

A web platform to promote Students to add their project Idea to represents Strengths and skills in various technologies.

DAFFODIL INTERNATIONAL UNIVERSITY

DHAKA, BANGLADESH

Fall – 2019



Daffodil
International
University

Project Title:



Course Code: CIS499

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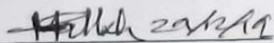
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Submission Date: 29-12-2019

APPROVAL

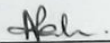
This Project titled "Daffodil Idea Portal", Submitted by **MD. AMINUL ISLAM** ID No: **182-16-335** to the Department of Computing & Information Systems, Daffodil International University has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of B.Sc. in Computing & Information Systems and approved as to its style and contents. The presentation has been held on 29-12-2019.

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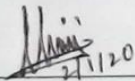
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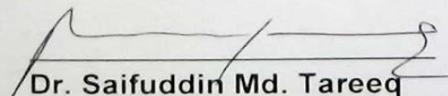
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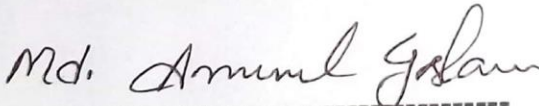
I hereby declare that; this project has been done by me under supervision of Md. Sarwar Hossain Mollah, Asst. Professor & Head, department of Computing and Information System (CIS) of Daffodil International University. I am also declaring that this project or any part of there has never been submitted anywhere else for the award of any educational degree like, B.Sc., M.Sc., Diploma or other qualifications.

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Acknowledgement:

I would like to thanks Allah Subanhu Taala. Again I would like to also thank my honorable teacher “**Md. Sarwar Hossain Mollah**”, Assistant Professor and Head of CIS is my supervisor to support me during the course. I would not complete this project properly without their help from the beginning of the project. Alhamdulillah, I have successfully completed the project by their proper help. I think that this project is very helpful for every student for every college, university and also diploma section.

Dedication:

Since I have completed another project in third year name is “Rental Car Systems”. This is my second final academic project, so I would like to dedicate this project to my Sisters who taught me that the best kind of knowledge to have is that which is learned for its own sake. It is also dedicated to my mother, who taught me that even the largest task can be accomplished if it is done one step at a time. They are my inspiration and without them I am fully incomplete. So I think they deserve this honor.

Abstract:

At presents People are becoming interested for passing more times with new technology and technological devices. But they have little time to know around the people and their problems. Most of the university students in our country don't get feedback to work with new technology like **IOT**, **Block-chain**, **AI** and **Cyber Security**. Most students failed to submit the final year project or third year project. They will be face with problem in their project idea.

The proposed systems more useful for the students who want to acquire knowledge about project and they also try to make creative project idea. In this system any student can help from their teachers and their seniors to work with technology. If student face any problem to work in technology then they can share their problem by add post into the system. Students can easily make connectivity among them through the messenger and also they can help during on development time. Since this project is only for Daffodil International University so there is no business benefits like other business benefited system.

The main purpose of the “**Daffodil Idea Portal**” is to build the skills of students so that they can get best job or start with new business after completing their graduation. So this system helps them and encourages them to build their skills in global village. As a result Varsity gained more popularity through the student's activities by the make new invention in the global world.

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Chapter: 1

Introduction:

Bangladesh is one of the developing countries in the world and with the change of time the technology is playing an important role **Daffodil International University** is trying adopting with the technology in the automated system to provide technology based learning for their students so that students can make technology based project easily with AI and IOT. **Daffodil Idea Portal** ensure that, students can make fully technology based project by using innovative idea and also removing the existing and ecommerce project through the proper guideline from the system. Nowadays many students prefer to learn the **AI** (Artificial Intelligence), **IOT** (Internet of Change) and **robotics** so that they can easily adopt the global job placement like **Google**, **Microsoft**, **Samsung**, **Amazon** etc. The purpose of the project is to provide proper guideline, communication with senior brothers, know new technology, come out the existing system, ecommerce based system, remove fear about project idea and help to avoid semester. As result students can save the time, make innovative idea with new technology and easily capture the renowned job where varsity achieved popularity and save cost for advertisements.

Layout of the Report for Daffodil Idea Portal:

Chapter: 1 Introduction

Where added the overview wholly about Daffodil Idea portal

Chapter: 2 Initial Studies

In this chapter wholly described the project background study where involve understanding the problem domain, possible solution and with the nature of challenges.

Chapter: 3 Literature Review

In this chapter described the literature review of submitted project system, communication process, proper guideline the project with new technology and project finding process with different time based.

Chapter: 4 Feasibility Study

Feasibility study has described step by step in this chapter.

Chapter: 5 Planning

In this chapter added the whole system planning process described properly.

Chapter: 6 Development Method and Tools

This chapter has described the system development method, tools and techniques step by step and these are used in the system.

Chapter: 7 Requirements analysis and Specifications

In this system wholly described the system analysis of other related system, old system and new system requirements and specifications.

Chapter: 8 New System Design and architecture

In this chapter explained properly the level of the complexity of the system design and it's architecture according to the system planning.

Chapter: 9 Developments

This chapter properly described wholly how the system development step by step and it's critical discussion.

Chapter: 10 Testing

This chapter explained the system testing process properly where involve testing task after development the application.

Chapter: 11 Implementations

This system the explained the how the system will be implement the system properly.

Chapter: 12 Evaluations

In this area described the system evaluate and sustainability of the developed application so that this system worked and give out properly.

Chapter: 13 Critical Appraisals

In this chapter properly indicate the critical thinking of the system including further development of the project.

Chapter: 14 Lessons Learned

In this chapter described the missing tasks that are made learning points to solve it and overcome it in time from this project during the system development process.

Chapter: 15 Conclusions

In this chapter described the whole system summary according to the development process.

Chapter: 2 Initial Studies

2.1 Background study

2.2 Problem area

2.3 Possible solution

2.4 Project Proposal

2.4.1 Overview

2.4.2 Aims

2.4.3 Objectives

2.4.4 Gantt Chart

Figure: Gantt chart of the project

2.4.5 Scope

2.5 Nature of Challenges

2.6 Resources

2.1 Background Study:

This proposed system is financially affordable, technically possible and more important. That is ethically acceptable and more beneficial for every students and university to make innovative idea for implement. In Bangladesh there have no such kind of online or offline system or platform where students can easily able to view projects, profile, project feedback, give guideline, submit project, view year or semester wise best project and Search and communicate technology based project. So students can easily learn and create innovative project whole over the country through using the platform. Obviously the proposed system will be able to draw attraction for any department of students for its unique features in university and college all over the country.

Some university have students portal to support student activities but no Idea Portal. Students portal have some features and functionalities which is not enough to support students activities. But my proposed system has many features and functionalities which are enough to grow their skills, support educational activities, varsity best project, best awarded projects etc.

To make strong bonding or relationship between students and department teachers to make their projects idea, project development, get proper guideline to overcome the projects difficulties. Students will get help easily to develop or make project idea or development process from their senior students anytime anywhere through the proposed system. Third year or final year students have often fall problem for project idea, to choose platform and also development process. DIU idea portal can good impact to overcome these problem.

New Students have many problems to choice technologies, to build up their skills, to develop projects based knowledge, to know technology based contests; workshop and seminars but DIU idea portal will solve these problems properly. Students are able to know technology based workshops and also attained in proper time. Students can help easily from their senior students. As a result students can help to understand project idea technology based support make easily choice expected worked platform and invents creative project idea and also developed properly according to their related technology based platform.

The main purpose of the proposed system is to grow the student's skills, quality, get good job positions, teachers and students relationship, junior and senior student relationship, to know best project idea, new technology in the world. Therefore, using the system DIU will be able to show their best students' performance, popularity and also setup good job facilities. It also helps the other institutions of Daffodil to improve share their project related work, skills and make strong relationship.

2.2 Problem Area:

Generally project problem area define that the scope of the project where an Idea portal has different types of tasks and tools, which can be productive and proactive through the system. As a developing country many students want to work with new technologies like IOT (Internet of Change), Robotics, AI (Artificial Intelligence) so that they can invent new things in our country. At this moment the current project is specifically focused on some problem domains which are listed on the below:

Those people also faced difficulties for managing books/educational material for their academic or learning purpose.

✚ Those students faced many difficulties for their projects and project idea for third year or final year or academic or learning purpose. As a result they can make a existing system or transfer project for next semester and no make new idea. In this perspective varsity reputation is decrease step by step and don't ensure the good job place for their students.

- ✚ But the project play important role for the development of student skills and also varsity reputation. Many students can be able to feel the project idea problem for their semester wise project or competitive project in any organization.
- ✚ Students can feel for communication with seniors students about project related task or technology based skills or support so that they can make a good relationship. And also communicate with job field or internship.
- ✚ Students faced problem for project feedback or proper guideline in time from the supervisor or teacher. As result they don't complete the project in time and not added new features.
- ✚ Students are confused to choice the technology in first year. They don't know about job market skills and which technology is future bright or easily they can adopt those fields.
- ✚ Varsity organized many kinds of workshop or seminar which are very important but students don't know all kinds of workshop or seminars as result they often missed the important workshop or seminars.

2.3 Possible solution:

Now by discussed the problems area to ensure that a web based application is more needed as a solution of those problem which can be best solution to make for the daffodil students. Who are the suffering from make a project idea or build skills about the different technology and also feel proper guideline to make new invention for the country. Students can easily submit their own project or semester wise project in the system. They can post about different types of skills or technology through the system. So it was the best solutions for the Daffodil students to ensure build their knowledge, communication and skills.

Students can view and post easily through the system in according to the department or technology field and initial level so that they can get the opportunity to make unique project, gather knowledge and also communicate their seniors about technology or job field. They can contact other students according to the same technology or project guideline through the system. Alumni or senior students can post or comments through the system to give job related information or new technology.

This system used as job hiring field for only daffodil students to provide job in different IT firm or other organizations, where senior students can job post or comments on the current students post or comments. It will be a solution for the current student's problem solution that needs help for the educational purpose.

Students can see the existing projects and identify the lacks of those project ideas. When they decide work with existing system that time they can easily overcome the lacks and add new technology with those systems. As a result they recover the fear about project or technology, E-commerce type project and project transfer through the Daffodil Idea Portal.

Students can safely submit project on the system and other users can't be use this system because they don't make account in this system. In this system only DIU students can make an account for use these system services. Only those students can login this system whose have an account so there are no risk about security issues. Thus this system certainly ensures that it will be the best solution for security issues for students and their unique project idea.

In this system if anyone want to sell their project idea or implemented project they can easily sell it and they get good feedback for their project. Alumni Students or current students can make opportunity for the project owners to sell their project through the system.

By this system project supervisor can easily give project feedback to their students in time with feel flexibility. Department head and Supervisor can select the best semester or year wise project and also make decide which projects are capable to participate the some special competition place like Daffodil ICT carnival, Bangladesh innovation award, NASA space and BASSIS innovation etc.

As a result Daffodil varsity can make the good reputation and no need advertisements through the system because while students can achieve the big prize in different types of competitions. In this situation students can easily show good performance in different job place and they can easily focus their varsity not in Bangladesh but also in the world.

2.4 Project Proposal

2.4.1 Project overview:

At presents Bangladesh is going to top level of technology where involves many types of platform such as: Artificial Intelligence (AI), Internet of Change (IOT), Robotics and also many types. Students are suffering to make or build up projects for idea and proper guide lines from the first day of university life as result they cannot make good project to build their skills. Students are confused about different types of language to learn properly for make technology based project which is best for current situation in the world. Students don't guideline or suggestion from their senior students who are already worked with technology based project in corporate or IT firms. And student's relationship is decreasing in day by day. Students don't know which projects have best awarded in many seminars or occasions. **Idea Portal** is not only Daffodil varsity but also polytechnic institute, college and other institute of Daffodil group.

Idea portal is best the solution for above this problem where students can easily communicate with their seniors brothers to know about technology and project idea. Students can get proper guideline to make any types of projects through the idea portal. Idea portal have stored all semester wise projects or other projects especially best awarded projects from government, university and colleges. Every student can see the senior student's projects and their job situations according to the technology or language platform. Department head can check the students' performance and also can select the best projects for occasions or seminars in year wise or semester wise. Project supervisor can view all projects, give feedback and also approved projects.

2.4.2 Aims

- ❖ To more utilize the recent project and make innovative project idea
- ❖ To improve new student programming skills and give proper guideline
- ❖ To qualified the students for technology based system
- ❖ To prepare the students for best job positions with strong skills
- ❖ To make benefit for selling project or idea
- ❖ To make strong relationship between students and teachers
- ❖ To make opportunity for seminars, job and technology related post

2.4.3 Objectives

- Students can View projects (semester, year wise best projects)
- Students can share the projects idea and give guideline to implement
- Students can choice friends with the related technology
- Students can able to sell or implement the project and project idea
- Students can able to see how many Students submit the project or project idea
- This system will be more user friendly for all kind of students.
- Students can able to contract with other Students and teachers through messaging facilities.
- Students can able to view all kind of job or new project from her profile with related technology.
- User can able to search related technology based project or project idea.
- Keeps project managing facilities for Admin
- Keeps project feedback and managing facilities for Supervisor
- Keeps project accept and managing facilities for Department head
- Supervisor can confirm for projects or idea to other students.
- Supervisor can view all accept projects
- Make an effective database design
- User can able to conversation through the system about program related talk
- Make a Good and simple design for user interface of the system
- Make Design and develop secure website or platform
- Make a year or semester wise project report

2.4.4 Gantt Chart

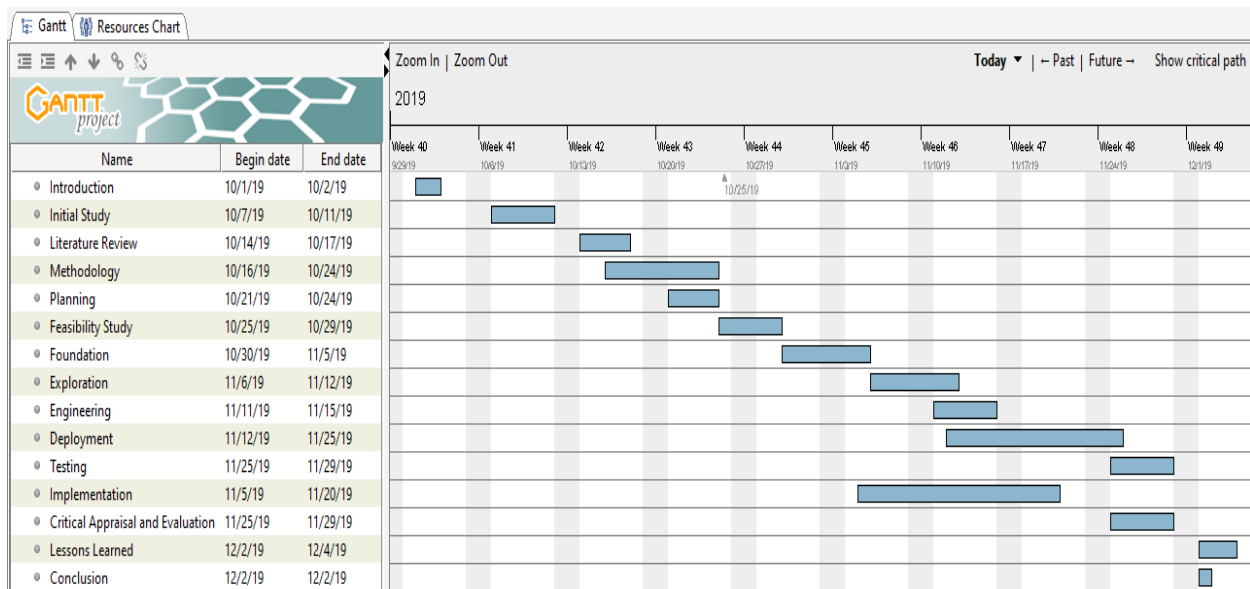


Figure 1: Gantt Chart to show project implementation schedule

2.4.5 Scope

There are lots of tasks regarding coaching management system. All of these tasks are not the scope of this project. The scope of this project is related with Collecting and saving student information, Manage question bank, creating exam, managing yearly schedule, taking exam, exam evaluation, managing student physical exam result, bookkeeping service, student attendance, notes and file management, selling exam and a Payment system for the students.

2.5 Nature of Challenges

Only one person is responsible to complete the project tasks like Analysis part, Design part, Development part and also testing part which are the main challenges of this project. This project has more or less than 8 roles, so there have some problems or lack of expertise in certain part of the project. On the other hand some people who want to try to hack the Idea portal data where involved all kinds of important project data. And users are try to proper use of this system with their student ID and password. So it is the main fact as perspective the security term to avoid the stealing project or students. On the other hand app is needed for this system so that students can easily use this system from anywhere and anytime as a result they cannot bore using this.

2.6 Resources

System Hardware Resources

- Dell 9870m Laptop
- Intel inside core i7-3637 CPU @ 2 GHz 2.8 Ghz
- RAM 10gb
- 500gb SSD
- 13.3 x 9.1 inches screen with 1366 X 768 resolution
- 21x 9.1 inches screen with 1920 x 1080

System Software Resources

- Programming Language: Php, JQUERY and Javascript
- This system made by PHP language with Spring LARAVEL Framework
- LARAVEL Framework 2.2.2
- System fronted design used Bootstrap, HTML, CSS
- Used Database MYSQL 5.7.14 For the system
- System Server: phpMyadmin server 4.9.0
- Used Operating System 64 bit windows 10

Needed Human Resources

- One LARAVEL Developer
- One Supervisor
- One Client from RCC

Chapter -3 Literature View

Introduction:

Generally a literature review is a search and evaluation that is available literature in given subject or chosen topic area (rlf, 2018). In this chapter I have explained shortly some problems where including various types of web system like informative system or website and some ecommerce website in the perspective of comparison on various this project related system or websites specially to guide other students and give proper feedback.

Discussed on the problem domain:

The first website or web page went live on 6th August in 1991 which was made by Tim Berners-lee in 1990. At present all over the world have a large number of websites where added used many functions and used in different types of purpose or fashions. A web application as usual used as personal website, where a company have a commercial website and non-profitable organization website is used Government website.

As usual a website or web application will be used as aggregate of two types such as: a commercial website alongside as used for social welfare. Some people can help by the some social awareness through the website are change, organization that is support to users learn more about some reasons that are occurs as well as around the global and locally. Then sign petitions to view helping people who are suffered. Some organization like Idealist organization give offers some ways to find out volunteers and give opportunities other for help nearby or far away from people as like as youtube.com provides usable and instantaneous access to unlimited opportunities to millions of youth for free.

There are six types Ecommerce applications that are given on the below with brief description:

Business to Business (B2B):

Business to Business is the ecommerce site where the business selling services and products to other business. Those like Websites or Applications have comparatively less amount of visitors than other popular categories of Ecommerce sites. For example I think say manufacturer and wholesaler transaction. In this market manufacturer are selling and whole seller are also buying for business purpose.



Figure 2: This figure is B2B model in Ecommerce (becakmabur, 2018)

Business to Business (Business to Customer):

This is most common online business through the ecommerce sites and that is define that is marketing of products to business or other organizations for use in production of goods and for use in general business operations. All over the market Business is selling its product to the customer or consumer in the world. Whereas this structure was mainly apply to refer to the online retailers who sold goods or products and provide services to the consumers through the internet. A Business to Business transaction is an ecommerce site where buying necessary goods.

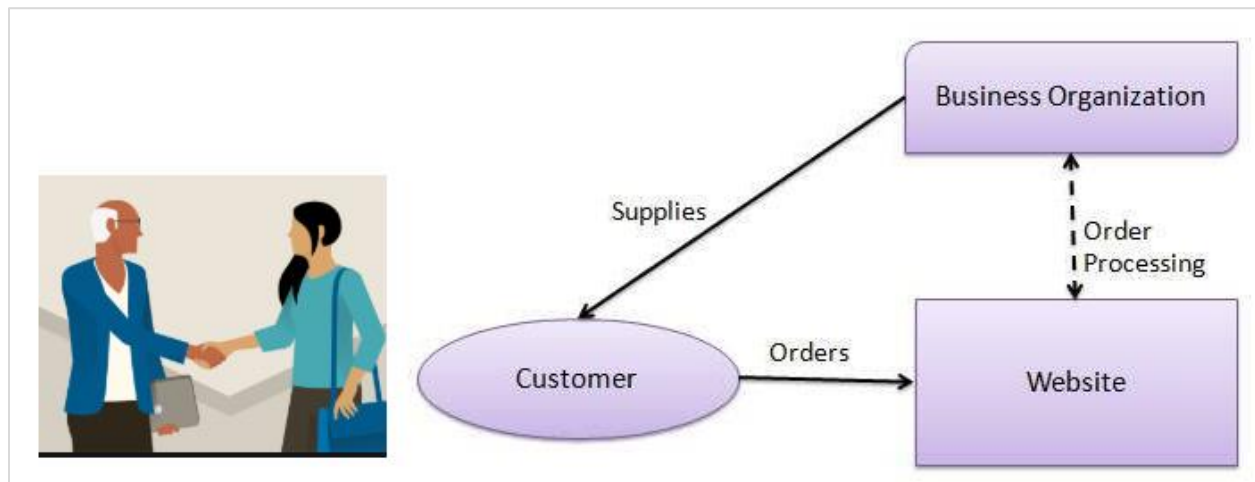


Figure 3: Business to Consumer model ecommerce (tutor2u, 2018).

Consumer to Consumer (C2C):

This model facilitates commerce between private individuals where the different types of consumer interacts with each other and also sellers selling their things with each other. To facilitate a transaction there are two parties who provide a platform for use with each other. In this model the buyers and sellers make greater profits through the commerce. The inventory stored at their place of convenience by the sellers and this leads to a less selling price hence. As example, homemade products from an ecommerce site are C2C transaction for buying second hand products.



Figure 4: This figure is about Client to Client Model Ecommerce (emsoho, 2018).

Consumer TO Business (C2B):

In this field of business sell their product to the consumers. C2B model is providing the transaction which is conducted between a business and consumers. It becomes the responsibility of electronic commerce business entity where transaction originated by the customer has set of requirements as specified prices for a commodity or service. This model of business buys products from the customer where the customer places an estimate of amount want to spend for a good or service. For example, in this field a photographer will be selling their photos directly.

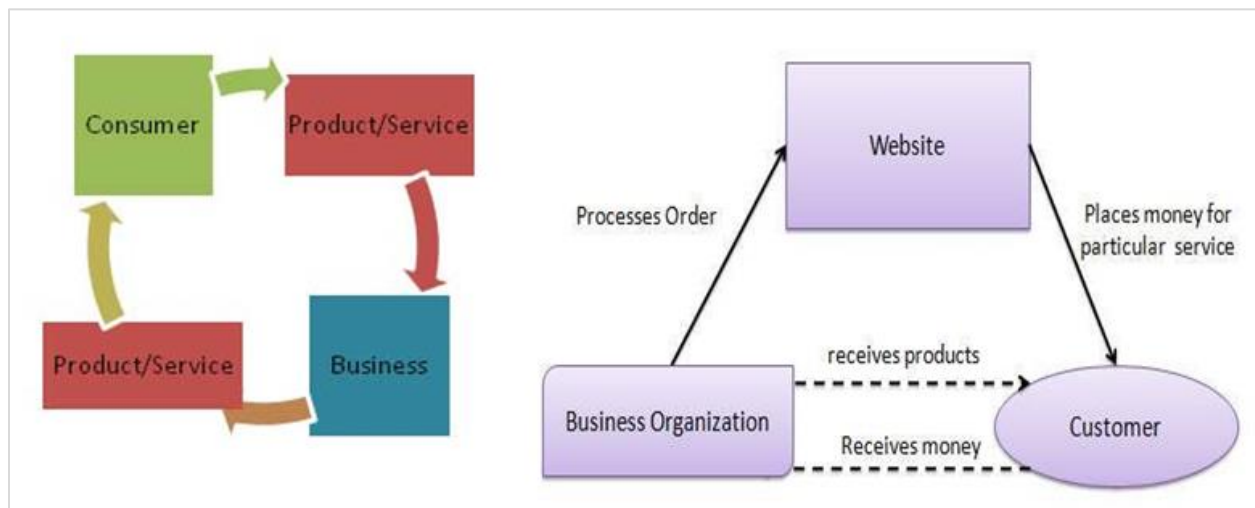


Figure 5: This figure is about Customer to business (standard, 2018).

Business to Administration (B2A):

Business to Administration means that business government commerce that is derivative of B2B ecommerce. For doing business more company and government agencies exchange information as compared to off web. For example, these types of ecommerce system used for dealing submitting business tenders, submission, application and auctions organization.

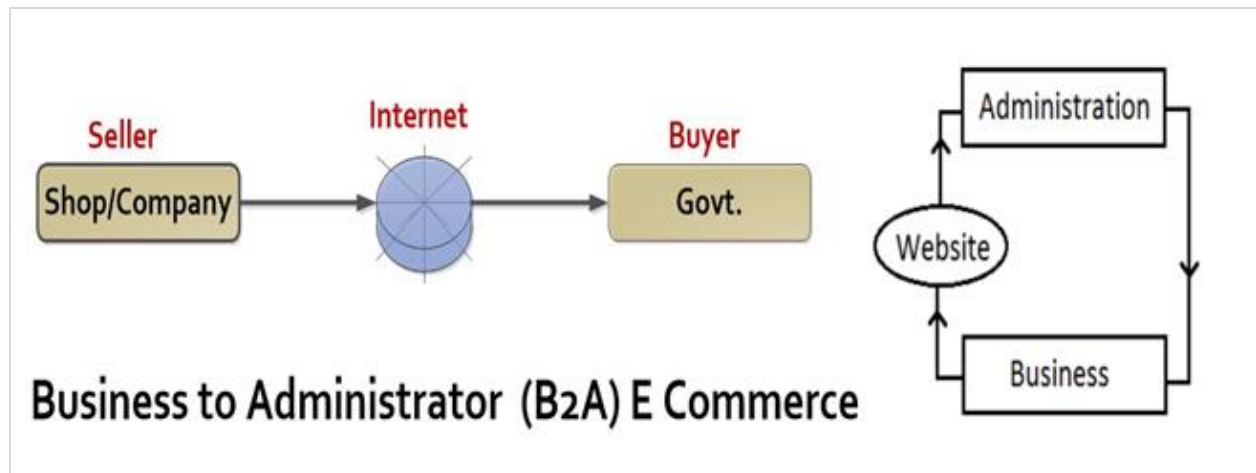


Figure 6: This figure is about B2A E-commerce (csetutor, 2017).

Customer to Administration (C2A):

Consumer get helps to post their feedbacks or request for information about public sectors through the e-commerce system. This is directly connected with authorities or Government. Generally e-commerce system will be makes strong bond with an instant and easy solution of communication between consumers and government administrations. For example, to paying taxes, paying electricity bill on government website and also paying health insurance consumer used these types of ecommerce system.

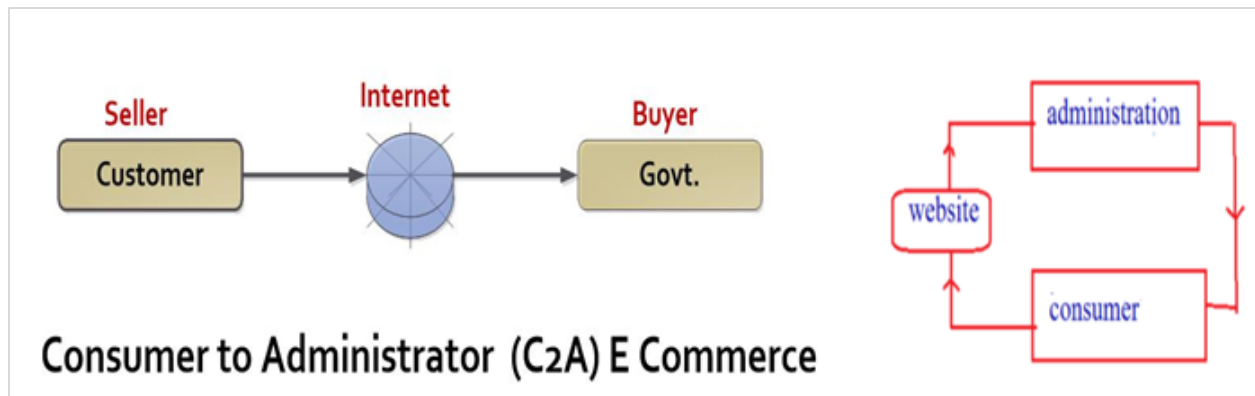


Figure 7: This figure is about C2A e-commerce (digitalblogmegha, 2018).

Discussion on problems and solutions for Web Platform and E-commerce

Websites:

This project will be known to the students as a web platform that partially used for the Daffodil varsity and under E-commerce domain. From this application students can interact and get advised from their teachers and other students and also Alumni students will be able to help to give the job opportunity and valuable information about job marketplace each other based on their capabilities. Now some tasks need to be discussed and solved for those problems or issues are following:

Trust:

In e-commerce websites have a common problem is trustworthiness. Students will not be ensured that the information idea are submitted about project idea is accurate, Because they don't see the idea as text or message. They need to understand with other students as technology based so that they can provide their info about project for get guideline or selling idea or system. In this situation they are very concerned about their valuable tasks and idea is being improperly.

Solutions:

Above this problem need to be transparent data of customer and creating a loyalty program is one of the best paths to earn customer loyalty. Some tasks are customer feedback, reviews and testimonial needed to publish properly where required to faster response of customer questions or necessities.

Project Delivery Issues:

Project delivery issue is the important part for any kind of educational website or application. Recently Students can able to track their positions in industry field and they also know about new technology through the many kinds of resources. But in the business perspective students can easily find out their requirements of project and customers choice technology based project for concern security issues. There has probability customer don't able contact face to face within time where specific locations are identified through customer mutual understanding.

Solution:

Different types of customer need to have options for contact or complain against others if they late during delivery time or uncompleted tasks. But location tracking can't be added for security perspective issue.

Project Quality Ensure:

Because of online platform, Students cannot able to see project which are not accepted by the supervisor or department head. So there are no guarantee project quality are good when students are not give proper feedback. After selling once project then Client if face any types of problem that time it is hard to solve and also hard to return the system to seller.

Solution:

To perform those problems need to sample video of the project or required function images added, and performance of those projects required fully describe in the description box or communicate through the messenger. On the other hand still there are no proper solutions of those problems.

Communication:

It is the major problem of academic website where communication is properly with students to department head and alumni students. They used messenger not video or audio platform to communicate with each other. As a result they cannot talk clearly with each other and don't share document file with each other.

Solution:

For this problem used new technology to communicate with each other and used post function to share their documents or other files. They also take care their documents through the privacy function used.

Online Identity verification when absence:

At present most of the online users in Ecommerce site don't use their actual Gmail or yahoo address, mobile number, name for sign up. So it's have made conflict for other students in Customer to Customer ecommerce model for this, others time, money or effort may be assumed.

Solution:

For the above problems there are many possible solution to overcome this problem. And need to check email address, mobile number and others are real or not, can be used Gmail verification, mobile number verification. And also used National IDs to verify the user's information and it is the proper solving options for the system.

Comparison of leading solutions:

Now, I want to discuss some popular website in our country or abroad those support or helps other students or people through their website or selling projects for customer to customer. If those website are not fully same like this system but some features are same with my system. By finding out the features don't have those websites and I will try to find out most perfect solution for the educational related or business related project selling and giving free project as donating for inspirational or startup business purpose.

There are three leading software in our sub-continent:

- + <https://nevonprojects.com/> (USA)
- + <https://www.elprocus.com/> (INDIA)
- + <https://www.seminarsonly.com/> (Bangladesh)

In this field, above these websites are selected from our subcontinent because many students are admitted here and they want to make good in their skills. In educational perspective many students are mostly dependent on the other students or download projects free or paid where they cannot learn anything or they loss their semester only reason for project at the last time. This proposed system will only for students for our country that's why analyze the areas and it's all neighbor website where the strength and weakness of these solutions are briefly describe on the below:

Best Features:

NEVON Projects:

1. It is the helpful website for students where students can help to know the any problem and it is also useable system where color blind man can used this easily.
2. All system contents are well organized any user easily know their purpose mission, vision and goals etc.

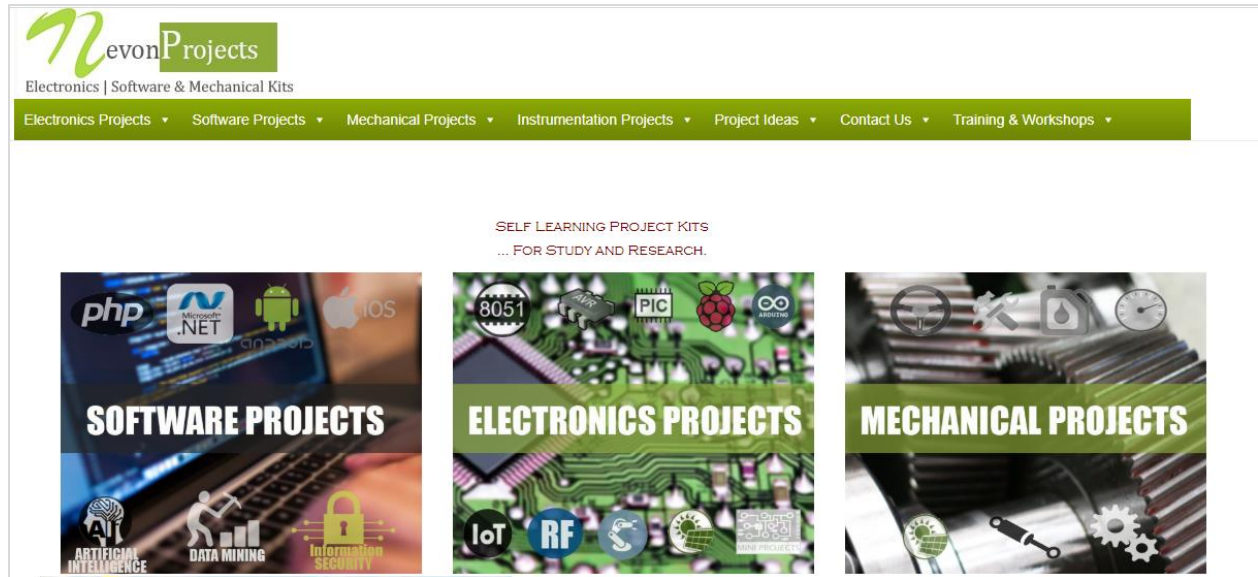


Figure 8: NEVON Projects Home Page layout

3. Students or people can easily see or submitted their project idea or plan from this website from anywhere all over the world by use of the internet and make account here. This system has department wise or based project ideas options for seeing or submitting projects.

Software Project Ideas

Get a list of the latest software engineering project topics. This is a compiled list of innovative software project ideas waiting to be implemented. Browse through these new topics for software projects prepared and constantly updated by our team to provide new ideas to software engineering students. Many times students are confused about selecting their final year projects. It happens when students run out of ideas of which software project should we implement ?. We are here to help you at this point, we update this page with innovative software based project ideas to be used by engineering students as their final year projects. This list of software engineering project topics is updated and reviewed to suit engineering university requirements. Find top software project ideas for diploma engineering as well as degree students for their final year:

Software Project Categories

Php Projects	Data Mining	Android Projects
Smart Card/ Biometrics	Dotnet Projects	Web Based
Matlab Projects	Information Security	iOS Projects
Artificial Intelligence	Embedded Projects	

All Software Projects Ideas and Topics

Android Task Monitoring	Online Mobile Recharge Portal Project	Detecting E Banking Phishing Websites Using Associative Classification
Vehicle Tracking Using Driver Mobile Gps Tracking	Sentiment Analysis for Product Rating	Fingerprint Based ATM System
Image Encryption Using AES Algorithm	Image Encryption Using Triple DES	Extended AES with Custom Configurable Encryption
E Commerce Product Rating Based On Customer Review Mining	Image Steganography With 3 Way Encryption	Canteen Automation System
Engineering College Automation and Scheduling System	Fingerprint Voting System Project	Employee Hourly Attendance By Barcode Scan
Weather Forecasting Using Data Mining	User Web Access Records Mining For Business Intelligence	Railway Tracking and Arrival Time Prediction
Android Local Train Ticketing Project	Android Patient Tracker	Opinion Mining For Restaurant Reviews
Website Evaluation Using Opinion Mining	Opinion Mining For Comment Sentiment Analysis	Movie Success Prediction Using Data Mining
		Monitoring Suspicious Discussions On Online Forums Using

Figure 9: Seeing or submitting project ideas in NEVON projects

Electronics Projects Focus:

1. Students or user can easily find out their technology based projects if it has added that project idea in this system. And it has categories of many projects are listed properly:

The screenshot shows the homepage of the EL-PRO-CUS website, which is focused on electronics projects. The header includes the site's logo and navigation links for various categories like Home, Electrical, Electronics, Communication, Robotics, Projects, and General. Below the header, there's a banner for Texas Instruments' TPS22918 power switch, encouraging users to 'Make the switch' from discrete components to an integrated solution. The main content area features a section titled 'You are Browsing "Project Ideas" News' with two featured articles. The first article, 'Arduino Uno Projects for Beginners and Engineering Students' by Tarun Agarwal, describes the Arduino Uno microcontroller. The second article, 'Image Processing Projects For Engineering Students' by Tarun Agarwal, discusses the application of image processing in electronics. To the right of the articles is a search bar and a list of 'SPONSORED SEARCHES' including 'pcb circuit', 'test automation', 'electronic circuit projects', 'investing for beginners', and 'arduino projects'. At the bottom right, there's a 'RECENT POSTS' section with a post titled 'Megger : Construction and Its Working'.

Figure 10: Seeing or submitting project ideas in Electronics projects Focus.

2. Users can easily make the conversations or comments about the any problem of the system and they can easily get help for any types of valid reasons.

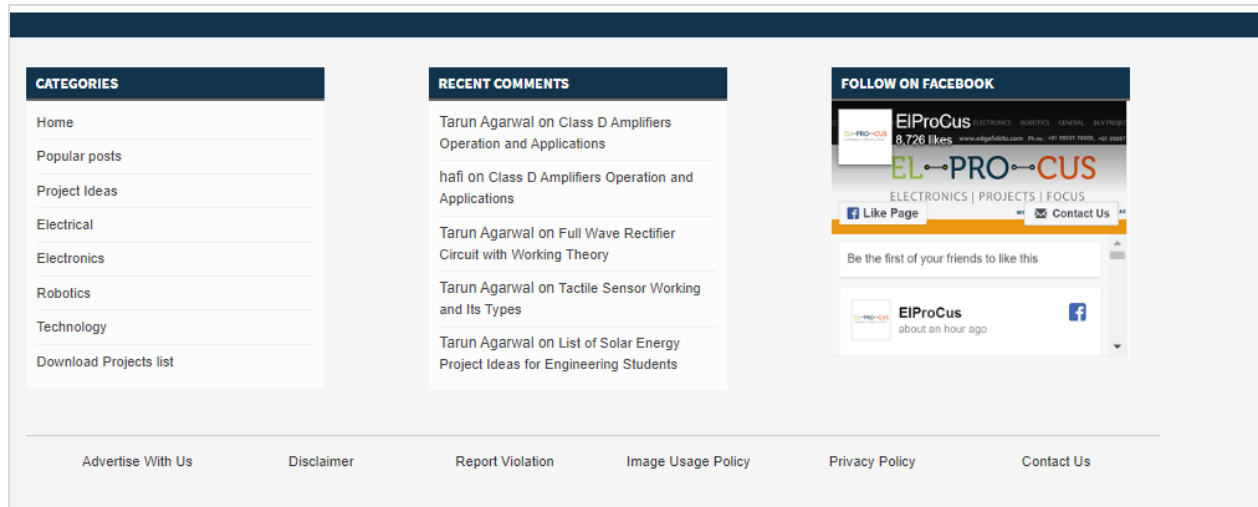


Figure 11: Commenting or sharing information in Electronics projects Focus.

- Any students can make account and they easily contact or conversation with them or any types technology based programmer or system analyst. Students can buy or sell their projects easily sometimes they can get offer many types of course about technology. People can buy system according to their business functionality.

Seminars Only.com:

- This website is familiar and popular website in INDIA for students to make share or submit their projects securely. Which is support the students or people economically or mentally to develop their projects or give proper guideline.

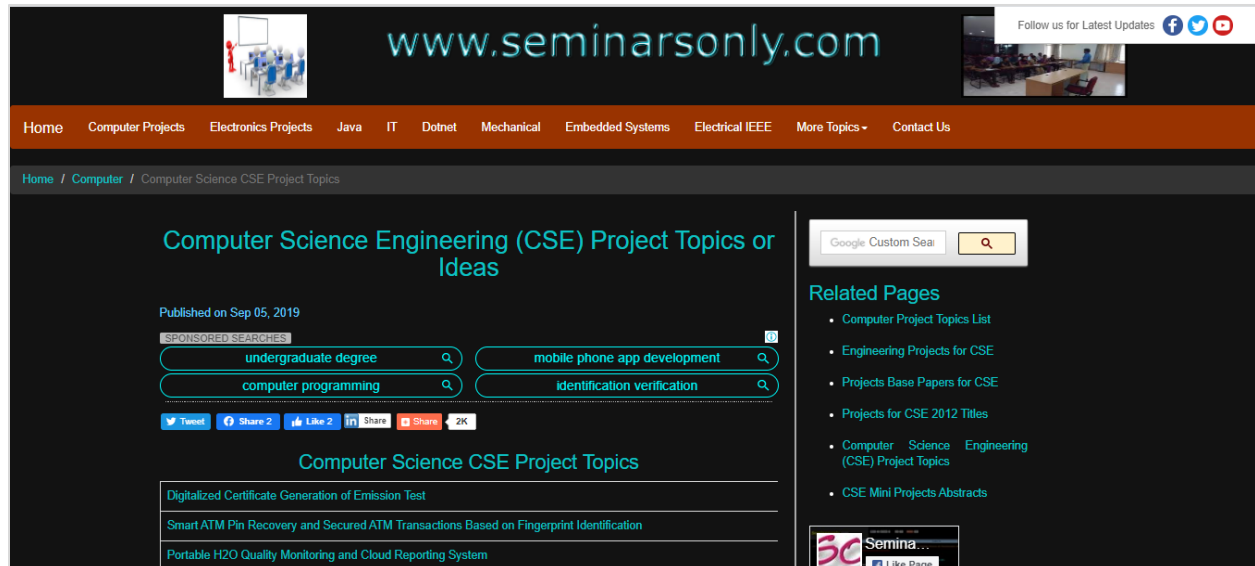


Figure 12: department wise projects in Seminars only.com.

- Here added the searching or categories bases projects presented on the systems and it has proper instruction to show the new projects or idea. Anyone can make account from anywhere and perform all functions about project related tasks.

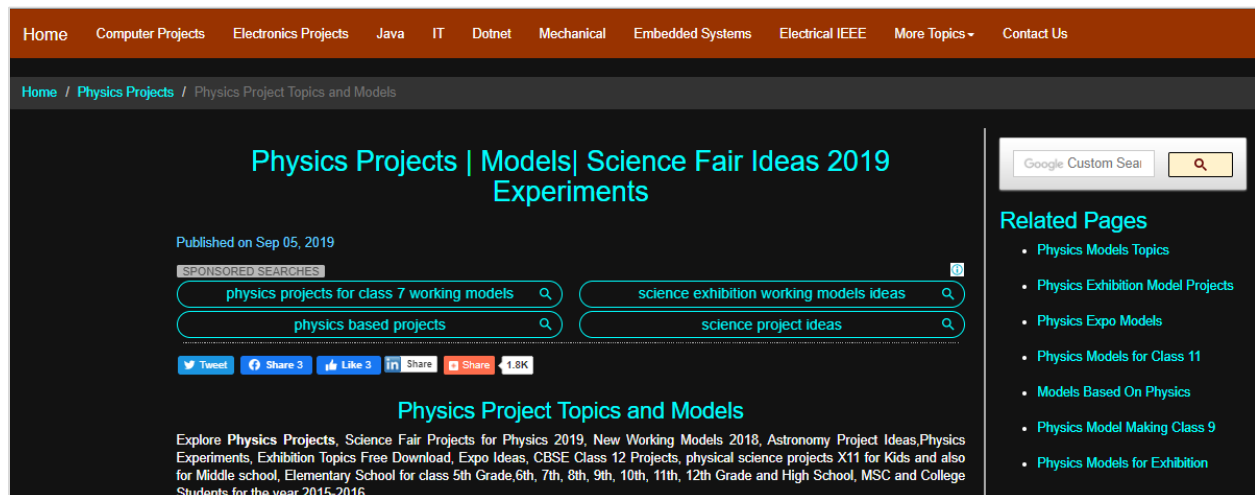


Figure 13: Many types of competition to show projects in Seminars only.com.

3. Here added many types of place or organization place where anyone can show their projects or new ideas and they can get easily prizes. They can make opportunity to use the system and it is the common platform for any level of students like general and engineers students.

Limitations:

NEVON Projects:

- ✚ Only project idea showing and no get guideline or full resource of the projects idea. Sometimes they want to money for some projects which are very popular or completed by new technology.
- ✚ Currency problem is always not fixed credit card or banking transactions.
- ✚ New Students cannot get special help or support from this website.

Electronics Projects Focus:

- ✚ In this system there is no communication option to share specific problem with them
- ✚ There are no project ideas downloading options just only read.
- ✚ Their user interface site is not well organized

Seminars Only.com:

- ✚ This system is not completely user friendly as like as other academic system.
- ✚ Don't sell or buy the project system from the system
- ✚ Projects ideas are limited and cannot provide descript about the project

Recommendation Approach:

At last I have analyzing leading website strength sites and their weakness where some needed features and some avoidance features are coming out. After understanding, the suggested or recommended approach should add these things are:

- ✚ For every web application need to be user attractive and user usable and good font size and positioning of design elements required to be user centric.
- ✚ Should be well defined and easy navigation bar of the system menu bar or menu item.
- ✚ All information should be well organized so that any types of users can use this system easily and understands in short time.
- ✚ Need all posts and projects idea are should be categorized as user required
- ✚ Give options so that users can able to add new posts easily about help basis and sell their projects and also they find their technology based friend.
- ✚ Users can get feedback from their supervisor and make conversation in any platform like audio call.
- ✚ Only registration person can view those ideas, or job posts and other persons cannot enter the system where it will be properly done as security purpose.

Chapter-4 Methodology

Introduction:

In this section about the idea portal that will consist selected method for the development proposed project and the reason to choosing it. Now I have discussed the most popular four types project development methodologies.

What to use:

To assess the success or failure rate of a project or a company is needed to follow the SDM (Software Development Methodology). The Software development have innumerable concept all around the world which suits my project is the really hard activities to determine. This methodology helps to keep the client information and alert through the adhering to a properly define that methodology.

Now I have described a methodology which will be following to make this project successfully. I have selected a methodologies from many types of them like Waterfall Model, Agile Software Development Methodologies, Rapid action Development Methodologies and Dynamic System Development Model methodology which are briefly describe on the below:

Waterfall Model:

This approach emphasizes a logical progression of steps which flows downwards in one direction- like a waterfall model. The process of waterfall model support that I can only able to move onto the next phase of development once the current development phase has been completed. Show on the below this phases are followed in the sequence of order are Analysis, Design, Requirement, Implementation, Deployment, Maintenance and Testing (tutorialspoint, 2018).

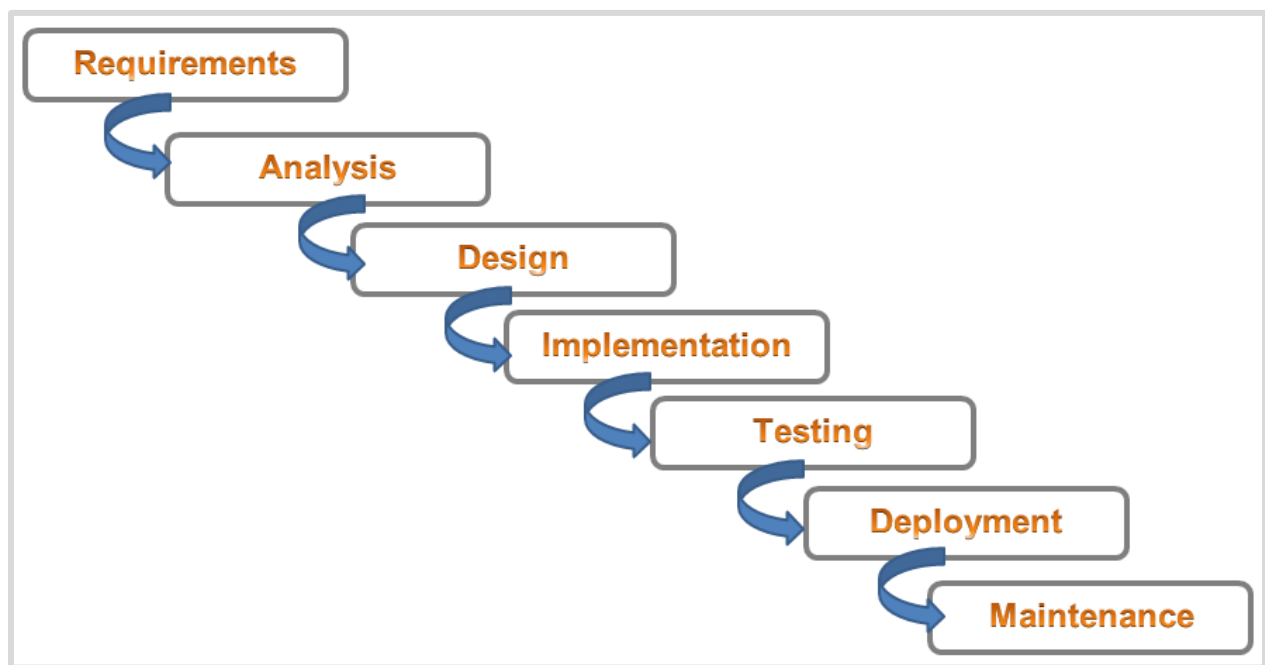


Figure 14: This figure about general over view of Waterfall model.

Advantages of waterfall Model:

- ✚ This model is simple and easy to understand
- ✚ It is easy to manage and each phase has specific deliverables and review process.
- ✚ It is completed processed one at a time and divided into phases.
- ✚ This model works for smaller system or projects where requirements are well understands
- ✚ It is properly define stages and well understood milestones
- ✚ It is easy to arrange tasks and its process are well documented (tutorialspoint, 2014).

Disadvantages of Waterfall Model:

- ✚ It is high amounts of risk and uncertainty
- ✚ This model is an object oriented projects but not a good model for complex.
- ✚ It is ongoing projects and poor model for long
- ✚ It cannot accommodate for changing requirements where adjusting scope during the life cycle.

Rapid Application Development:

Rapid application development uses minimal planning in favor of rapid prototyping and it also used faster software delivery and continuous iterations which is working on a strict deadline. For this project I will make a working system which more quickly than with

more traditional methods. It follows iterative and incremental model that might be “good enough for now” solutions for clients who required software quickly.

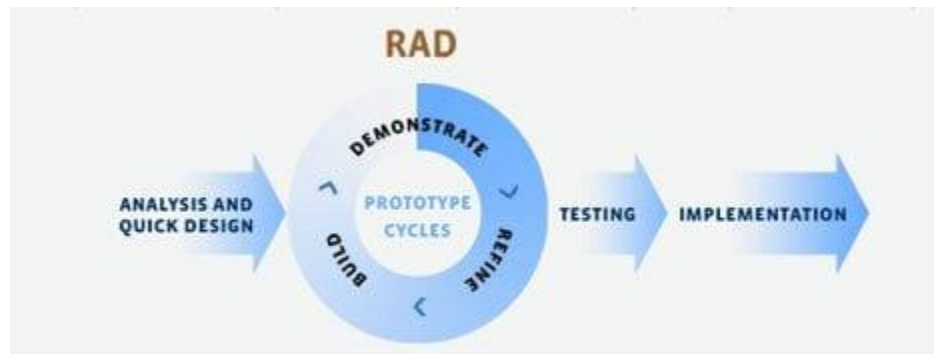


Figure 15: Rapid action Development model (airbrake, 2018).

Advantages of RAD:

- ✚ It is best for reduces development time
- ✚ In the Project perspective, it increases reusability of components
- ✚ It provides customers feedback and quick initial review occur.
- ✚ RAD doesn't take many workers to deliver the project on time.

Disadvantages of RAD:

- ✚ RAD has more management complexity
- ✚ It needs the user feedback throughout the life cycle
- ✚ RAD is high dependency on the modeling skills

Dynamic systems Development method (DSDM):

DSDM lifecycle provides best practice guidance for on time, in budget delivery of products, with proven scalability to address projects for business and the main target of the methodology can be making perfect at the first attempt. It is best for changing process and incremental approach that is legacy based on the RAD (agilebusiness, 2018).

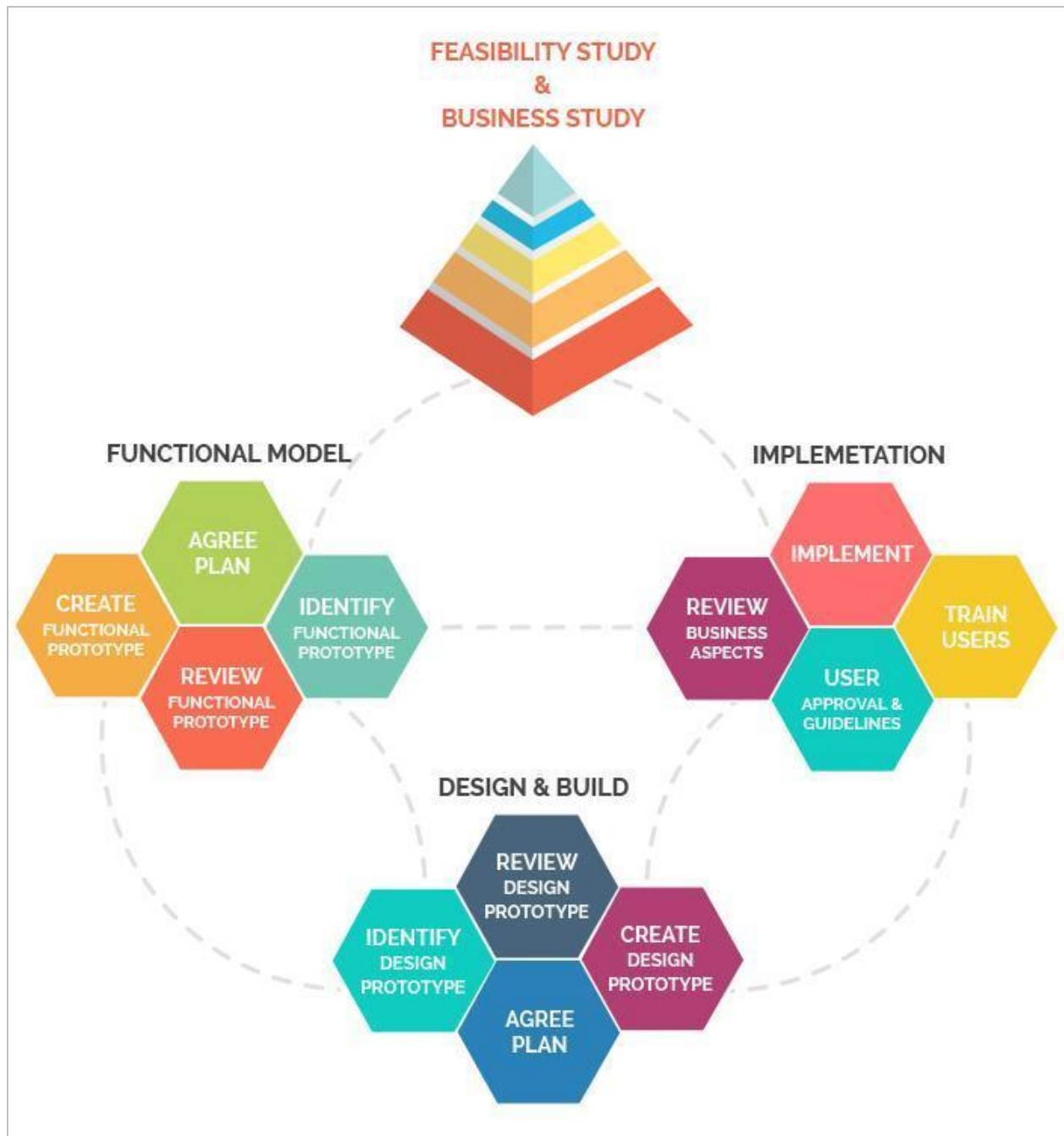


Figure 16: This figure is about DSDM attern (researchgate, 2018).

Figure:

Advantages of DSDM:

- + This model provides the technique that is independent software development process.
- + It helps to reduce risk of wrong solution
- + This models give well solutions that is more likely to meet the real business need
- + It has Smoothly deployment process
- + It is good for prioritization that will capable a system to be more acceptable (geeksforgeeks, 2018).

Disadvantages of DSDM:

- + This model does not well planned for all types of projects and it can be costly to implement.
- + It is not good for small organization
- + This model need less time for the development , which can bed effect on the developer to complete their projects

Lean Development Methodologies:

Projects are separated into some little parts and grow up part by part in the Lean development model. The project development is on the right track where all parts of projects test repetitive for proper progress of the project tasks. Lean methodologies change and are permitted in the center of the development. It is best for teamwork for the project development so it can be possible to deliver the project on time (castsoftware, 2017).

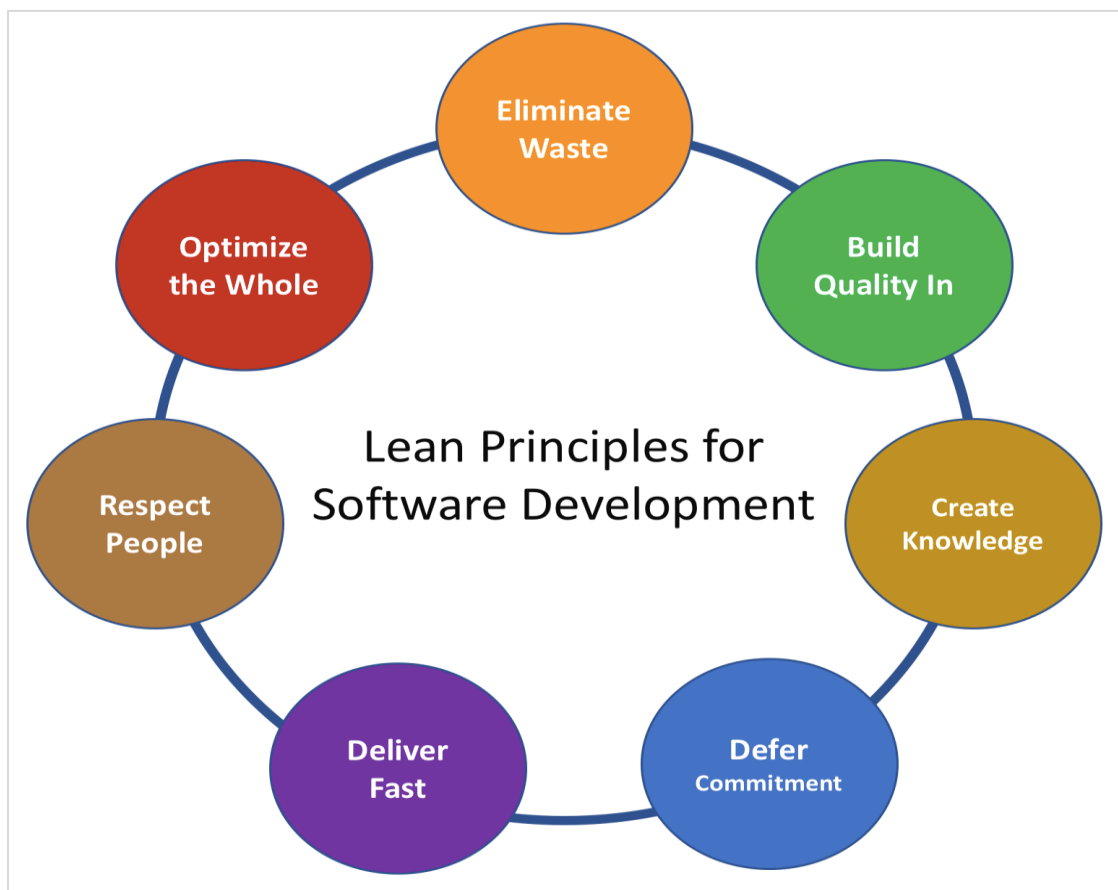


Figure 17: This figure is about Lean Development Methodology (nirmaljeet, 2018).

Advantages of Lean Development Methodology:

- ✚ It takes shorter period of time for development team can be provide more functionality
- ✚ LDM helps making the decision-making ability of the team through the empowerment.
- ✚ LED methodology reduces project time and costs and also grow up the process od software development.

Disadvantages of Lean Development Methodology:

- ✚ To complete a project properly it needs more time and more meeting after a working interval.
- ✚ This model involved users then it works effectively at that time.
- ✚ It emphasizes to follow their rules or decisions and the path they want.

Choosing Methodology:

Since this project is academic project it's very difficult to follow a specific method for this undertaking any specific methodology. For this project, I have needed to gather the requirements and after that I have implement the system. In this project no extra programmer or developer or other team members and it is only implemented by me. This project cannot match with a specific methodology but it is often follow the Waterfall Model so it is needed a hybrid methodology for further development if I want to add AI (Artificial Intelligence) Automatic performance.

I think that Waterfall model is the best for gathering requirements and for the development of the project iterative method of DSDM attern is the best solution. In this perspective this project need to use hybrid methodology where DSDM attern along with traditional Waterfall model, SDLC or other methodology.

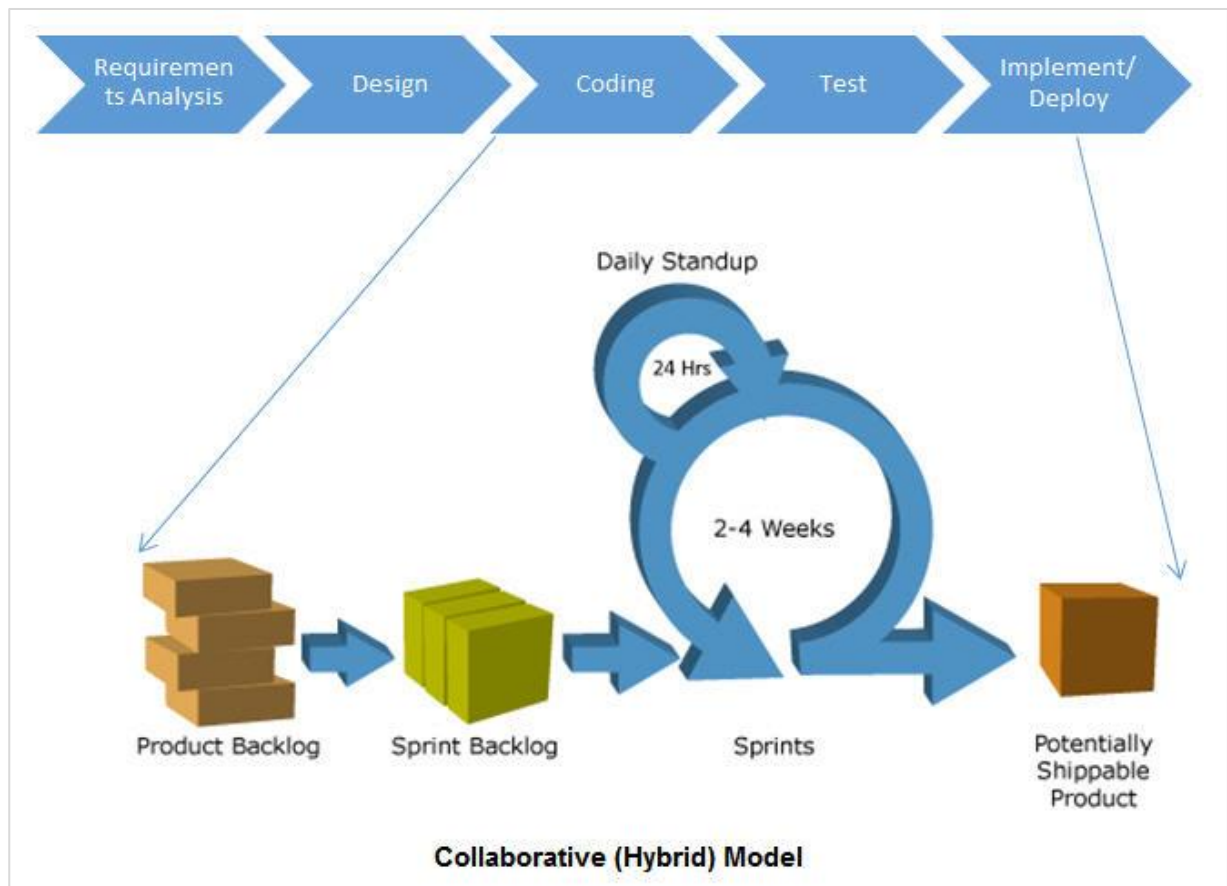


Figure 18: This figure is about Hybrid Methodology for this project (explore, 2018).

Reasons used it:

This project is not only academic project but also has business benefit and generally followed specific software development methodology. So I certainly used Hybrid methodology which is the best fitted for the project in term of requirements gathering and iterative development. That's why I have used Hybrid software development methodology for this project.

Sections of Methodology:

I have mentioned this section which emphasizes on how a procedural step should be meet to which identifying requirements, analysis, UI designs and developments are added and completed in intervals. Now I have given a brief description of each stage on the below:

Feasibility Study:

In this step feasibility study has an analysis that easily takes all of a project's relevant factors properly into including economic, technical, legal, and scheduling considerations to ascertain the likelihood of completing the project successfully and also evaluates the project's potential for success; therefore, perceived objectivity is an essential factor in the credibility of the study for potential investors and lending institutions (myaccountingcourse, 2018).



Figure 19: Feasibility Study of this project (marketbusinessnews, 2018).

Critical Analysis:

This section used for specific organization and writing a critique is to evaluate the projects work. This section is given whole concentration upon the analysis of the business procedures of the projects and related the problems to the proposed systems scope areas. It's related how the problems could be terminated using sustainable solutions with proper analysis backing up for the project or system (southeastern, 2014).



Figure 20: Critical Analysis of this project (ultius, 2018).

Requirements Analysis:

This section is well important where the process of defining the expectations of stakeholders on a project and this process is properly analyzes, documents, validates and manages all of the identified requirements. In this stage points out the main requirements of the proposed system through gathering many requirements like focus groups and involving the respected stakeholder and end users who will be derive the possible benefits of the system with business in mind (projectmanager, 2015).

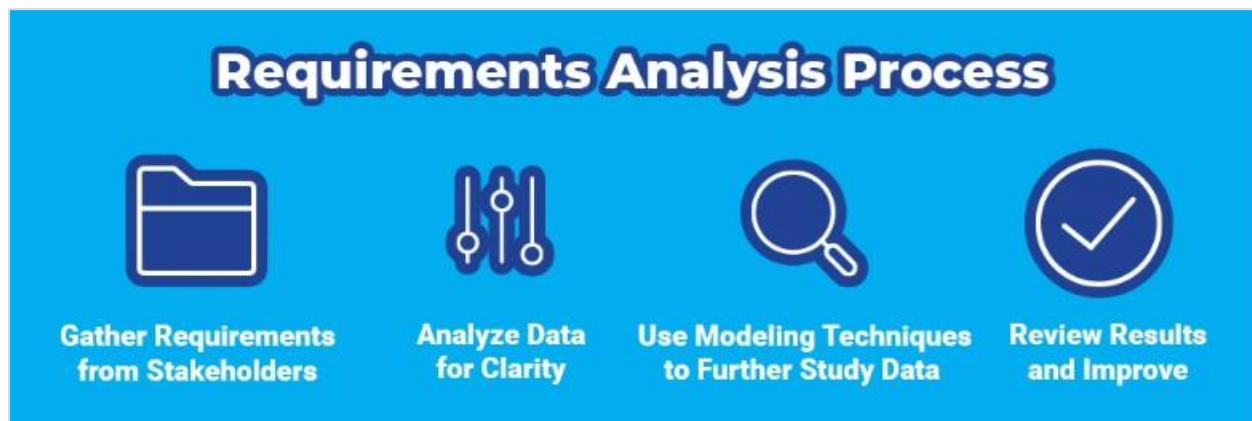


Figure 21: Requirements Analysis of this project (slideteam, 2012).

Design Specification:

This section is used to how proposed system performs the requirements outlined in the Functional Requirements where a desired prototype is made and it will have the fractions of the optimal solutions. It include instructions on testing specific requirements, configuration settings, or review of functions or code (ofnisystems, 2018).

Implementation:

The purpose of this section is developing the proposed system and database according to the prototype of the design specification. When completing the development process then it should implement for next step.

Testing:

When completing the development tasks then started the testing steps to evaluate the performance of the system and this step is mandatory. For every system has attest log documentation is maintained during the test performed.

Documentation:

This section is used as a guide line for the development of a system so that a person can easily understand the process of the system development properly.

Evaluation:

When complete the proposed system then need this section to check performance and get proper feedback from the users. As a result a system evaluates its performance than other related systems.

Chapter-5: Planning

Project Plan:

Project planning started from the beginning of a project. To complete any project successfully planning plays vital role. Wrong planning could drive a project into failure. Proper planning of a project ensure good quality product, on time delivery, product business value and quality of work. Planning stage include whole project time duration and way of work. This chapter includes project plan, test plan, risk management, change management and quality management.

Work Breakdown structure: Work breakdown structure split the whole project into different task. It specifies the duration of a task and start date, end date of a task. It is an effective way to complete a whole project in tight schedule. For this project WBS are included below:

SL	Chapter	Duration(Days)	Start date	End date
1.	Introduction	1	10/1/19	10/2/19
2.	Initial study	3	10/7/19	10/11/19
3.	Literature review	5	10/14/19	10/17/19
4.	Methodology	2	10/16/19	10/24/19
5.	Planning	3	10/21/19	10/24/19
6.	Feasibility study	5	10/25/19	10/29/19
7.	Foundation	5	10/30/19	11/5/19
8.	Exploration	5	11/6/19	11/12/19
9.	Engineering	8	11/11/19	11/15/19
10.	Deployment	10	11/12/19	11/25/19
11.	Testing	3	11/25/19	11/29/19
12.	Implementation	2	11/5/19	11/20/19
13.	Critical appraisal and evaluation	3	11/25/19	11/29/19
14.	Lesson learned	2	12/2/19	12/4/19
15.	Conclusion	2	12/2/19	12/2/19
	Total=	60 Days		

Resource allocation: Resource allocation defines as resources that are needed during this project. Some resources are already allocated and some need to add. As an academic project I have to play all of role incorporate with this project. Resource allocation helps to allocate right resources and use it on right time.

SL	Chapter	Duration(Days)	Resource
1.	Introduction	1	Analyst
2.	Initial study	3	Analyst
3.	Literature review	5	Analyst
4.	Methodology	2	Analyst
5.	Planning	3	Analyst, Developer, User
6.	Feasibility study	5	Analyst, Developer
7.	Foundation	5	Analyst, Developer
8.	Exploration	5	Analyst, Developer
9.	Engineering	8	Analyst, Developer
10.	Deployment	10	Analyst, Developer
11.	Testing	3	Tester, User
12.	Implementation	2	Developer, User
13.	Critical appraisal and evaluation	3	Analyst
14.	Lesson learned	2	Analyst, Developer, Tester
15.	Conclusion	2	Analyst
	Total=	60 Days	

Time boxing: Time boxing is an important part of project planning. Proper time boxing helps to develop the product on time which ensure on time delivery. There are total 15 chapter in this whole project. As 3 chapter in one time box, there will be five time box in

total. Each time box will be 10 to 15 day duration. This project time box are included below:

SL	Chapter	Duration	Total	Time box
1.	Introduction	1	9	Time box 1
2.	Initial study	3		
3.	Literature review	5		
4.	Methodology	2	10	Time box 2
5.	Planning	3		
6.	Feasibility study	5		
7.	Foundation	5	18	Time box 3
8.	Exploration	5		
9.	Engineering	8		
10.	Deployment	10	15	Time box 4
11.	Testing	3		
12.	Implementation	2		
13.	Critical appraisal and evaluation	3	7	Time box 5
14.	Lesson learned	2		
15.	Conclusion	2		
Total=		60 Days	60	

Gantt chart:

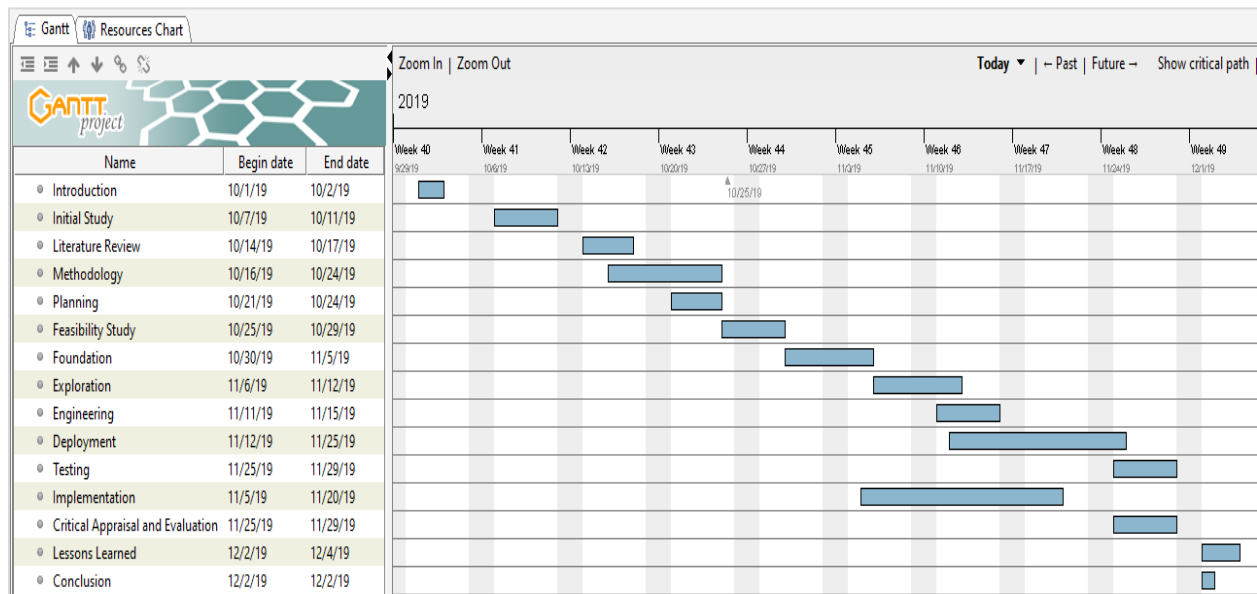


Figure 22: Gantt Chat to show project implementation schedule

Test plan

A proper test plan helps to ensure proper quality of an end product. It's documented all tests along with log and case. Any tester could understand easily how the test was done and what's the reason behind this test. A complete test plan helps to find out fault in the system and solve them.

Test against time box: Testing against time box defines as test after completing a specific time box. After completing a time box its deliverables will be tested. It will helps to track that the development is on right track.

Required test: Mainly two types of testing are doing in real life. One used for functionality testing and another one for non-functionality testing.

Functional testing: Functional testing is for checking that the system is working properly.

Unit testing: Unit testing defines as testing a specific unit of the system. The importance of unit testing is to checking every unit working right and providing maximum correctness. It is the first stage of testing and being performed by developer. As an example if we select Login as a unit, unit testing will check that it's working properly.

Integration testing: Integration testing defines as testing against a group of unit. In unit testing some problem may not identify, but in integration testing as group those problem identified clearly. It also indicate system behavior act as a group.

System testing: System testing defines as testing the full system. By this testing it will clear that, whether the system meeting business requirement. It also test the system behavior against any specific action and the system really capable to handle real life user/environment.

Acceptance testing: Acceptance testing defines as how user accept the system. Though it is done before developing system, but it is a crucial part of software testing. The importance of this testing to find out how system meet user requirements and how they want them. For this end user involvement is very important.

Non-functional testing: Non-functional testing defines as which are not directly involved with system functionality.

Security testing: Security testing defines as testing a system security with both hardware and software. A lot of supporting component is included with a system and their security is also much important. Security testing identifies vulnerabilities of system along with other resources.

Usability testing: Usability testing is to check how user friendly the system is. In ensure that how easily user using the system and how they get benefitted from the system. Also identify how much satisfied by using this system.

Test case: Test case is like a form which includes a set of criteria and information. It helps the tester to test sequentially and proper documenting. By this testing other tester can easily understand the test result and its importance.

	Test Name	Description	Test by
1	Unit Testing	Testing a small unit of coding	Developer
2	Module Testing	Test a complete module when it complete	Developer
3	Integration Testing	Testing the group of units/module together	Developer
4	Acceptance Testing	Testing solution against the requirement	Owner
5	Performance Testing	Testing system performance against load.	Developer + User
6	Security Testing	Finding security leak in the system	Developer
7	Usability Testing	User finds how easily usable system is.	RCC teachers and students
8	Cross Browser Testing	Comparing functionality and style between different browser and device	Developer

User acceptance test plan: User acceptance test plan is end user testing plan. It will done releasing beta version of system. It identifies how user accepts the system and what kind of service they want.

Risk management:

Risk management is a complete procedure to reduce risk. Proactive techniques will help to reduce risk. It is very useful to reduce risk and proper risk management will help to damage control easily.

Risk identification: Risk identification is the first stage to risk management. To reduce risk first of all need to identify the risk clearly. It works defines on three step. First of all I have listed out possible risks of the project. The second task is to document the risk properly and the third stage is to identify how much impact on the system by the risk.

Risk Identification			Date: 4 March 2018
No	Risk	Cause	Impact
Technical			
1	Development failure	<ul style="list-style-type: none"> • Huge change in requirement • Miscommunication • Lack of skill • Lack of importance 	<ul style="list-style-type: none"> • Use less system • Abort the Project
2	Network failure	<ul style="list-style-type: none"> • Local internet connection failure • Inconsistent connection from service provider 	<ul style="list-style-type: none"> • Delay in delivery
3	Development Data lose	<ul style="list-style-type: none"> • Laptop stolen • Laptop hard disk failure 	<ul style="list-style-type: none"> • Delay in delivery • Permanent data loss

4	Hardware failure	<ul style="list-style-type: none"> • Laptop crash • Very low performance • Regular load shedding 	<ul style="list-style-type: none"> • Rise development cost • Delay in delivery
Human Cased Risk			
5	Miss use	<ul style="list-style-type: none"> • Data may reached to 3rd party by mistake • Data may be kept for personal use 	<ul style="list-style-type: none"> • Rise ethical, legal and professional issues. • Clients deny continuing.
6	Wrong implementation	<ul style="list-style-type: none"> • Staff may get it wrong and use it inappropriately • User uses it in appropriately. 	<ul style="list-style-type: none"> • Product turn into useless • Fail to make expected benefits.
7	Change in owner Decision	<ul style="list-style-type: none"> • Product owner may change his mind about developing the system 	<ul style="list-style-type: none"> • Whole project fail
Civil issue			
8	Change in law	<ul style="list-style-type: none"> • Education system may introduce new rule 	<ul style="list-style-type: none"> • Limiting the service.
9	Government Restriction	<ul style="list-style-type: none"> • New ICT law get against this system • May introduce new government tax 	<ul style="list-style-type: none"> • Project propound • Increase maintenance cost.

Natural Disaster			
10	Earthquake	<ul style="list-style-type: none"> • Environment disaster 	<ul style="list-style-type: none"> • Server unavailability • System break
11	Flood	<ul style="list-style-type: none"> • Continuous rain. • Sonami 	<ul style="list-style-type: none"> • System failure • Longer unavailability

Risk assessment: It is the second stage of risk management. These stages identify what is behind the risk, and it is very important to know the cause of the risk. It helps to prioritize the risk. At first identify possible impact of a risk, and then possible action to prevent the risk, and then identify possible cost reduce the risk and the last is to analyze benefit of solving the risk.

Action plan: Action plan is defines as step that taken to solve a risk and reduce risk in future. It begins the development of system and continues after completed development. After prioritizing risk action plan will provide alternative and effective solution to reduce risk.

Change management

A system cannot be 100% perfect. The always need change day by day. For this change management is a way to manage required change. But changes are related with cost, time, business benefit and other supporting environment. So if developer think that this change is important, there is a way always will open.

Factors that might cause change: There are some factors in this project that might cause changes and that are included below:

- User interface changes
- Requirements list change or update.
- Changes of methodology.
- Business requirement changes.
- Develop alternative solution.

DSDM atern welcome changes: DSDM atern always allow logical changes. It work on iterative development process, so if any changes required DSDM atern allow that. Until a certain period DSDM atern allow changes.

This projects is Considering business value: Based on priority need to consider the business value of the system. It helps to identify changes based on business value. Those requirement will have high business value will accomplish first and those have less business value will complete later.

Change workshop: Change workshop is very important to get user feedback. It is an effective way to know where user need the changes and is there any alternative solution for this.

Changes that are allowed: Changes are allowed in DSDM atern but based on business value, project progression and the importance of changes. In my way I will look after in this point to make any changes.

Key decision taker of change: As an academic project there are no specific stakeholder who will take decision for changes. I am playing all of the role except user. So in this project developer and analyst will take the decision to make any changes.

Quality management

Quality management goal is to ensure an end product quality. For better quality product, need proper plan from initial level and need to maintain this completion of the system. A good quality product will contain these criteria (well designed, proper plan, market research, implementation plan, business facilities and work efficiency).

Rules applied to maintain quality: To maintain a system quality till the end, need to apply some rules. This will ensure the quality of product and the rules are given below:

- Start from firm foundations.
- Time box of whole project.
- Requirement prioritization.
- End user involvement.
- Maintain international and standard procedures.
- Using DSDM attern methodology.

DSDM attern standard quality measures: DSDM never compromise with quality. DSDM attern main aim to provide quality product with expected quality. It works in iterative development process and check continuous progress. Standard quality measures are based on three tasks:

- Quality control
- Quality assurance
- Quality management

Quality plan and measuring meter: Quality plan is also a part of quality management. It describes the activities, plans, techniques and tools are used in this project for ensuring quality. Project need to review time to time for better quality.

Chapter-6: Feasibility

Feasibility study is an important part of any project. Feasibility study provides the data for whether the project is feasible in real life or not. Feasibility study includes project description, market condition, and facilities, legal & technical requirements which help to make a project decision.

All possible type of feasibility: There are few types of feasibilities. Some of feasibility studies are described below from the context of this project.

Operational feasibility study:

Operational feasibility criteria measure the urgency of the problem of a solution with the help of a new proposed system. It helps in taking advantage of the opportunities and fulfills the requirements as identified during the development of the project (evirtualservices, 2019).

The proposed system will be solve the problem for those who are not idea or guideline to make a project and also adopted with the technology for new invention. The proposed system interface will be more user friendly and secure for any type of user where user can be post, view project (semester, year and top selected projects), conversation with senior students or teacher and view related technology based students profile, provide feedback, submit project, Search by favorite technology based projects, view related technology based contest or seminars etc. So this system will be used to make opportunity for create innovative project idea between AI or IOT based technology and ensure effective guidelines for new programmer or students.

Technical feasibility:

Technical feasibility analyzes the project from technical aspect. It describes the hardware and software need for this project. Technical feasibilities will also provide the technical possibilities of proposed system.

Hardware:

Hardware	Configuration
Laptop	Corei-3
	4GB DDR3 Ram
	500GB HDD
	Processor 2.30 GHz
Router	300Mbps Wi-Fi Router

Software:

Software:
Xampp
Microsoft Office 2019
Windows 10
Kaspersky Anti-virus
Notepad ++ and Sublime Text

These are based on minimum requirements for running this system. All the software will be updated and latest version.

Economic feasibility: Economic feasibility describes from the economic benefits aspect of proposed system. Economic feasibility analyze the benefit from the investment for proposed system.

Social feasibility:

Social feasibility describes the social impact of proposed system. This project will have great impact in society for job placement. A lot of students came up with new valuable ideas but they don't have proper guideline to make it happen. This idea portal will give them the opportunities to do this. So this project will be very helpful for social development.

Cost benefit analysis: Cost benefit analysis is an approach to estimating a project cost and benefit. Stakeholder always finds the positive factor and benefit from a project. It also identifies how much cost will be need for development of this project and how this will benefit the business. A project future depends on this cost benefit analysis.

Economic feasibility:

Generally **economic** feasibility means whether a business or a project **feasible** cost wise and logistically where economic analysis is used for evaluating the effectiveness of the proposed system. **Economics** calculate **economic feasibility** by analyzing the expected costs and economic feasibility, cost benefit analysis is done in which expected costs or benefits are evaluated (ofm, 2018).

For this proposed system required a website to interact or communicate between students or users. In this proposed system need PC, Domain, Hosting, and Server and also certain maintain cost for develop and maintain the website of the system.

System Components Name	Total Number Of Component	Component Price	Total Price of Components
Desktop or Personal Computer	2	60,000.00/=	226,000.00/=
Web Domain	One Year	2,500.00/=	
Web Hosting	One Year	3,500.00/=	
Web Server	1	50,000.00/=	
Developer Cost	01	50,000.00/=	
Maintenance Cost	total	10,000/= (per year)	
Training Cost	01	50,000/= (per year)	

This system will save cost and time with reliability calculations and efficiency. It does not only used for business purpose but also used for new invention to adopt digital world which is needed for economic and technical perspective. To make this system is much lower than the benefits because this system fully technical.

Market Research Analysis:

In this system, Market research analysis technique comprises of both analytical as well as statistical research methods adapted to harness and interpret information in a systematic way (iresearchservices, 2018).

This proposed system is financially affordable, technically possible and more important. That is ethically acceptable and more beneficial for every students and university to make innovative idea for implement. In Bangladesh there have no such kind of online or offline system or platform where students can easily able to view projects, profile, project feedback, give guideline, submit project, view year or semester wise best project and Search and communicate technology based project. So students can easily learn and create innovative project whole over the country through using the platform. Obviously the proposed system will be able to draw attraction for any department of students for its unique features in university and college all over the country.

Chapter – 7: Foundation

Introduction:

The purpose of this section is explained the problem area of the project and briefly describes problem solutions that will also find out in this section. In this section of the document contains the requirements collecting technique to identify the problems and give possible solution.

Problem Area Identification:

This part of the system is represents properly to identify and explained the system problems that are removing the goals and objectives and defined in the previous step

from being achieved. It provides the platform of the system for investigating a board range of advantages through the problem identification. There are many types of problem identification techniques which can be used in this system. Now I have explained on the below **that are listed:**

Interview:

Interview is the great techniques for gathering requirements along with the problems which techniques are most effective for any particular situation to complete the system or project (work, 2018). It is held from the users, the problems can be easily found out. Certainly called that this techniques is very popular to carry out the problems of any solutions whereas I have the written those on the below by the bullet point:

- ✚ There are many sorts of users requirements are collected
- ✚ Listed appropriate stakeholders which are needed
- ✚ The system are listed satisfaction factors of the stakeholders
- ✚ Identified the major problems of point of sale.

Interview Summary:

There are many problems in the full work procedures of the old system after discussed interviews with the well stakeholder accordingly. I have kept all the records and listed them based on their priorities through the system. The most problems is there are no platform for get or generate project idea and where no one cannot get support from the seniors brothers or teacher to get guideline or make innovative idea. Other problem is that new students are confused what they do or starting time on the initial level and they also suffer from various information.

Observation:

Observation is the better suited for requirement gathering in any types of project. This technique is used mostly in qualitative research and it added group behavior in a

specific situation (research, 2018). Anyone can get a better understanding in their in current activities environment where the analyst may observe the user themselves. The analyst may observe the user themselves in the present work environment and following the issues are picked out during the flow of the observation techniques of the proposed systems.

- ✚ The workflow of the existing system shall be revealed
- ✚ There are noticed the major workflow issues
- ✚ Identified the unorthodox requirements of the system

Observation Summary:

After the observing I will be think that there are no system like this proposed system where students can able to know about project idea, get language related knowledge, proper guide line and also help to get information about job field or job requirements. There is no scope in DIU (Daffodil International University) where students cannot sell their innovative project or system and not found senior student to know about different types of new technology like **AI** (Artificial Intelligence), **IOT** (Internet of Change) and also they don't know how they adopt with their system through the AI or IOT but at present These technology are very popular in our country. The main problems is that many students cannot submit their project in time as a result they loss their semester and suffer from confusion. At present many seniors want to help other students so that they can perform their project in time and they also want to hire the new students who are enabling in different types of technology based job. Other universities have a portal but there are no enough facilities as result students feel bored to use this system.

Questionnaire:

Questionnaire technique is a set of questions typically used for research purposes which can be divided into qualitative as well as quantitative in nature. Questionnaire will

be asked to get answer from the users and delivered in the form of a survey, but a survey always consists of questionnaire (questionpro, 2018). It is best way to gather information and in this section no need place or time to ask questions arise support to find out on the below:

- ✚ What is the problem of running system?
- ✚ What can be effective or provable solution of that problem?
- ✚ What the student want from this system and what they need from the system?
- ✚ What action to fulfill their requirements?

Rich picture:

Only one descript diagram technique is rich picture where a picture is a drawing of a situation that illustrates the main elements and relationships that need to be considered in trying to intervene in order to create some improvement. This diagram have added pictures, text, symbol, icons, straight line, annotation which are used to represent for graphically illustrate the situation. Rich picture is fully describe a system where added all functionality and activities through the images and texts as result anyone can understand easily through the techniques. Now I am show the rich picture for my system on the below:

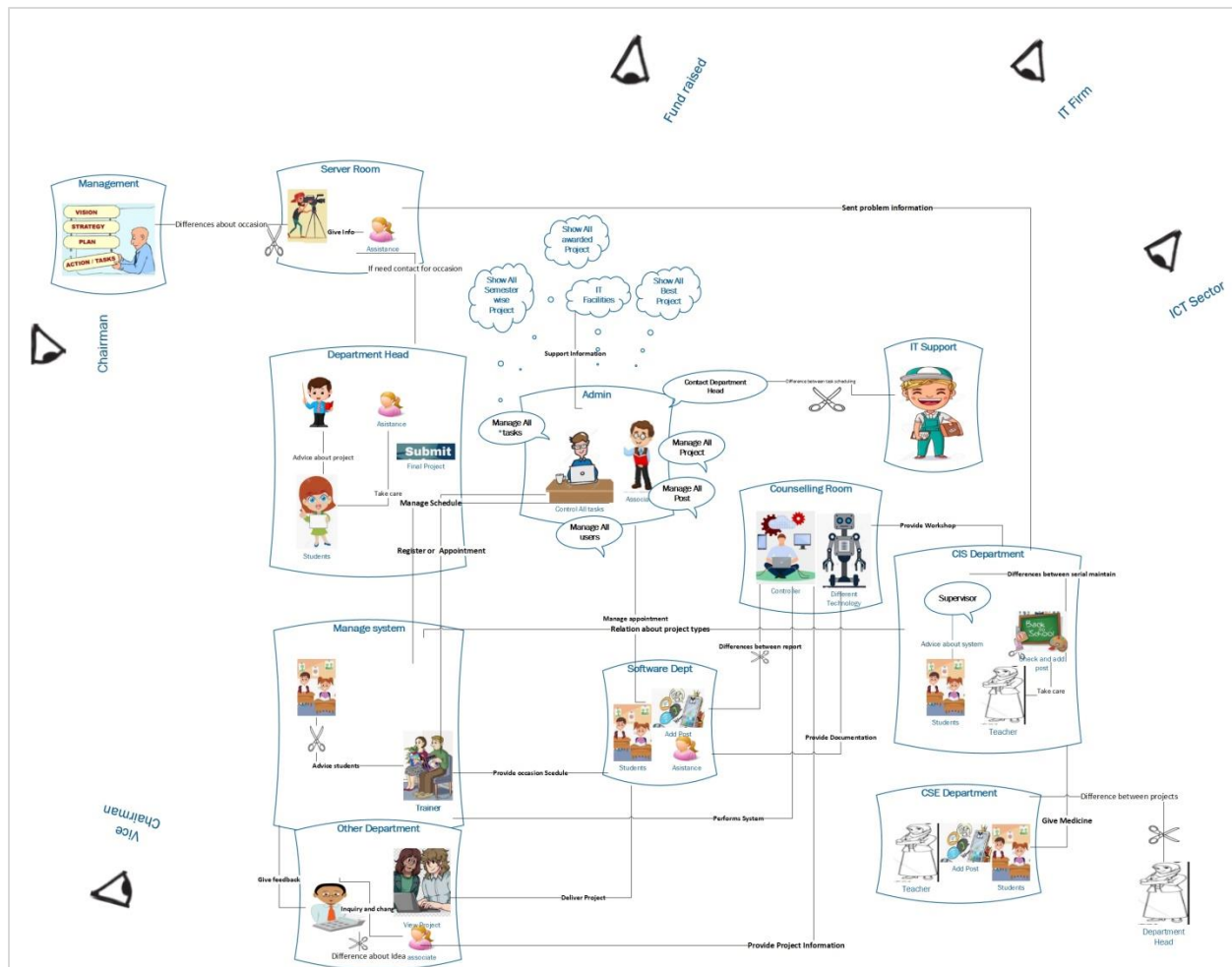


Figure 23: Rich Picture of the proposed system

Specific problem area and description:

After analyzing the proposed system, where students can submit their projects idea, share their technology related knowledge, communicate with their seniors and their supervisor and also solve their any types of problem about project or technology related can be identified are:

- Most of the times students cannot know their seniors students worked where? And they don't know alumni worked where and which technology?

- ✚ Many students posts in social media to get solution about their problems or support but at the last time they often face wrong information as result they reject their tasks.
- ✚ New students are feel confusion of the different types of technology where they work and build their skills to work in global network.
- ✚ Communication gap is already impact on the students they cannot contact their seniors to share their information or project related tasks. In this perspective they have need support to works in academic or organizational projects.
- ✚ DIU has no online platform where students can contact or share project ide to get proper feedback and many students don't know which projects are best awarded for ICT carnival and other year wise projects. Which projects are best awarded prize enjoy from the government Institution.

Possible Solution:

Above the problem analyzing there are possible solutions have been identified. Where a web platform having options for submitting project idea options, get feedback, guideline about different types of technology, proper support of job filed, get idea for final project building Communication Bridge among the students are the best way to solve the current problems. Where the system should provide features are on the below:

- ✚ Students make account in the system through giving information like give student id or national id, email, Full name, permanent and current address. And that information enough to identify them properly and they don't cheat with others students of the system.
- ✚ Students can easily find their technology based projects and friends through the system and also know about the best awarded projects or best year wise projects through the system.
- ✚ All completed projects can easily sell to the other students who have need for their organization in Daffodil international university. And all students get proper feedback for their seniors and teachers to work with new technology.

Overall Requirements list are given on the below:

The proposed system requirements are process which can be done by using any particular system and all processes above along with interview, observation and also questionnaire all the requirements were identified. Requirements are added in two different sections on the below:

Functional Requirements:

For the system Functional requirements help and describe how a service or system should behave or react to particular input and particular it's solutions, what its features and functions.

For Admin:

- ❖ Secure Login facilities
- ❖ Manage all submitted projects
- ❖ Add per year best project
- ❖ Best university project
- ❖ Add educational equipment's (programming) and guideline
- ❖ Manage per year best project list
- ❖ Announce for participate for any program
- ❖ Select best university project
- ❖ Add educational board
- ❖ Manage other services of the system
- ❖ Mange user activities
- ❖ Manage posts and feedback
- ❖ Manage user Search system
- ❖ Manage search user
- ❖ Search any type of project
- ❖ Update admin password and info
- ❖ Manage user conversation or message
- ❖ Able send emails to users
- ❖ Manage user comments and feedback
- ❖ Logout facilities

For Students:

- ❖ Make account facilities
- ❖ Login
- ❖ Get a dashboard
- ❖ Submit project
- ❖ Get project feedback
- ❖ Find year or semester wise project
- ❖ Show project on dashboard
- ❖ Manage message with supervisor or department head
- ❖ Show year or semester wise best project
- ❖ Search facilities for favorite technology based project
- ❖ Find friends
- ❖ Post panel
- ❖ Instruction board
- ❖ Update profile
- ❖ logout

For Supervisor:

- ❖ View project
- ❖ Provide feedback
- ❖ Accept project
- ❖ Send message
- ❖ View semester wise projects
- ❖ And include final year

For Department Head:

- ❖ View all semester wise accept project
- ❖ View all accept project
- ❖ View final year best project
- ❖ Send message (student or supervisor)

Non-Functional Requirements:

Nonfunctional requirements describe how the system work and the general characteristics of a system. The system offered constraints of the functions or services like: timing constraints, Constraints on the development process, Standards are non-functional requirements.

Validation: Validation is determining if the system complies with the requirements and performs functions for which it is intended and meets the organization's goals and user needs. Validation is done at the end of the development process and takes place after verifications are completed.

Verification: Verification is an act of testing checking and auditing that makes sure that the product is designed to deliver all functionality to the customer. Verification is done at the starting of the development process.

Reliability: The system should be so reliable that it would work for a long time without any problem and we can easily trust the system. There are two terms related to the software reliability.

Fault: Fault means a defect in the software like a bug in the code which can cause failure in the software.

Failure: Failure means that when the behavior of the software is not same as the specified one.

Response time: The system response time towards any task. In other words, performance is the speed or how effectively the software response to the given task. Performance can be tested by MIPS (millions of instructions per second)

System efficiency and effectiveness: Efficiency is the capacity to do things right. Effectiveness is the capacity to do the right thing.

Accessibility: Accessibility features are designed to help people with disabilities use technology more easily.

Technology to be implemented:

The proposed system will be need implementing some essential technology. As a result those technologies will be help to manage the whole process in organized and accurate way.

Client/Server application:

The main features of student/server application are provided on the below:

- ✚ It enables in multiple technology or machine.
- ✚ It has added menu driven application or system
- ✚ Here limited students can be capable to use this system
- ✚ This is easy and faster to use
- ✚ Well security deploy on the system

Web Application:

In this field web application are providing the opportunity to use the system with web browser through internet where features of web application is listed on the below:

- ✚ For every device enable to run web application which have web browser.
- ✚ Users don't feel limitations on the system. URL driven system.
- ✚ There are some issues like performance and security for the proposed system.







Recommendations and Justification:

Analyzing of the natures of proposed systems and students requirements has been find out that system or application would be the best covering problem to implement the system. Valuable reasons where some useful features are helpful by the web application or mobile application like:

- ✚ To use this system no extra software installation process needs to overcome
- ✚ There are no limits of users.

- ✚ To properly use this system is need internet and web application or apps
- ✚ Anyone can able to use this application from anywhere if the internet is available.
- ✚ This system is usable, friendly and faster for students.

Rich Picture Notations:

Notation	Description
	I have used this shape for declare the department and here added all other details
	I have used this shape to show It facilities department and also provide add post, view post and other informations
	This is association line and it is used to make relationship
	All controller is decided by this symbol who monitor they system activities
	This icon used for show the confliction between department head, teacher, and also other users of the system.
	To represents the system activity this diagram icon is used in the rich picture of the system.

Chapter-8: Exploration

Introduction:

Exploration is used to define the early work performance or deliverable of the system and this chapter will be added the priorities requirements list with the requirements catalogue and varsity needs.

Old System Use Case Diagram:

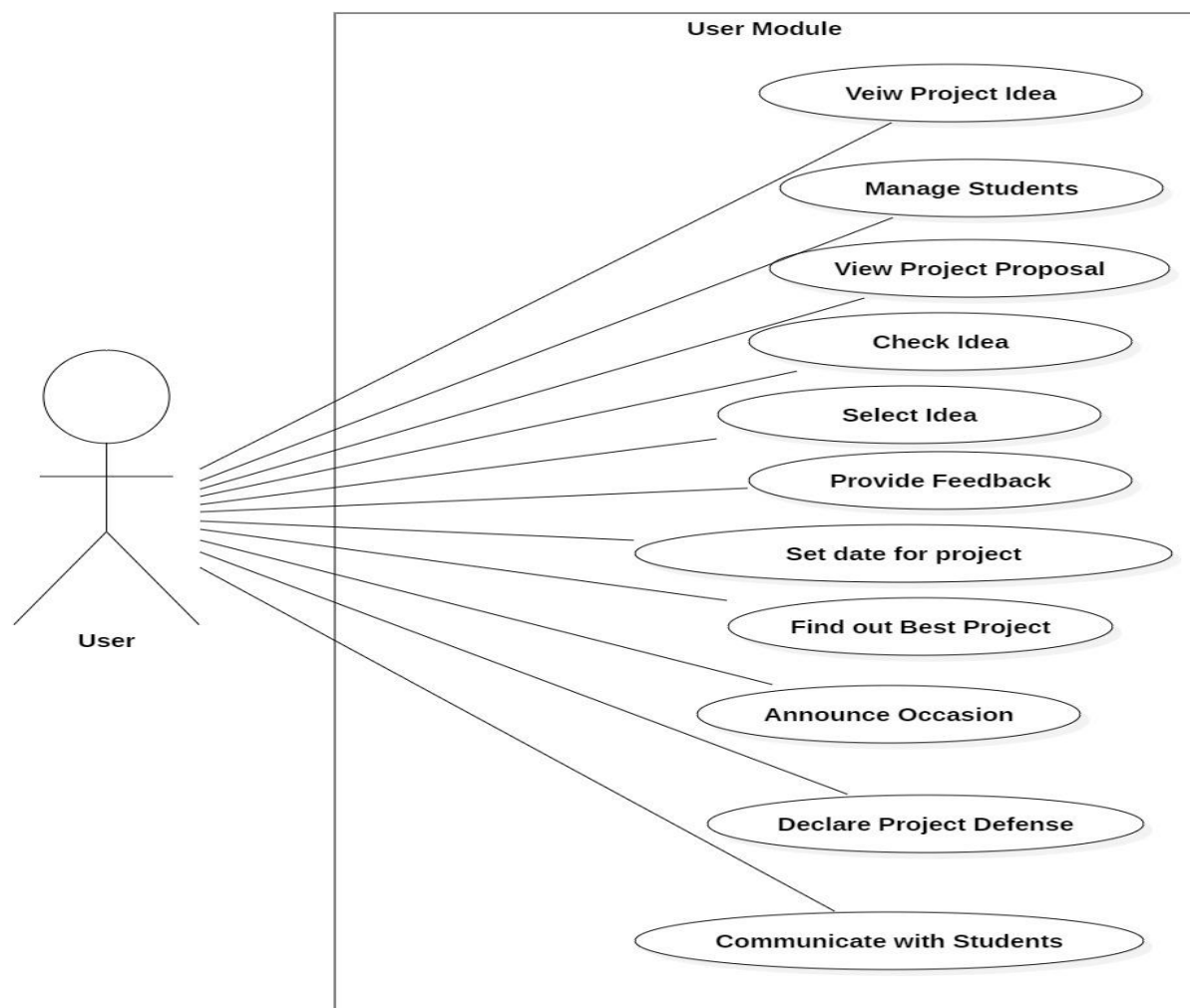


Figure 24: Manual System Use Case Diagram

System Use Case Diagram for Admin:



Figure 25: Current System Use Case Diagram for Admin

System Use Case Diagram for User:

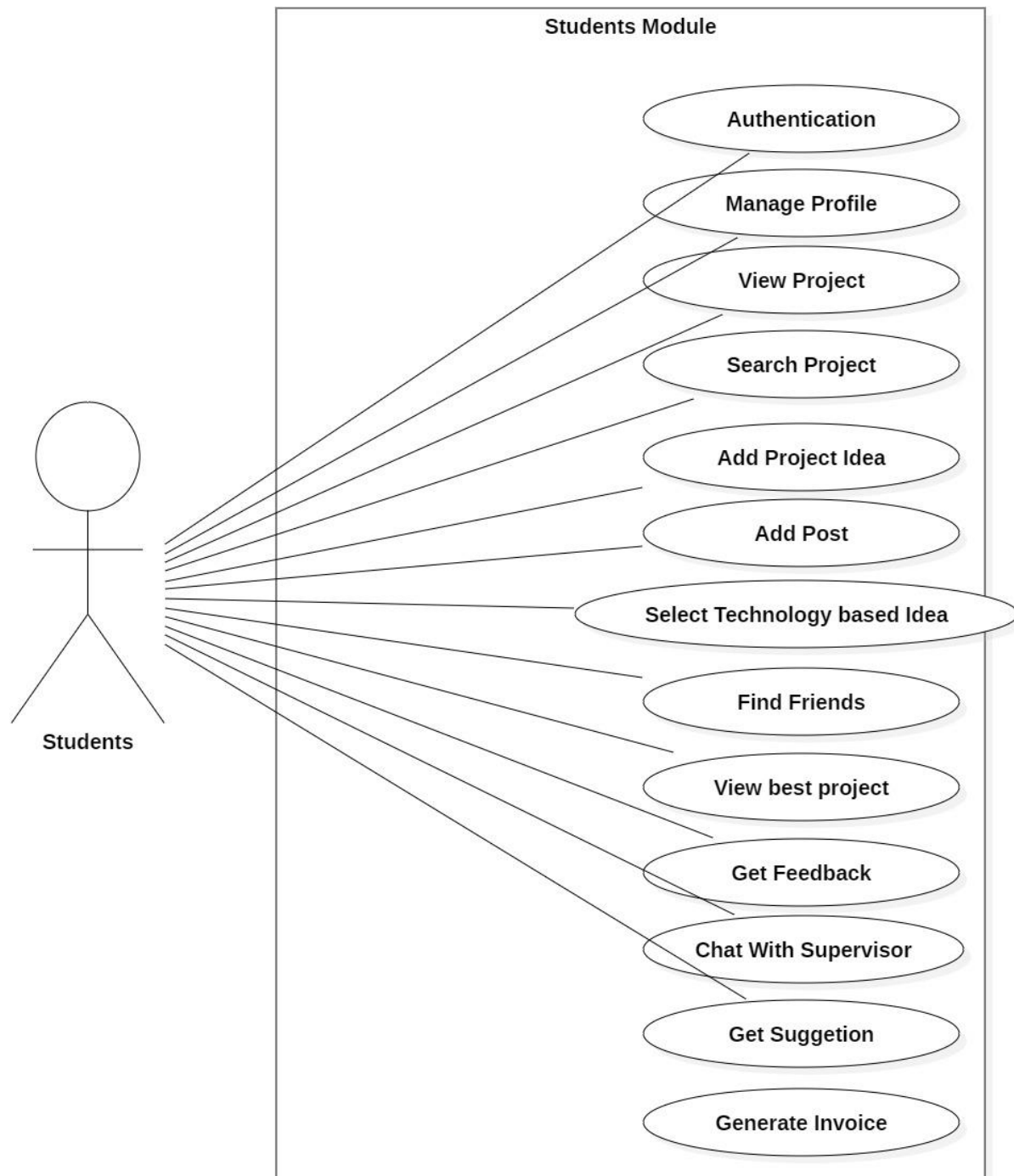


Figure 26: Current System Use Case Diagram for Users

System Use Case Diagram for Supervisor:

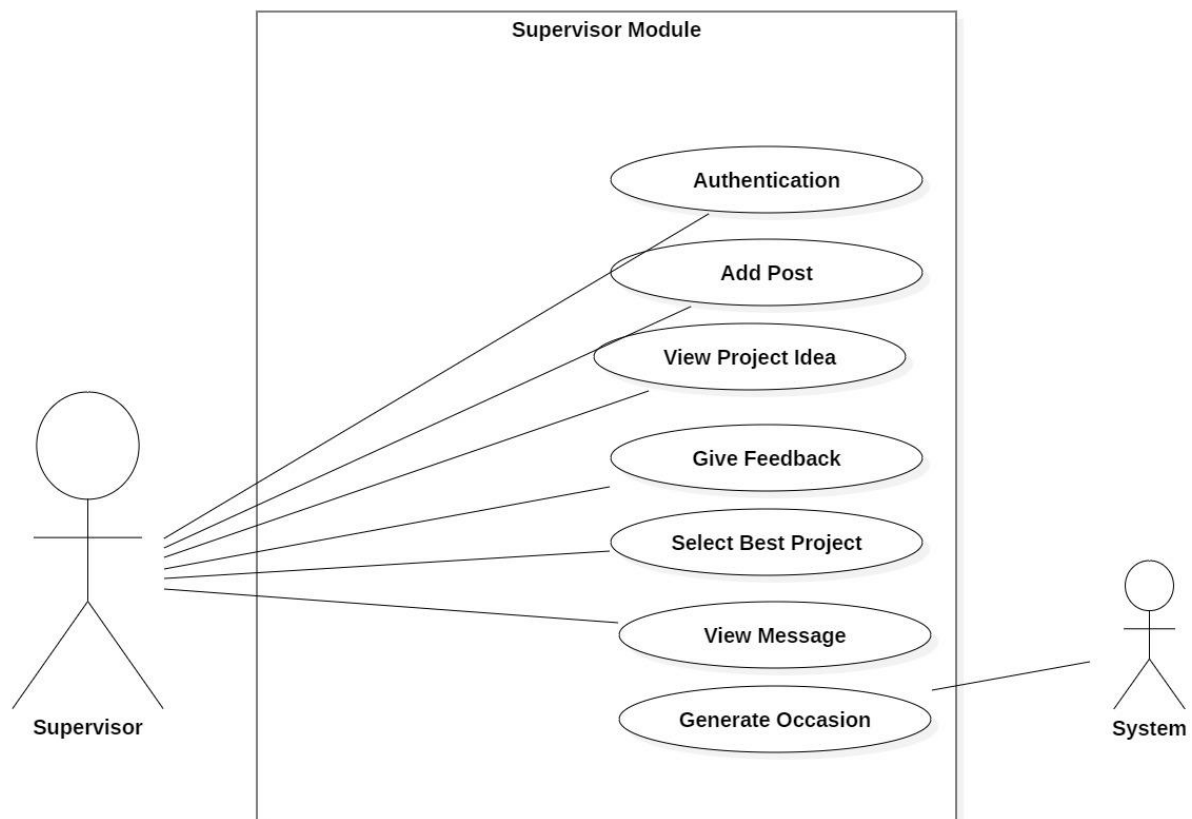


Figure 27: Current System Use Case Diagram for Users

System Use Case Diagram for Department Head:

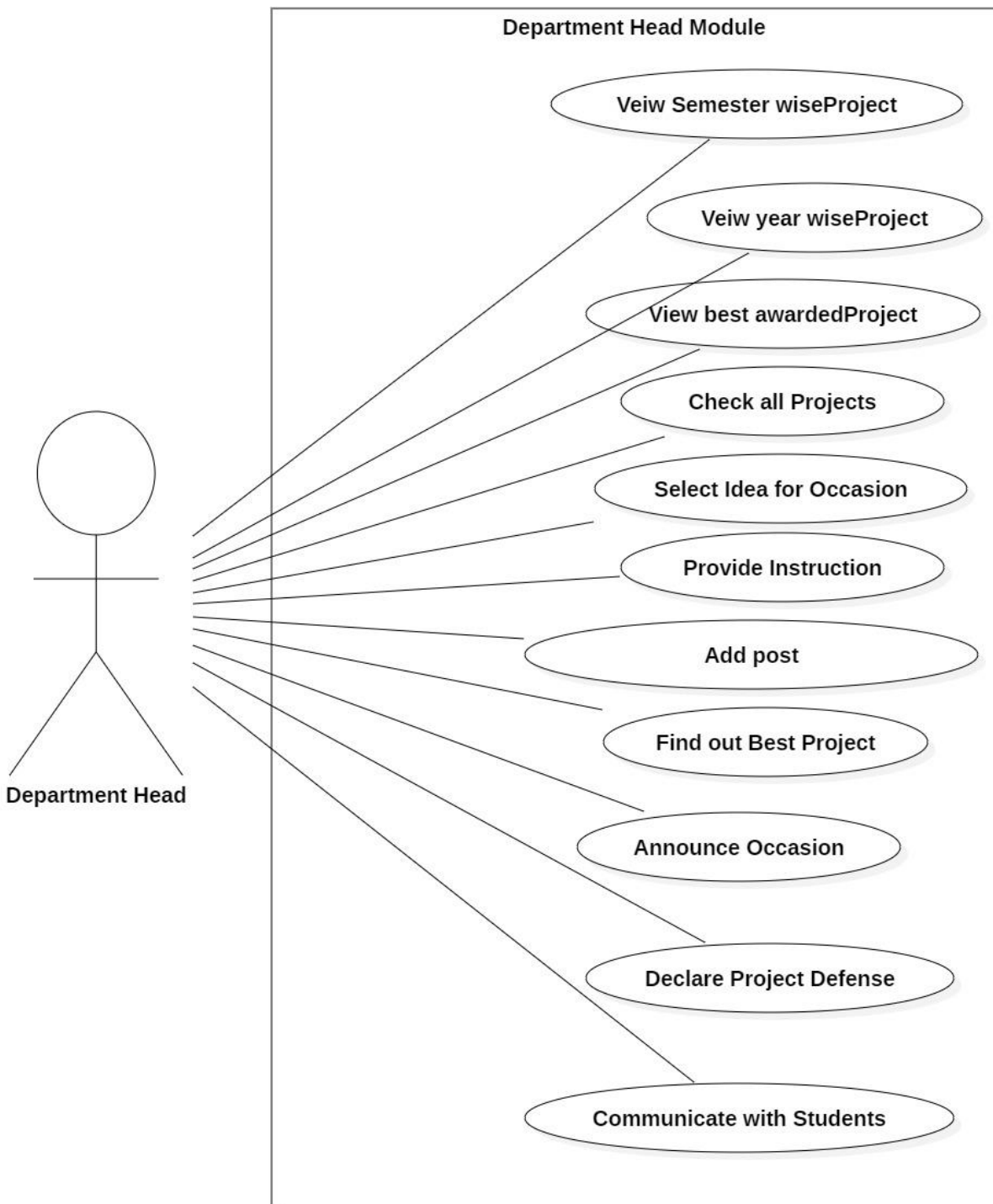


Figure 28: Use Case Diagram for Department Head

Activity Diagram of the System:

Students Activity Diagram:

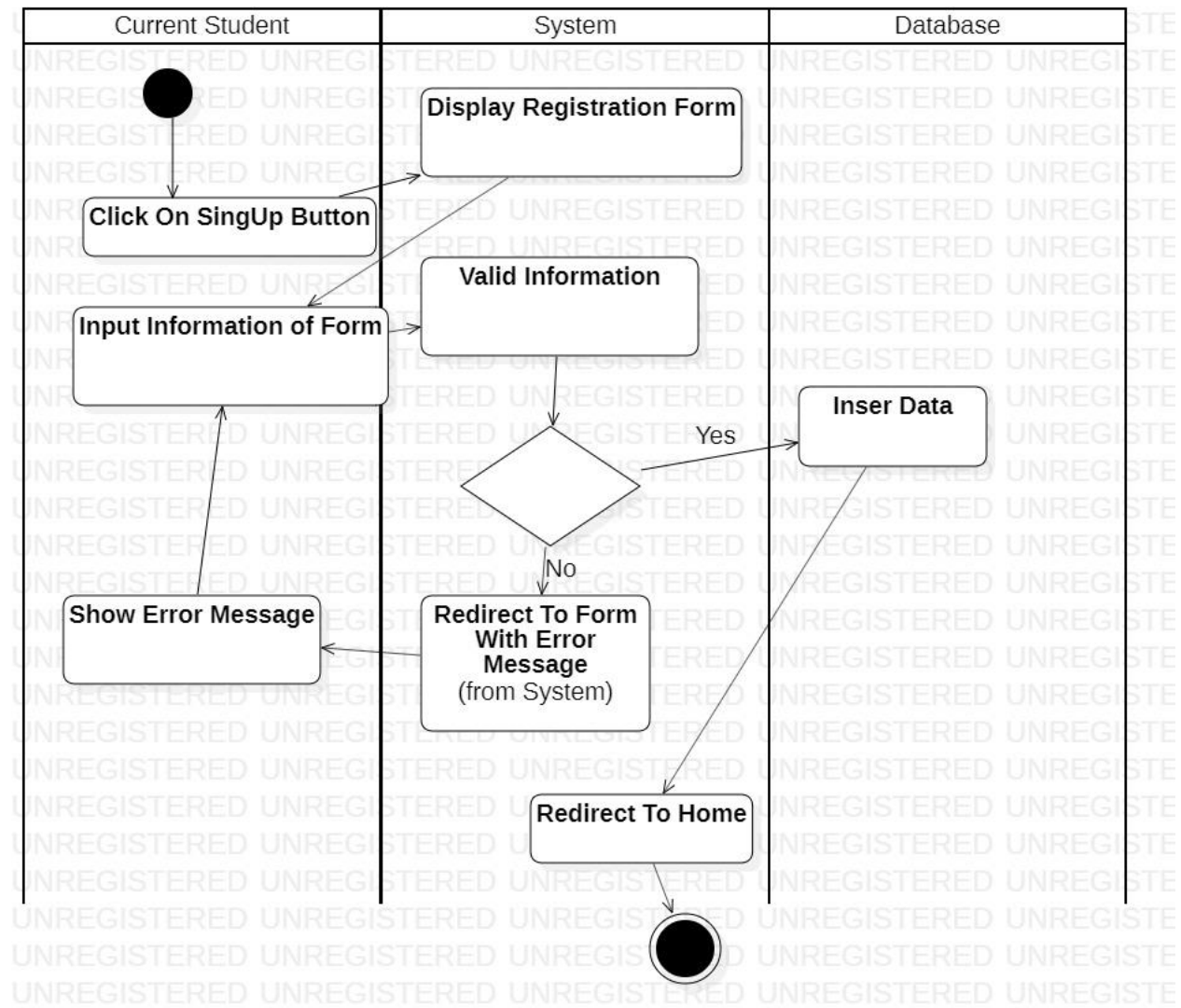


Figure 29: Activity Diagram for User Registration process

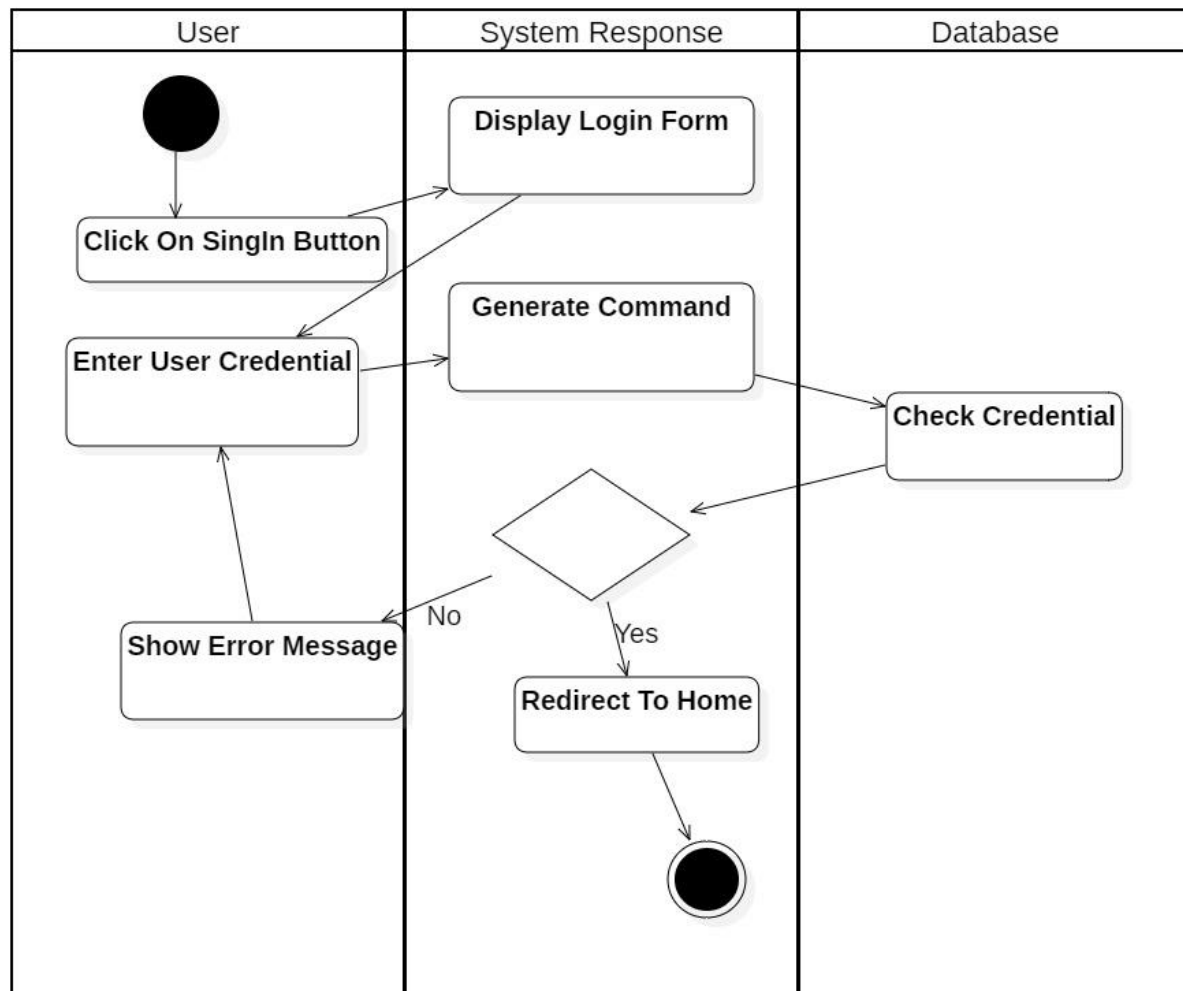
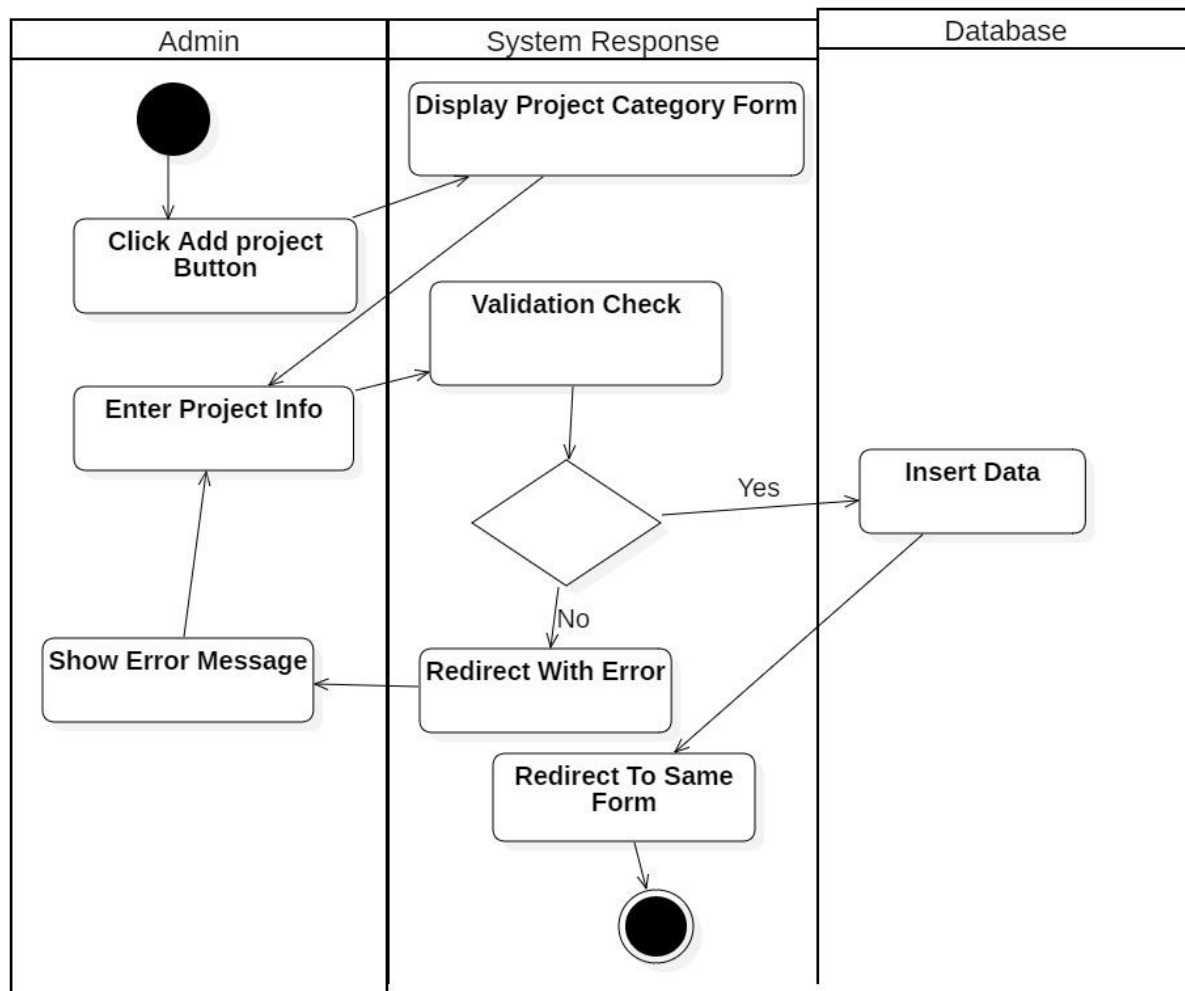
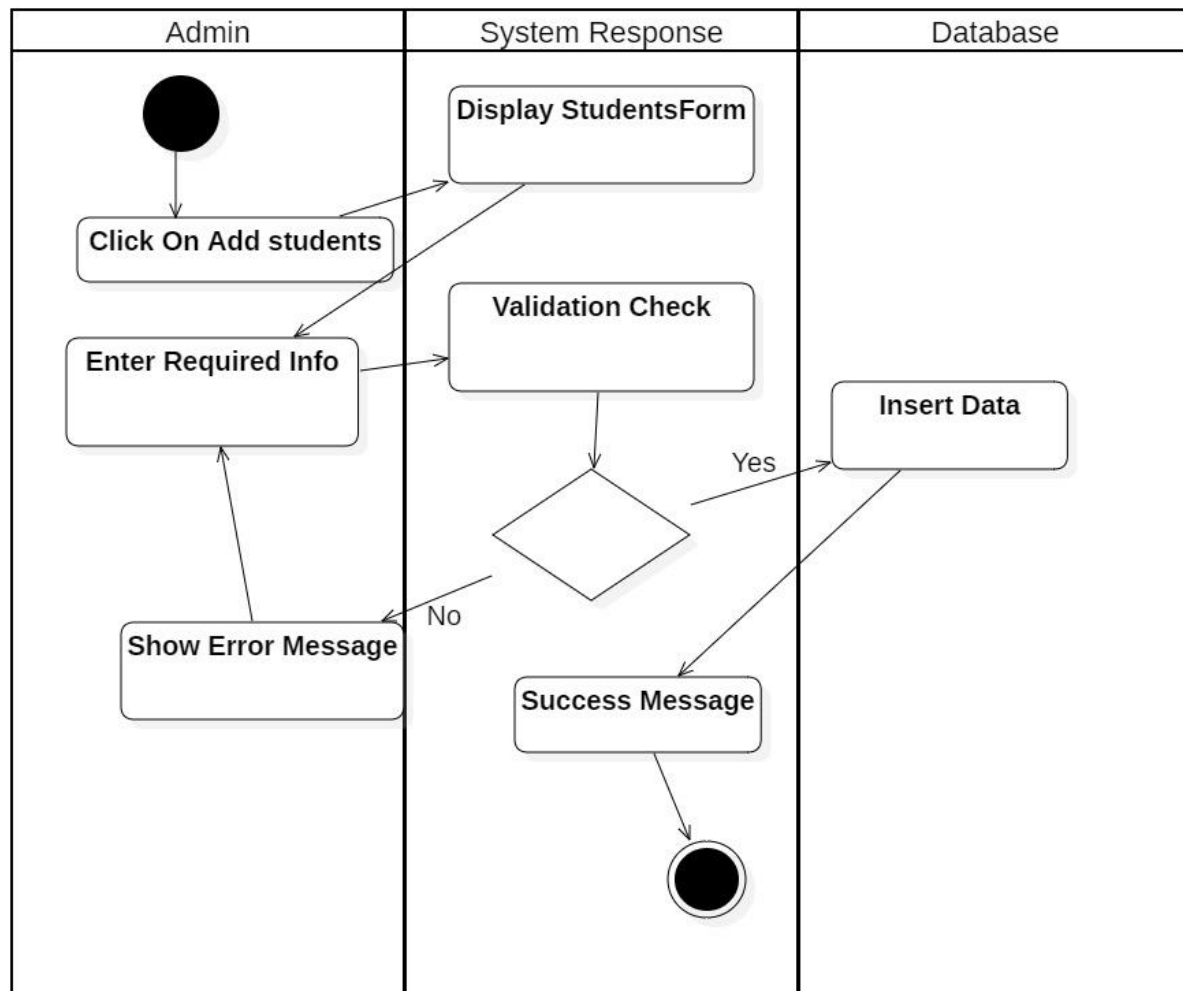
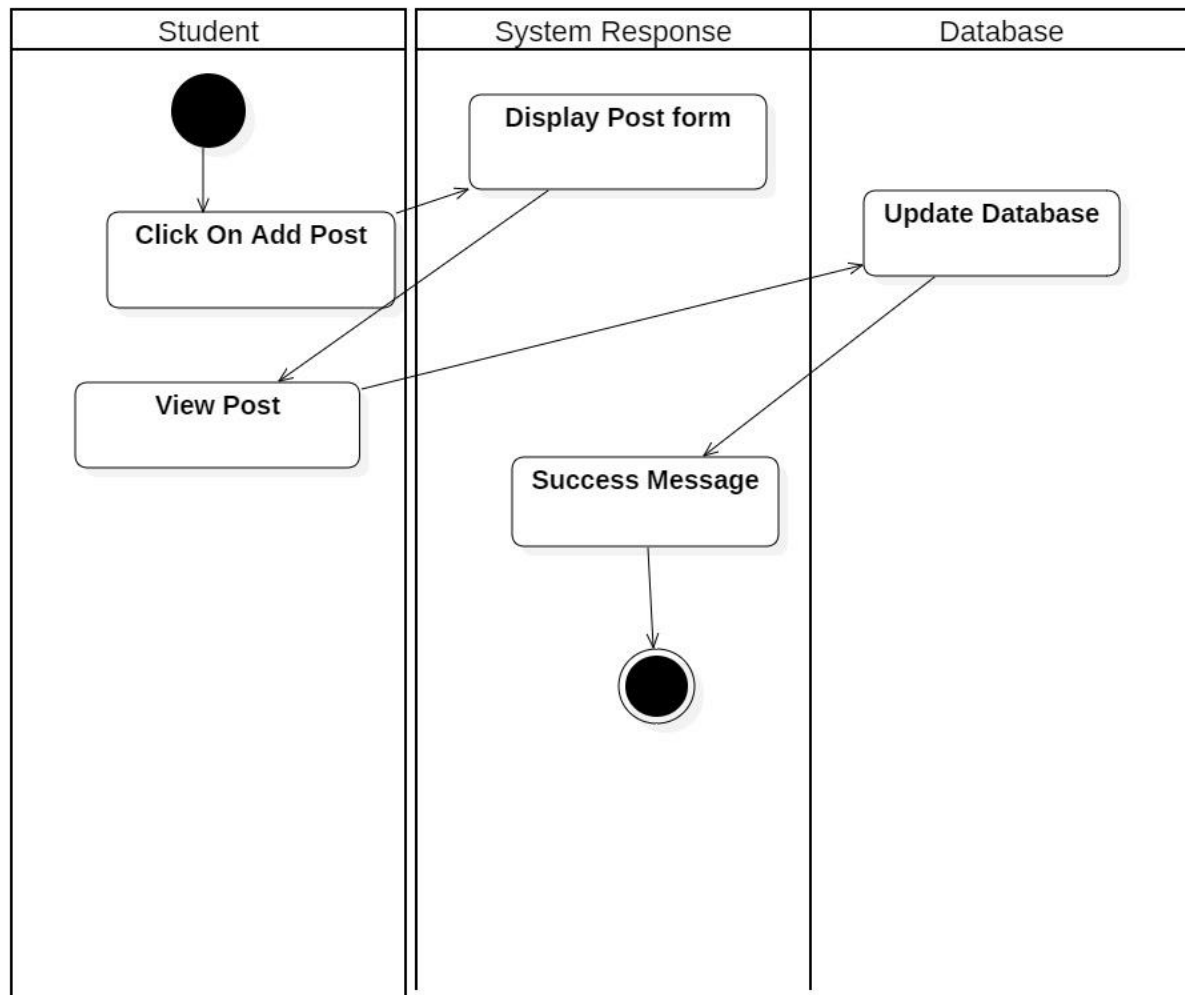
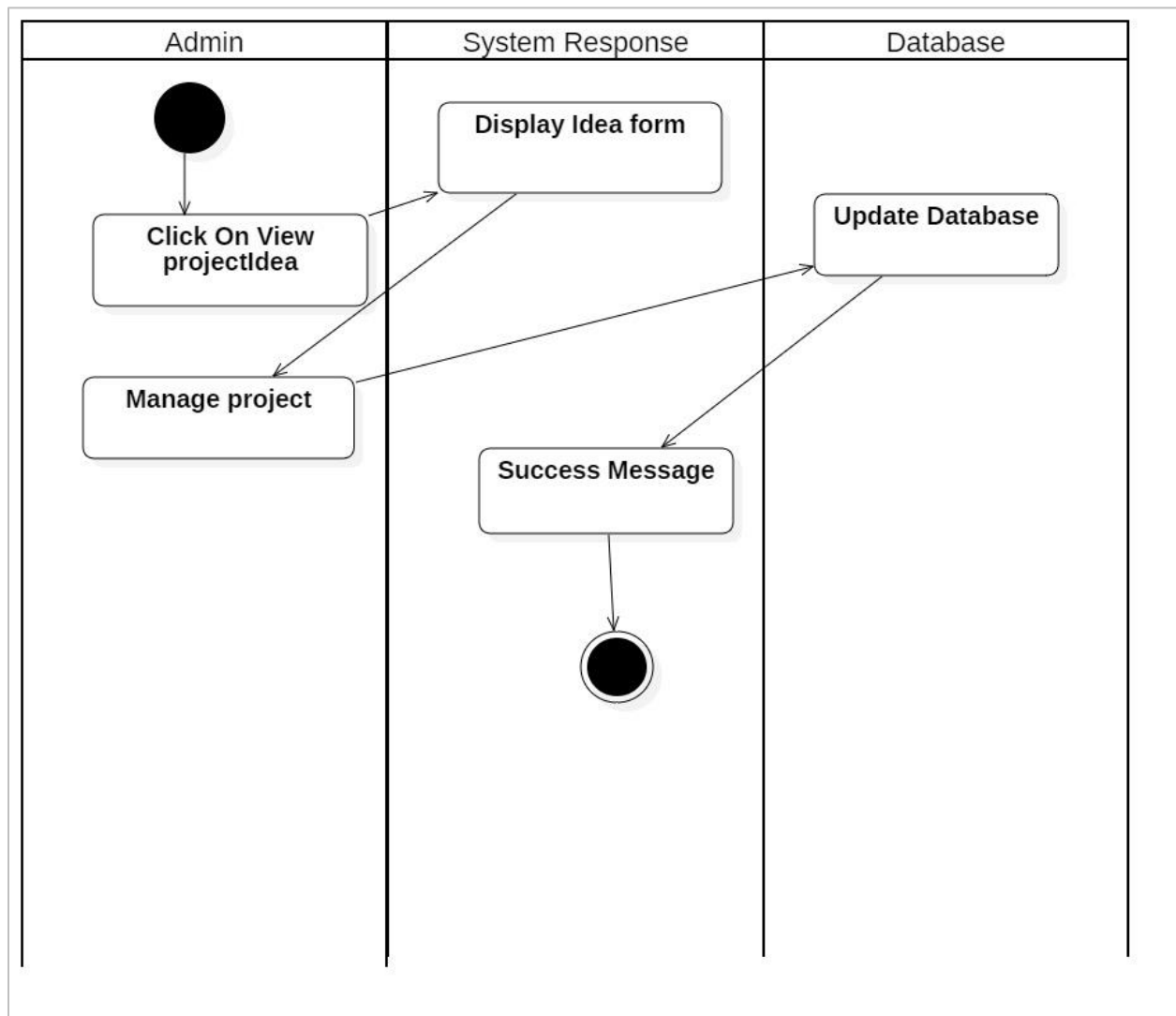
User activity Diagram:

Figure 30: Activity Diagram for User Login Process

Admin add post Activity Diagram:**Figure 31: Activity Diagram for Add Project**

Admin add user Activity Diagram:**Figure 32: Activity Diagram for Add Students**

Student View and add post:**Figure 33: Activity Diagram for View Project**

Admin view project:**Figure 34: Admin view Project**

Supervisor Select Project Activity Diagram:

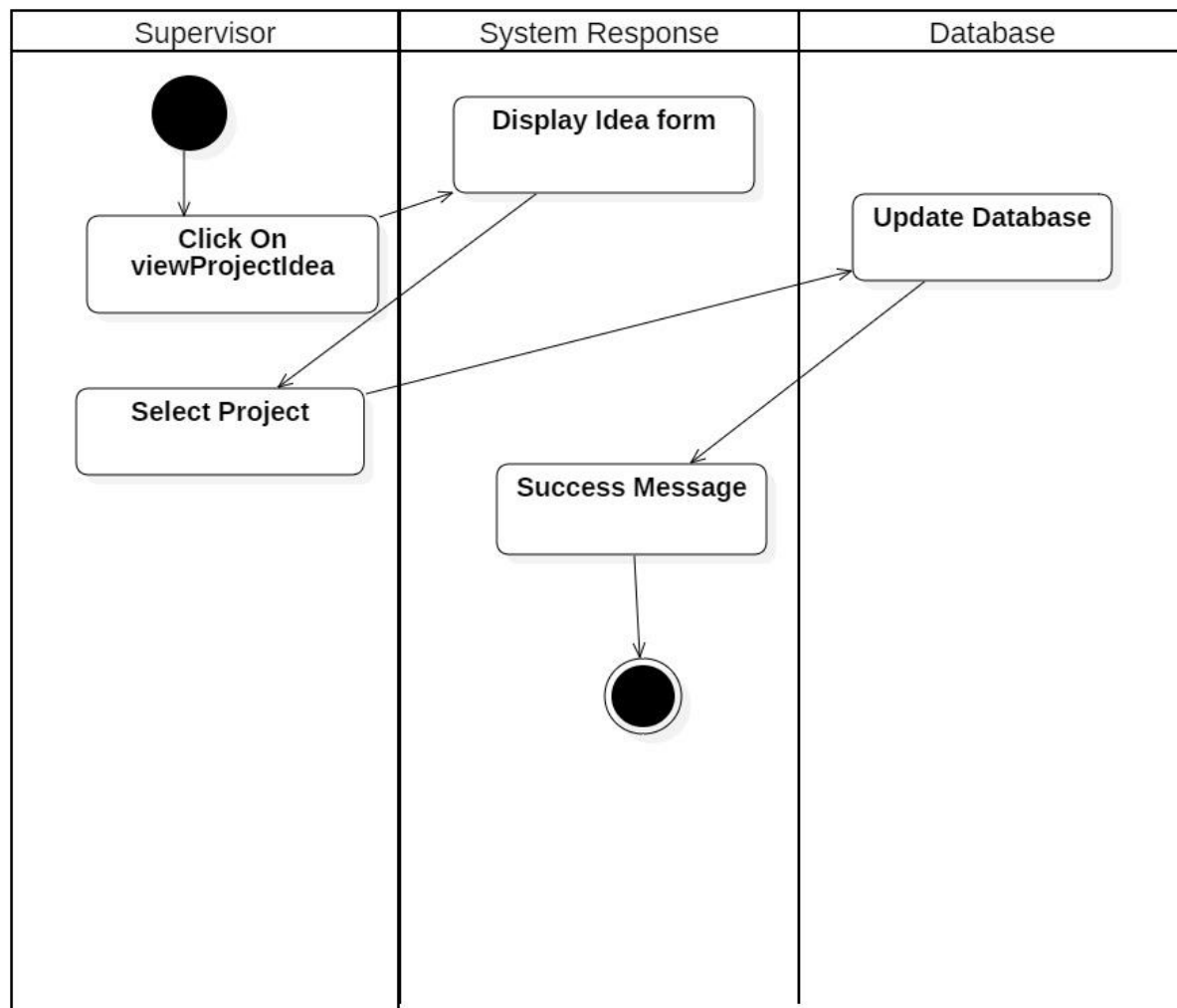


Figure 35: Activity Diagram for Add Project

Department Head Activity Diagram:

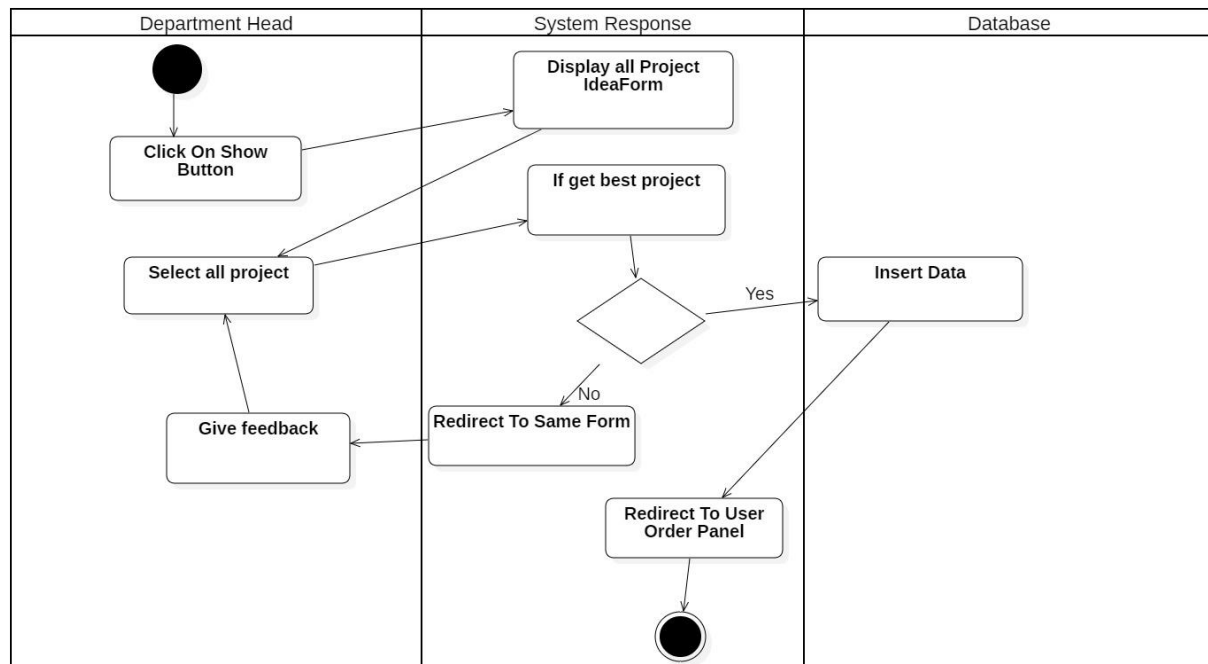
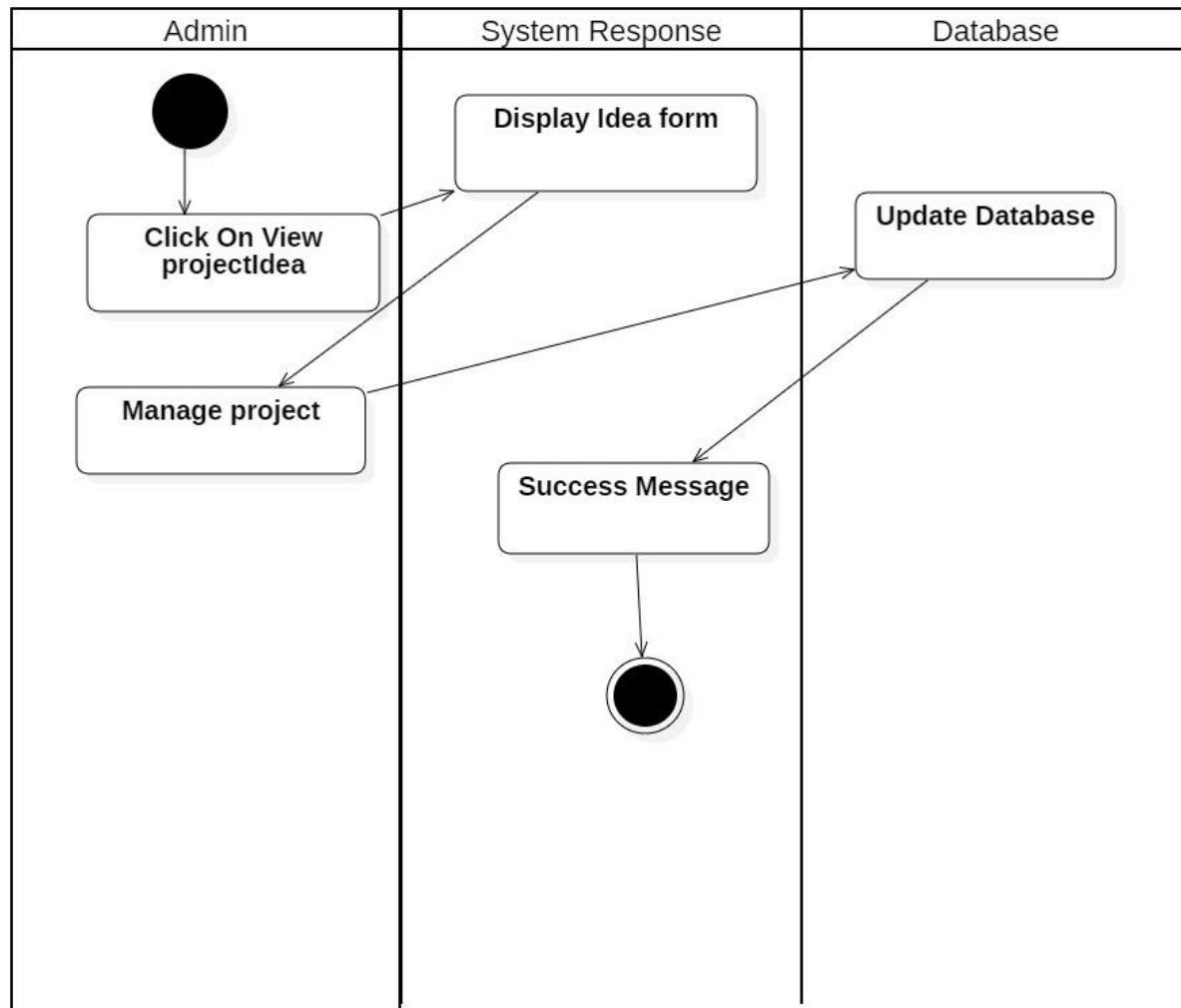


Figure 36: Activity Diagram for Select best Project

Admin manage Post Activity Diagram:**Figure 37: Activity Diagram for manage Post**

Use Case Description:




Primary Scenario For login:

Use case ID	User Code:01
Use case name	Login
Actors	Students, Alumni, Supervisor, Department Head, Admin
Description	First time properly input the any important task login must require.
Pre-condition	<ul style="list-style-type: none"> ✚ For login Internet connectivity is important ✚ Need valid Student ID and each individual password
Action	<ul style="list-style-type: none"> ✚ Click into login button from the home page and go ✚ Input Student ID and password ✚ If any error then show the error message
Post-condition	Redirect to home page based on their rule
Secondary scenario	Students who are not DIU then they will be unable to login to the system.






Primary scenario for submit Project idea:

Use case ID	U Code: 02
Use case name	Submit project
Actors	Students
Description	Authorized students can able to submit the project idea
Pre-condition	<ul style="list-style-type: none"> ✚ Always need the Internet connection. ✚ To enter the system, students must be logged in.
Action	<ul style="list-style-type: none"> ✚ Go to the project submit options ✚ Click the file upload button ✚ Give subject or comments on the box
Post-condition	Need to view page after the project submit
Secondary scenario	Unauthorized students will be unable to submit or view project idea.

Primary scenarios for project or technology about post:

Use case ID	User Code: 03
Use case name	Add post on the system
Actors	Students, Alumni and teachers
Description	Only Students, Alumni and Supervisor can able to add new post
Pre-condition	Always need Internet connection to access. To perform action User must be logged in.
Action	<ul style="list-style-type: none">  Go to the My post option to make post  Click add new post button on the system  Properly Filled required information to add a post
Post-condition	Redirect to view page post after adding a post
Secondary scenario	Unauthorized person will be unable to add or delete a post in the system

Primary scenario for manage users:

Use case ID	User Code:04
Use case name	Manage users of the system
Actors	Admin
Description	Properly check and monitor user authenticity user information must be required.
Pre-condition	Always needed Internet connection Separate Log in system as an admin
Action	<ul style="list-style-type: none">  Go to the admin dashboard  Add new features and update  Click manage user  Show User information  Able to delete a user
Post-condition	Redirect to admin dashboard based on their rule
Secondary scenario	Unauthorized person is not able to perform all activity.

Primary Scenario for manages posts:

Use case ID	User Code:05
Use case name	Manage all posts
Actors	Admin
Description	Properly check and monitor all posts details.
Pre-condition	Always needed Internet connection to access the system Separately Log in system as an admin
Action	<ul style="list-style-type: none"> + Go to the admin dashboard + Click manage all posts + If need Show all post information and update + Able to delete, update a post any time needed
Post-condition	Redirect to admin dashboard based on their rule
Secondary scenario	Unauthorized person is not able to manage posts.

Primary scenario for project feedback or conversation:

Use case ID	User Code:04
Use case name	Feedback and conversation
Actors	Students and Supervisor
Description	Properly check and monitor all project idea.
Pre-condition	Always needed Internet connection to access the system Separately Log in system as an admin
Action	<ul style="list-style-type: none"> + Done submit the project + Get feedback from supervisor + If need their supervisor + Able to change feedback and final submit date
Post-condition	Redirect to students dashboard based on their rule
Secondary scenario	Unauthorized person is not able to manage posts.

Requirements Catalogue:

The requirements of the proposed system are priorities and find out through the **MoSCoW** Prioritization. Here I 'm going to the all requirements will be described on the below by the following requirements catalogue:

Functional Requirements catalogue of the projects:

“Register as users”

Source: Admin	Sing off: Users	Priority: Must Have	Requirement ID: Functional R-001
Functional Requirements - Register as User			
To take facilities from the application general users need register process themselves.			
Non-functional requirement			
Description	Target Value	Acceptance Value	Comment
	500 per day	350-400 per day	User id will be auto generated.

“User Login into the system”

Source: Admin	Sing off: Users	Priority: Must Have	Requirement ID: Functional R-002
Functional Requirements – User Log in process of the system			
Register students must be follow login process to enter the system for access.			
Non-functional requirement			
Description	Target Value	Acceptance Value	Comment
	300 per day	240-350 per day	This function is mandatory to enable further actions of users.

“Submit Post”

Source: Admin	Sing off: Users	Priority: Must Have	Requirement ID: FR-03
Functional Requirements – User submit project option Authorized student must be able to submit a project idea.			
Non-functional requirement			
Description	Target Value	Acceptance Value	Comment
	120 per day	120-230 per day	Product posting option must be available

Function requirements for “Add post about technology”:

Source: Admin	Sing off: Users	Priority: Must Have	Requirement ID: FR-03
Functional Requirements – All types of user Add Post Authorized user must be able to post about project or technology related.			
Non-functional requirement			
Description	Target Value	Acceptance Value	Comment
	220 per day	220-330 per day	Product posting option must be available

Functional requirements: “give feedback”:

Source: Admin	Sing off: Register Admin only	Priority: Must Have	Requirement ID: FR-04
Functional Requirements – supervisor can give feedback Authorized supervisor must be able to give feedback in specific time.			
Non-functional requirement			
Description	Target Value	Acceptance Value	Comment
	1000 per semester	500-1000 per semester	Product category adding option must be available for admin.

Non-functional requirements catalogue:

Source: Admin	Sing off: Admin	Priority: Should Have	Requirement ID: NFR-01
Non-functional requirements: <ul style="list-style-type: none"> • All system data should be encrypted • This system must have following terms of access • This system should be easy and faster to use • This system may easy to access and maintain 			

Source: Admin	Sing off: Admin	Priority: Should Have	Requirement ID: NFR-02
Non-functional requirements: The system should have following level of access: <ul style="list-style-type: none"> • This system may run from different technology based platform OS and also other different devices. • System should install a database system in secure place. 			

Prioritized Requirements List (PRL)

Priorities of project requirements identified the process that the users use to identify essential functionalities of a system where the essential business need to going to find out using priorities list. **MosCow** techniques are going to be applied to produce a priorities list for the project. Now I'm Going to display **MosCow** technique on the table on the below:

Must Have	<ul style="list-style-type: none"> ➤ Admin can manage users. ➤ Admin can manage posts panels. ➤ Admin can manage all projects. ➤ Admin can manage post category. ➤ Admin view the final year best project ➤ User can submit project ➤ Users can view posts. ➤ User can add posts. ➤ User can view all projects. ➤ Users can view Confirmation projects details of feedback ➤ Users can Registration ➤ Users can Login ➤ Admin login
Should Have	<ul style="list-style-type: none"> • Users can search technology based project • Users can update and recover password • Admin can manage user comments and message • Users can send message to other users • User can find friends on related technology • Department head can view the best university project • Department head can announce the any types of programs • Department head can give educational equipment and guideline
Could Have	<ul style="list-style-type: none"> • Users can view recent posts • User can view different types of programs schedule on related technology. • User can send message to others

	<ul style="list-style-type: none">• Users can update project that is already submitted• User can contact department head and supervisor• Supervisor view all project• Supervisor can accept project
Won't Have	<ul style="list-style-type: none">• User can delete other users' posts• General users can access as admin• User can delete projects• User can delete comments

Prototypes of the proposed system “Daffodil Idea Portal”

i. Prototyping:

In this step I have represented some important low-fidelity prototype of the proposed system:



Figure 38: This prototype is about home page of the proposed system (Idea Portal)

Figure 39: This prototype is about login form of the proposed system (Idea Portal)

Figure 40: This prototype is about Registration form of the proposed system

Figure 41: This prototype is about overview of the proposed system

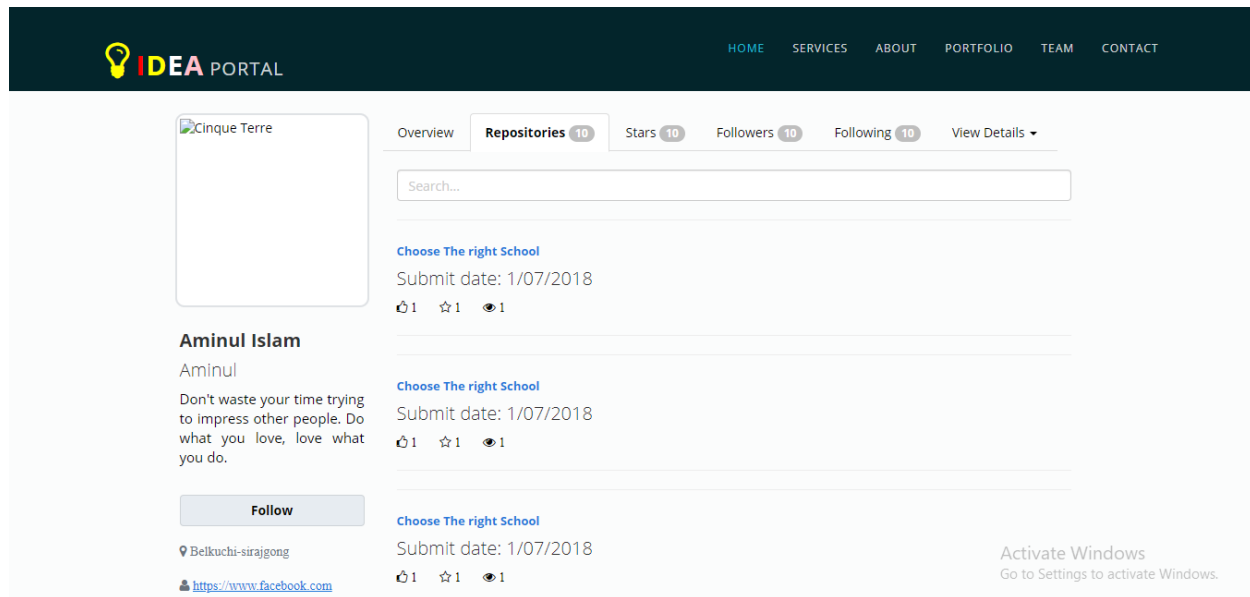


Figure 42: This prototype is about Repositories of the proposed system

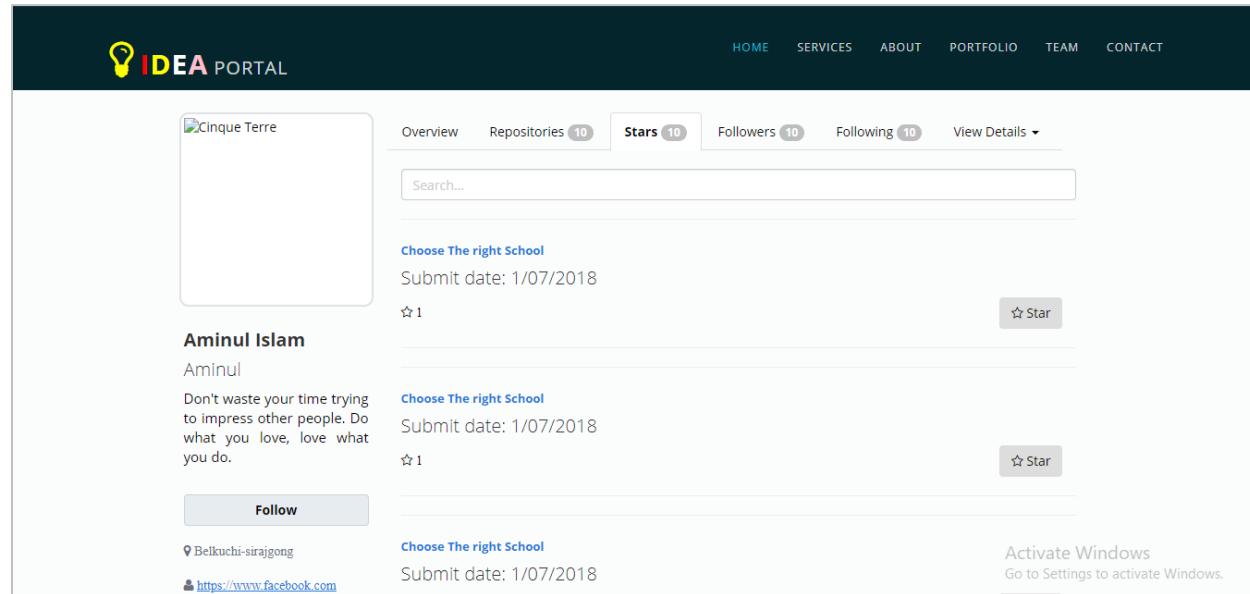


Figure 43: This prototype is about ranks options of the proposed system

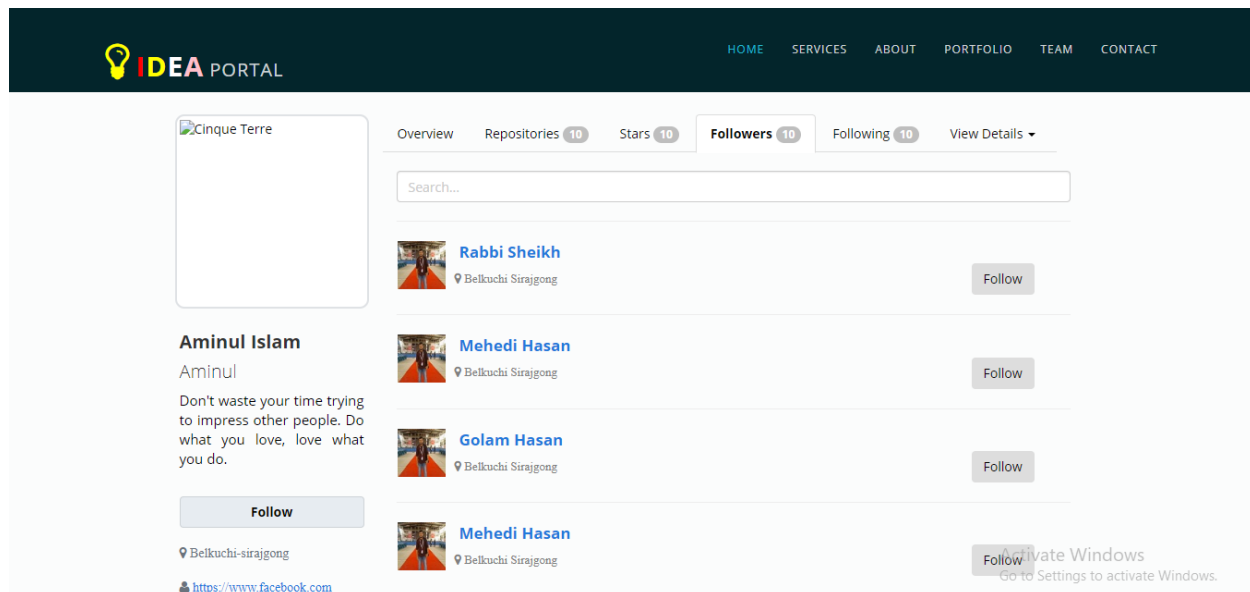


Figure 44: This prototype is about Followers options of the proposed system

Chapter-9: Engineering

Class Diagram of the “Daffodil Idea Portal”:

Class diagram is used to make a relationship between the projects classes where added different entities in the system. This diagram also show the table to table relationship and provide primary key so that each users or project can identify easily from the system. Diagram show the details of every classes and entity connected with each other. Now I have represents the “Daffodil Idea Portal” Class diagram on the below:

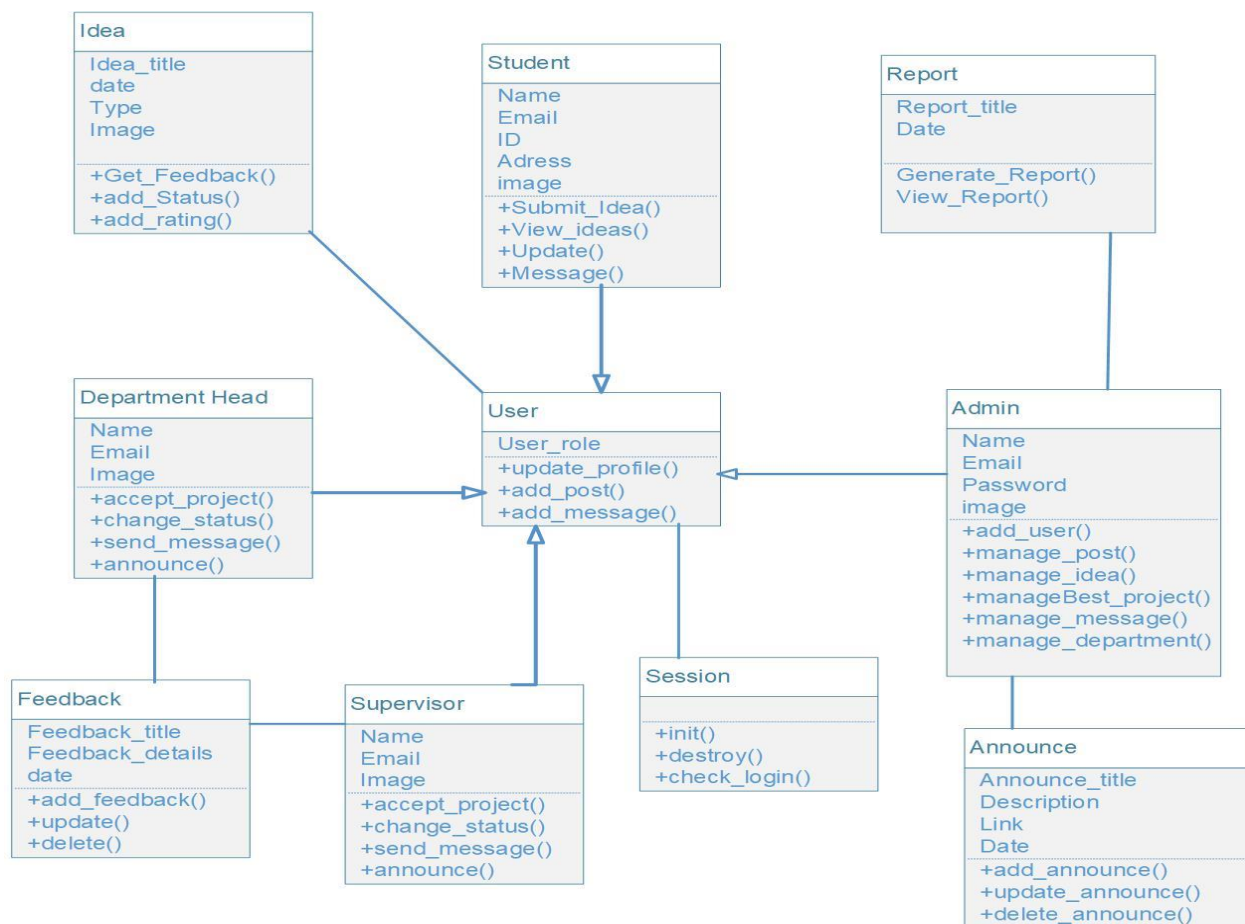
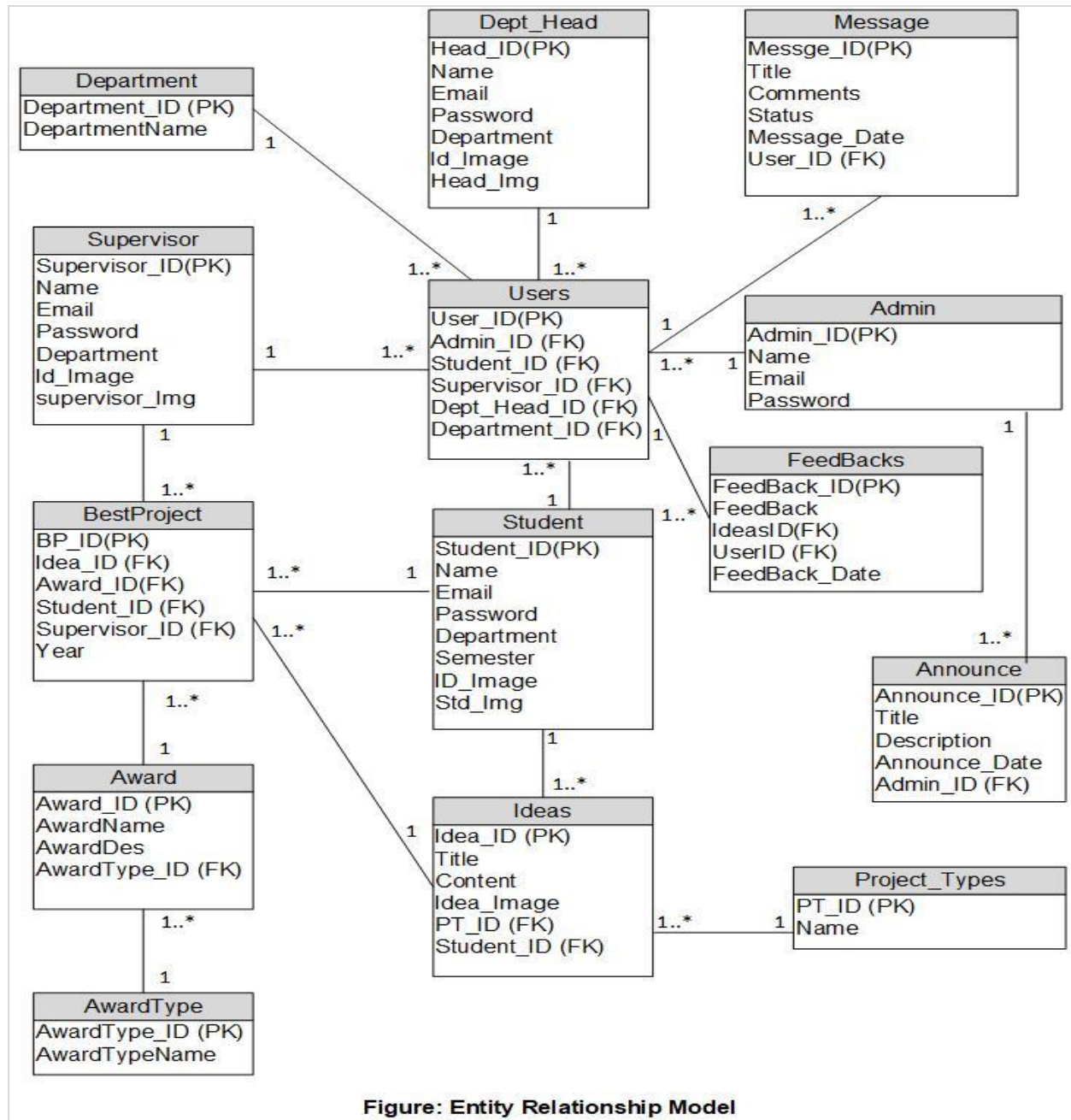


Figure 45: Class Diagram

ERD Diagram of the “Daffodil Idea Portal”:

ERD means the Entity Relationship Diagram which represents the graphical view of how data are logically hidden connected. This diagram is used to represent the total information of Database management system of the project and also help to find out relationship from the system table. Now I have represents the ERD diagram of the “Daffodil Idea Portal” on the below:



Component Diagram “Daffodil Idea Portal”:

To represent the user visual presentation of the system by the component diagram where every components of the project is view as connected. This diagram is give support to implement the proposed system functional requirements where checking each validation. Now I have represented a component diagram of the “Daffodil Idea Portal” on the below:

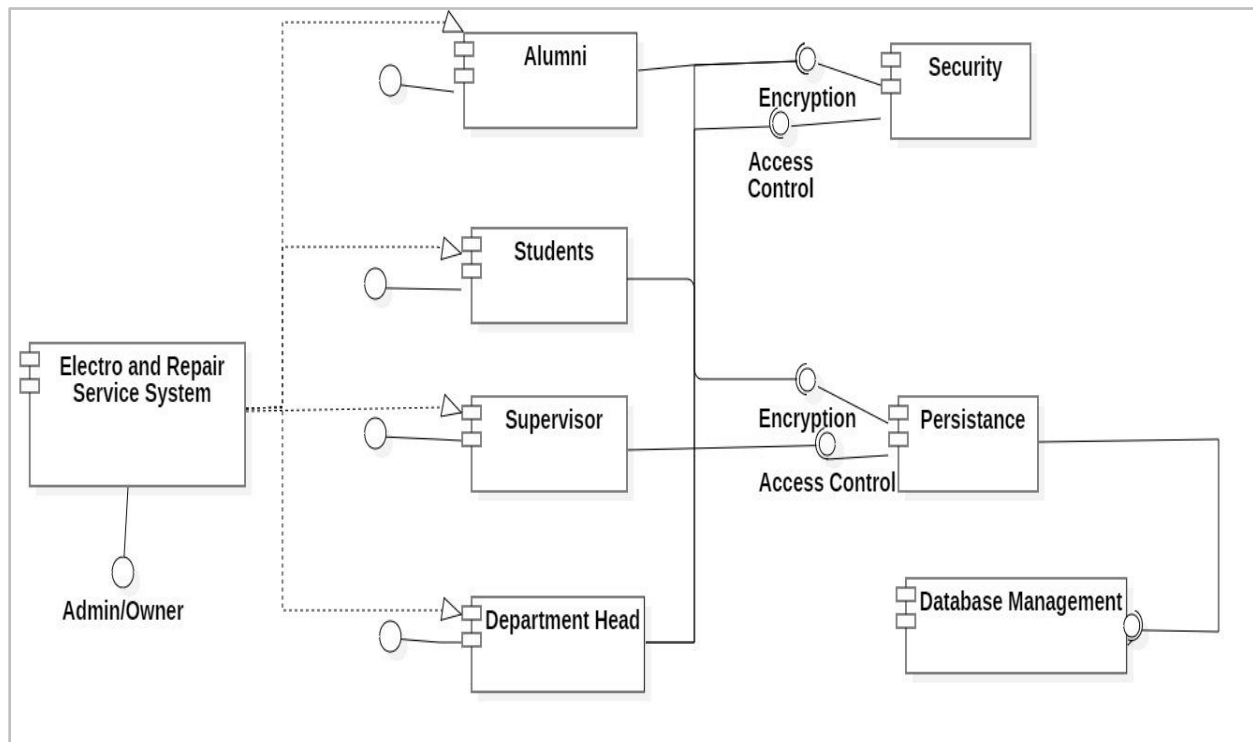


Figure 46: Component diagram of the current system.

Deployment Diagram of “Daffodil Idea Portal”

As a structural diagram is used Deployment diagram which is represents the architecture of the proposed system. I have used the MVC web design pattern where the MVC pattern works by the combination of model, view and controller. Now I have represents the Deployment diagram of “Daffodil Idea Portal” on the below:

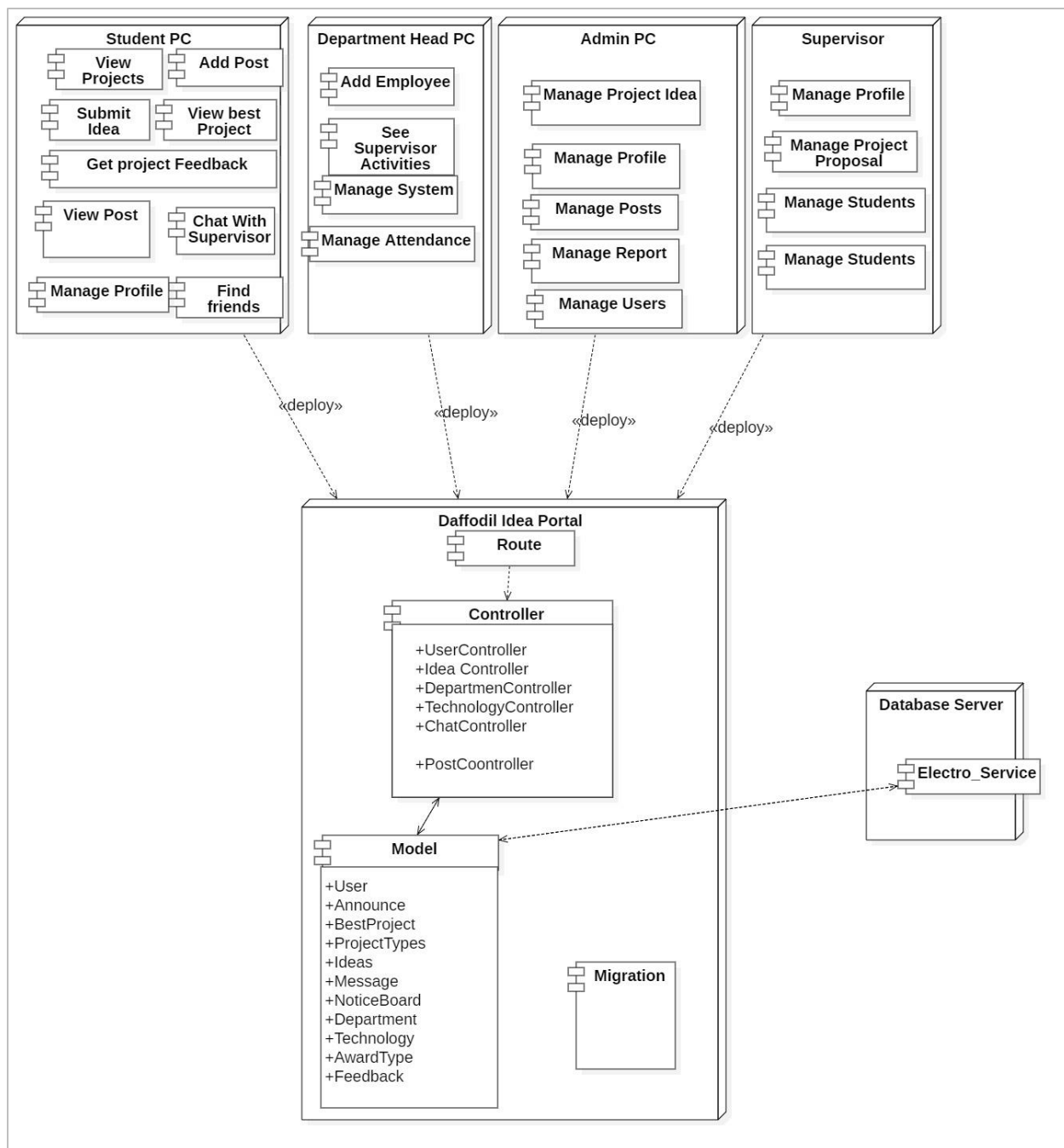


Figure 47: Deployment Diagram of the System

User interface Design of the system:

Previous chapter where is added prototype of the system step by step. In this chapter is shown the user interface design from the prototype design. Here added all the system user pages and also the admin pages.

In this step I have represented some important high-fidelity **interface design** of the proposed system:



Figure 48: This interface design is about home page of the proposed system (Idea Portal)

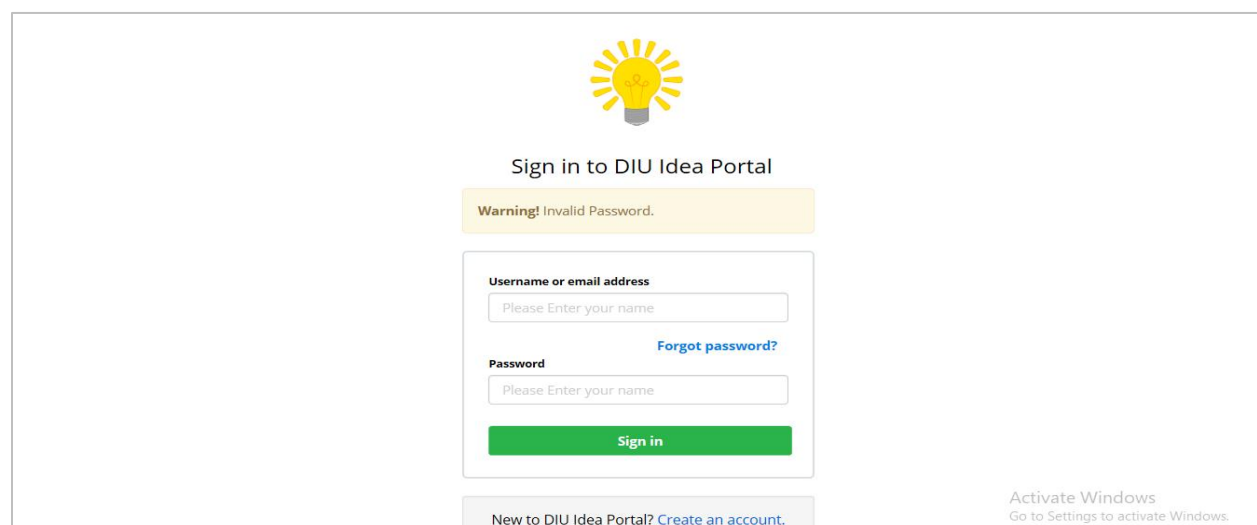
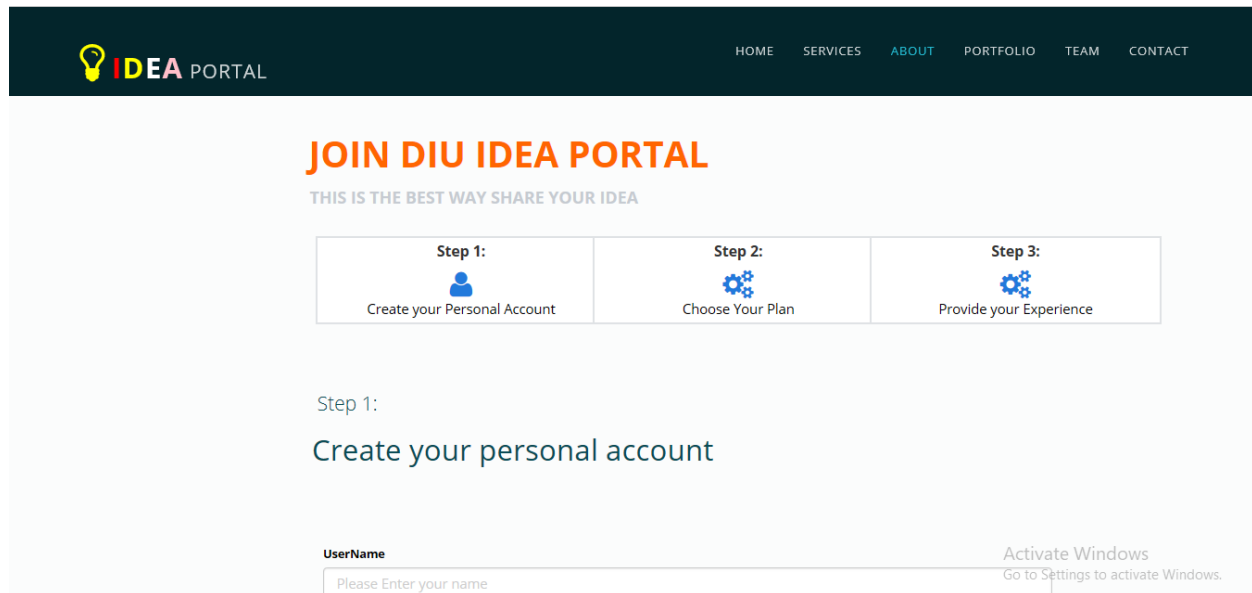





Figure 49: This interface design is about login form of the proposed system (Idea Portal)



IDEA PORTAL HOME SERVICES ABOUT PORTFOLIO TEAM CONTACT

JOIN DIU IDEA PORTAL

THIS IS THE BEST WAY SHARE YOUR IDEA

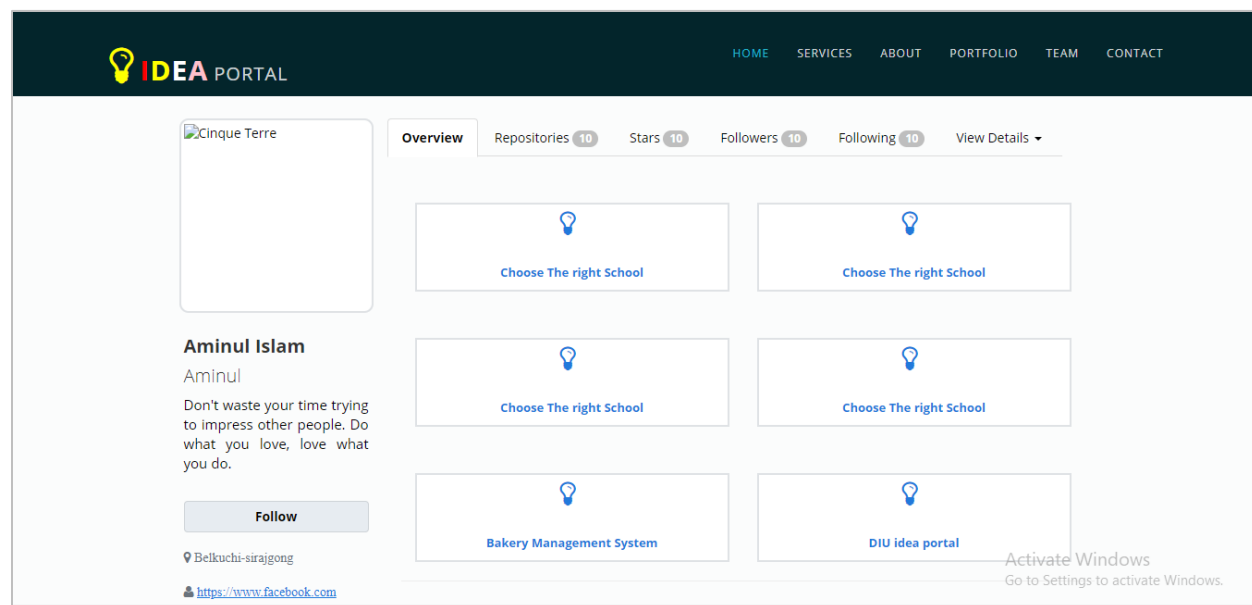
Step 1:  Create your Personal Account	Step 2:  Choose Your Plan	Step 3:  Provide your Experience
---	---	--

Step 1:
Create your personal account

UserName
Please Enter your name

Activate Windows
Go to Settings to activate Windows.

Figure 50: This interface design is about Registration form of the proposed system



IDEA PORTAL HOME SERVICES ABOUT PORTFOLIO TEAM CONTACT

Cinque Terre

Overview Repositories 10 Stars 10 Followers 10 Following 10 View Details

Aminul Islam
Aminul
Don't waste your time trying to impress other people. Do what you love, love what you do.

Follow

Belkuchi-sirajgong
<https://www.facebook.com>

Choose The right School

Choose The right School

Choose The right School

Choose The right School

Bakery Management System

DIU idea portal

Activate Windows
Go to Settings to activate Windows.

Figure 51: This interface design is about overview of the proposed system

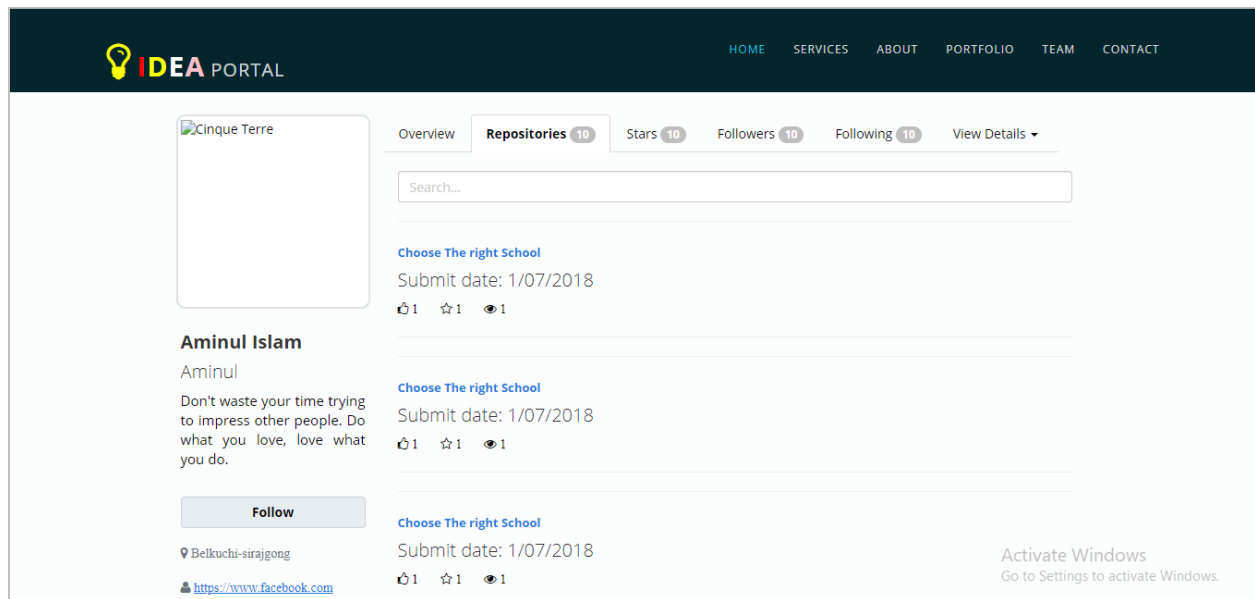


Figure 52: This interface design is about Repositories of the proposed system

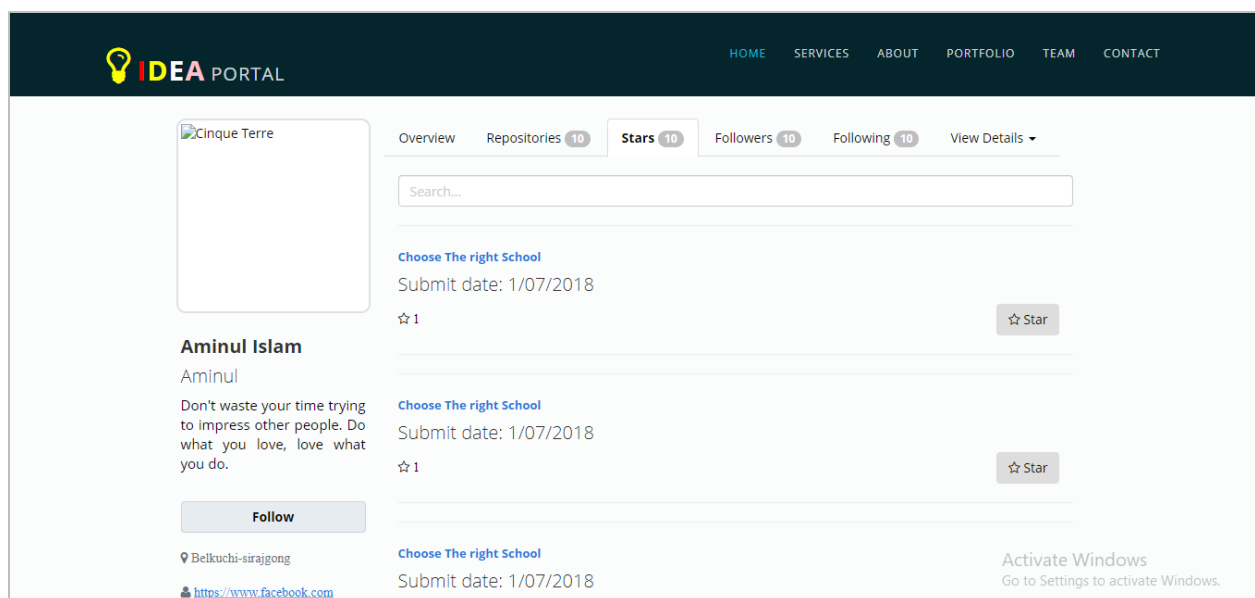


Figure 53: This interface design is about ranks options of the proposed system

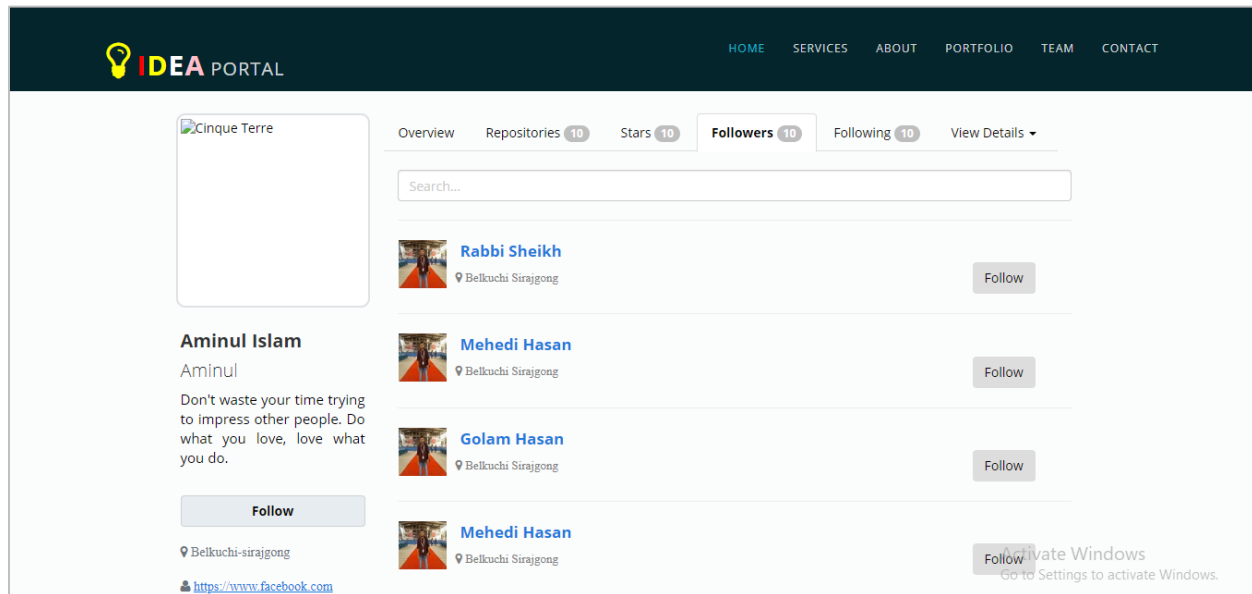


Figure 54: This interface design is about Followers options of the proposed system

Chapter-10: Development/Deployment

The development is considering to be one of the most important phase. It allows us to get the actual system based on the analysis we have done. The development process involves steps like choosing programming language and framework etc. to influence development.

Possible problem breaks down:

As time changes new requirements need to added to the system. So the system should be able to accept changes over time. To do this I have break down my system in some important parts. Such as

Database creation:

- + Created database for idea portal
- + Used migration files of **Laravel** framework to established tables and relationship among them.
- + Efficiently used **Laravel** eloquent ORM framework.
- + Used migration command to set the table and column in database.

Front end design:

- + Write HTML code to make elegant looking user interface.
- + Used **Laravel** blade framework for template to reuse to code efficiently.
- + Attached attractive content, image and icon.

CRUD for Submit project idea:

- + Designed form for submit project idea
- + Validate impute data than store that in database.
- + Update if any changes required after idea submission.
- + Publish the submitted project idea.

Admin management:

- ✚ Manages submitted project ideas.
- ✚ Add best project of each year
- ✚ Choose best university project idea
- ✚ Manage user activity

Prioritizing while developing:

Without prioritizing the development project could get in wrong way. Cause less priority module could be developed first. This can cause failure of the development. So taking this seriously is cognitive.

According to importance of each module, these are given below:

- ✚ UI design
- ✚ Database creation
- ✚ Authentication and authorization process management
- ✚ Admin user management
- ✚ Project idea submission process management
- ✚ Search system management
- ✚ Best idea selection process
- ✚ Communication process

Core Module sample coding:

Project Idea uploading:

User need to upload their project Idea:

Submit Idea

Submit Idea

Submit Idea

Submit Idea

Submit Idea

Submit Idea

Submit Idea

Submit Idea

Submit Idea

Submit Idea

Submit Your project Idea

Project Category

Web App

Project Title

Project Title

Project Image

Choose File No file chosen

Project Document

Choose File No file chosen

Project Description

Submit

Cancel

Figure 55: Project Idea uploads File Sample design

```


45 $document_image = "img/upload/document/".$document_image;
46 if ($file_size > (1048567*2)) {
47     $_SESSION['error'] = "<span class='error'>Image Size should be less
48         then 2MB!
49     </span>";
50 }elseif (in_array($file_ext, $permitted) === false) {
51     $_SESSION['error'] = "<span class='error'>You can upload image only:-"
52         .implode(' ', $permitted)."</span>";
53 }

```

Figure 56: File size Manipulation for uploading project Idea

Sending Email only (DIU mail):

Students get mail from the admin to contact:



Reset your password


Enter your email address and we will send you a link to reset your password.

[.](#)

Send password reset email

[Home](#) | [Privacy](#) | [Security](#) | [Contact Us](#)

Figure 57: Reset Password for recovering password



Reset your password

Success! Password recover success. Please check your email to login ×

Enter your email address and we will send you a link to reset your password.

[Home](#) | [Privacy](#) | [Security](#) | [Contact Us](#)

Figure 58: Reset Password and Successful message

Backend Code above the registration page:

```

425 public function passRecovery($data)
426 {
427     $email=mysqli_real_escape_string($this->db->link,$data['email']);
428     if (!filter_var($email,FILTER_VALIDATE_EMAIL)) {
429         $_SESSION['error']="<span class='error'>Invalid Email</span>";
430         return $this->redirect();
431     }else{
432         $mailquery="select * from users where email='$email' limit 1";
433         $checkmail=$this->db->select($mailquery);
434         if ($checkmail !=false) {
435             $userid='';
436             $name='';
437             while ($value=$checkmail->fetch_assoc()) {
438                 $userid=$value['id'];
439                 $name=$value['name'];
440             }
441             $rand=rand(10000,99999);
442             $newpass="$userid$rand";
443             $pass=md5($newpass);
444             $subject="your password";
445             $message="Your name is " . $name. " and Password " . $newpass. " plz
                visit website to login.";
447             $transport = (new Swift_SmtpTransport('smtp.gmail.com', 587,'tls'))
448                 ->setUsername(EMAIL)
449                 ->setPassword(PASS)
450             ;
451
452             // Create the Mailer using your created Transport
453             $mailer = new Swift_Mailer($transport);
454
455             // Create a message
456             $message = (new Swift_Message($subject))
457                 ->setFrom([EMAIL => 'Recovery password'])
458                 ->setTo([$email])
459                 ->setBody($message)
460             ;
461             // Send the message
462             $result = $mailer->send($message);
463             if(!$result) {
464                 $_SESSION['error']="<span class='error'>Message could not be sent.Try
                    again</span>";
465                 return $this->redirect();
466             } else {
467                 $query="update users
468                     set
469                     password='$pass'
470                     where id='$userid'";

```

Figure 59: backend code images of Idea Portal

Chapter-11: Testing




Introduction:

A testing is the set of action executed to identify the particular functionality of the system and this part is important for the system development lifecycle. This part will support to create robust and integrated system and also reducing risk of factors. During and after development testing is the great way to create a bug free system (softwaretestinghelp, 2018).




Test plan Acceptance:

Test plan is more required to make the system proper successful. Testing part is help to “Daffodil Idea Portal” to meet the specified requirements on the time of the development where “Daffodil Idea Portal” is detect free to maintain its quality properly. To complete this system here used two types of testing part that’s are functional testing and non-functional testing. Test plan is more important to build after system and every test plan will be based on these two testing part which are shown on the below:

Functional Testing:

-  Integration testing
-  Module testing
-  And Unit testing

Non-functional Testing:

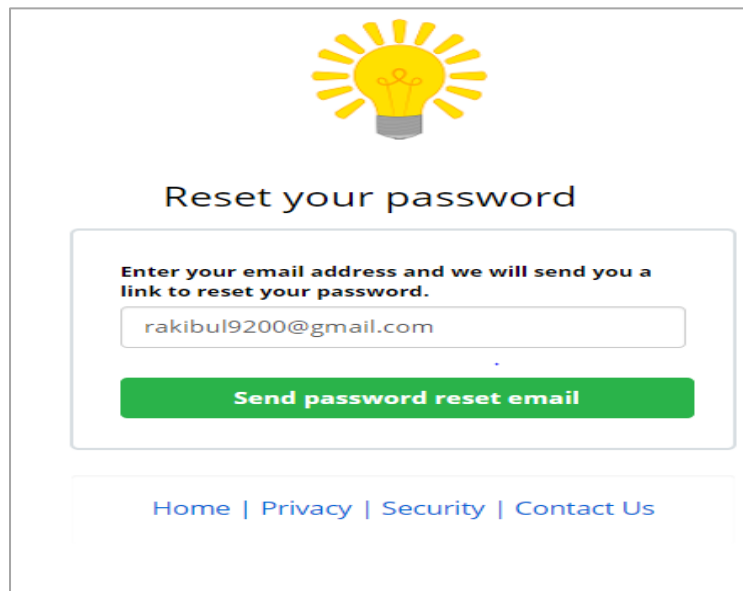
-  Acceptance Testing
-  Security Testing
-  Usability Testing

Test Case:

Test case may contain the related data to testing like actual result, expected result and it also added the explanations of the process of the proposed project.

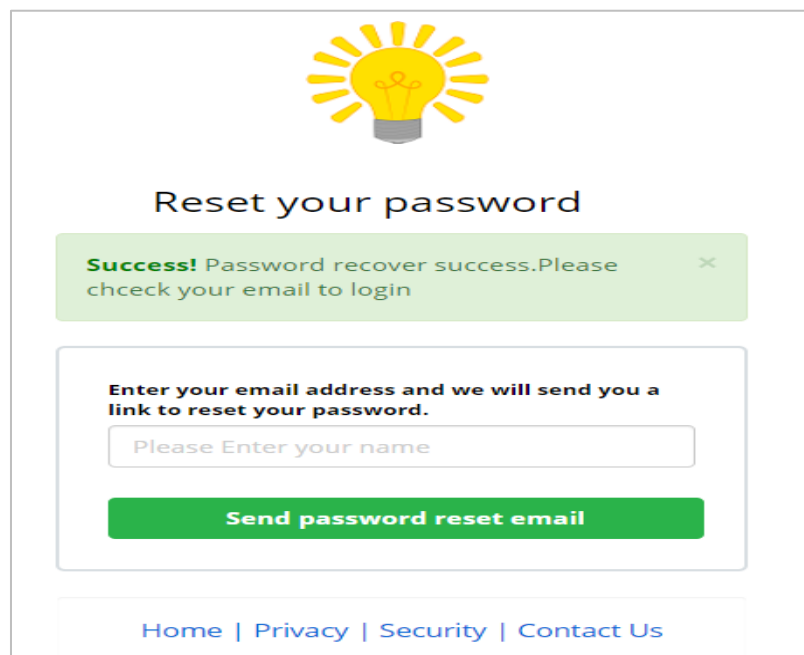
Unit Testing:

Test ID	Test Case	Description	Expected Result	Actual Result	Action
1	Registration or Sign UP	Registration new students by input data properly.	All Data will be stored into database system.	As expected	Don't required
2	Login or Sign In	Login with wrong email or password.	No Scope to login and show message "Please enter the proper email or password".	As expected	Don't required
3	Login	Login with correct email & password.	After provide information then go to the home page.	As expected	Don't required

Actual test:

The image shows a web form titled "Reset your password" with a lightbulb icon. It contains a text input field with the email "rakibul9200@gmail.com" and a green button labeled "Send password reset email". Below the form is a footer with links: "Home | Privacy | Security | Contact Us".

Figure 60: Actual test for Login Form



The image shows the same "Reset your password" form as Figure 60, but with a green success message at the top: "Success! Password recover success. Please check your email to login". The text input field now contains the placeholder text "Please Enter your name". The green button "Send password reset email" and the footer "Home | Privacy | Security | Contact Us" are still present.

Figure 61: Reset Password form for login

Integration testing of the system:

Test number: 01

Test ID	Test Case	Description	Expected Result	Actual Result	Action
1	Login	Provide the actual information to login: 1. correct Email: aminul@gmil.com 2. Password: 12345	Students login into the project submitted page	As expected.	Don't required

Test number: 02

Test ID	Test Case	Description	Expected Result	Actual Result	Action
2	Submit Project	Submit project successfully in the system.	Project Idea Insertion into the database and show the admin and user panel.	As expected	No required

Test number: 03

Test ID	Test Case	Description	Expected Result	Actual Result	Action
2	Add post	Students add posts successfully into the system	All Post information insertion by unique id into the database and show between admin and user panel.	As expected	No required

Test number: 04

Test ID	Test Case	Description	Expected Result	Actual Result	Action
2	Feedback	Give feedback for post by the supervisor.	Feedback information insertion into the database and show between admin and user panel.	As expected	No required

Actual Test:

```

425 public function passRecovery($data)
426 {
427     $email=mysqli_real_escape_string($this->db->link,$data['email']);
428     if (!filter_var($email,FILTER_VALIDATE_EMAIL)) {
429         $_SESSION['error']("<span class='error'>Invalid Email</span>");
430         return $this->redirect();
431     }else{
432         $mailquery="select * from users where email='$email' limit 1";
433         $checkmail=$this->db->select($mailquery);
434         if ($checkmail !=false) {
435             $userid='';
436             $name='';
437             while ($value=$checkmail->fetch_assoc()) {
438                 $userid=$value['id'];
439                 $name=$value['name'];
440             }
441             $rand=rand(10000,99999);
442             $newpass="$userid$rand";
443             $pass=md5($newpass);
444             $subject="your password";
445             $message="Your name is " . $name. " and Password " . $newpass. " plz
                visit website to login.";

```

Figure 62: backend code of the login Form


Module Testing:

Here added the particular testing which is collected on particular module. “Daffodil Idea Portal” modules are given the below step by step:

Test number: 01


Test ID	Test Case	Description	Expected Result	Actual Result	Action
1	Registration monitored.	Each field test for wrong registration.	Every input field of the system has particular error message for keeping it blank.	As expected	Don't required


Actual Result:


HOME SERVICES ABOUT PORTFOLIO LOGIN CONTACT

JOIN DIU IDEA PORTAL

THIS IS THE BEST WAY SHARE YOUR IDEA

Step 1:

Create your Personal Account

Step 2:

Choose Your Plan

Step 3:

Provide your Experience

Step 1:

Create your personal account

1

UserName

Email

Select Department

Select Semester

Password

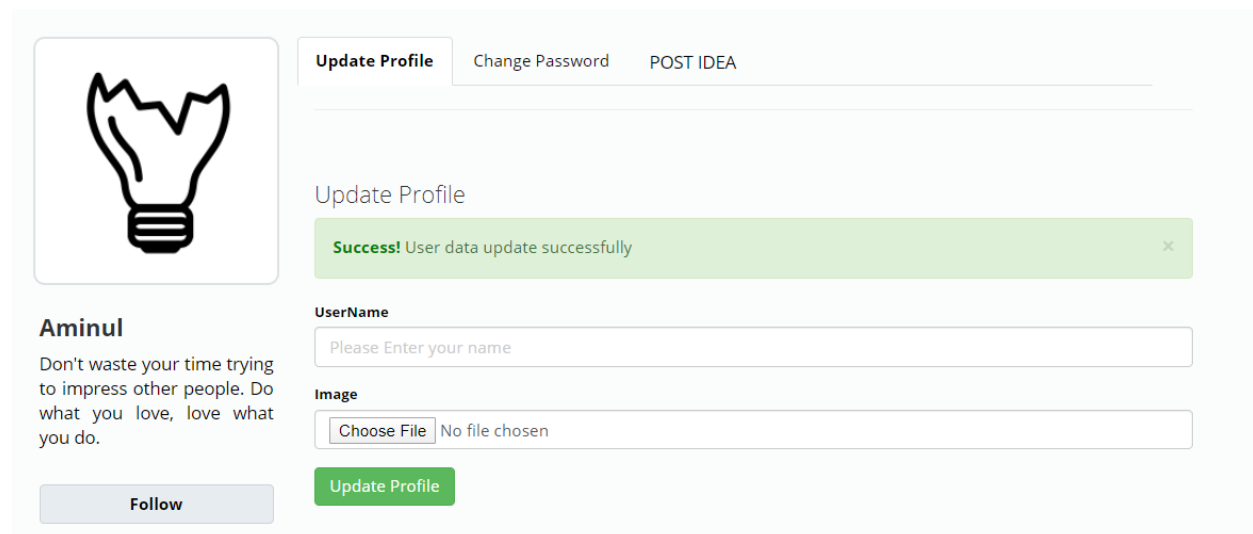
Confirm Password

Next

Figure 63: Registration form

Test number: 02

Test ID	Test Case	Description	Expected Result	Actual Result	Action
2	Sign Up form test.	Students can successfully registration as test Please enter correct value of account detail: 1. Username: aminul Email: aminul@daffodil.ac 3. Password:##### 4. Confirm password:#####	Students may logged into the main page of the system to view or submit project page	As expected,	Don't Required

Actual Result:


Aminul
Don't waste your time trying to impress other people. Do what you love, love what you do.

Update Profile Change Password POST IDEA

Update Profile

Success! User data update successfully

UserName
Please Enter your name

Image
Choose File No file chosen

Update Profile

Follow

Figure 64: Reset Password

Performance testing of the system:

Test ID	Test Case	Description	Expected Result	Actual Result	Action
1	System performance testing.	After complete the full system implementation and system performance monitor and run through the internet.	Every tasks of system work well and faster as according to requirements	As expected,	No Required

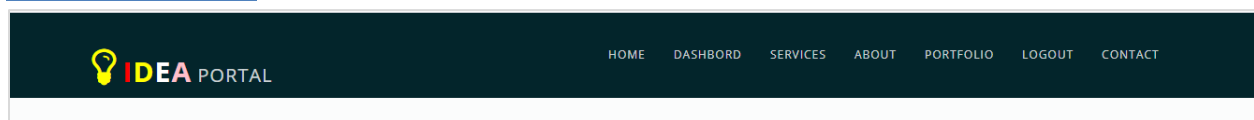
Usability Testing:

Usability testing is used to see how a customer can easily use the system as provide real user information and it is the main purpose of this testing. Usability testing of “Daffodil Idea Portal” is given on the below:

Test number: 01

Test ID	Test Case	Description	Expected Result	Actual Result	Action
1	Navigation of the system	User can go to the any page of the system through the navigation	Well, user can easily go to the any page by the navigation	As expected,	No required

Actual Result:



Chapter-12: Implementation

Introduction:

In this chapter describes how to implement the proposed system step by step by follow the DSDM atern. Properly implement the proposed system need project proper training; workshops and grooming of students are needed. Here I have explained the all implementation process step by step on the below.

Training:

Training part is the important part of any type system to continue if anyone expects to receive the best possible best performance from the employees from a system. Somebody are required to train them accurately to acquired enough knowledge to make sure. They may try to effortlessly practice their workflows along with system procedures. So for good practices need proper training is essential to make the employees familiar with the system and how to operate in each functional properly. Training part is the complete plan for providing training to the users.

Training Title	Description
Training the users	This training is not mandatory for the user because of this system is academic perspective but training will help the users to familiarize them with the web application. Training features is how to operate the system.
Workshop	Workshop is more valuable and it is need to arrange to promote helps other and precipitate in humanitarian deeds.

System Implementation:

System implemented is needed after the completing testing part. Implementation part has several process and some are closer to the system Daffodil Idea Portal. And Main feature of Implementation schemes briefly explain on the below:

Big Bang Implementation:

Since there is no old system like “Daffodil Idea Portal” so no need to remove system. In this section used to new system replaces the old system but it is a little bit risky. If new system implement into the old system then new system may be crushed or user may be face problem as they are not practice with it. So in this perspective there is a risk of data losing if the system crushed any time.

Parallel Implementation:

At a time cannot possible new implementation system replace with old system in the implementation of process. Because of old system is running in the institute or organization and side by side new system is also running. Whereas it has less possibility of data losses but it is more expensive or costly for business running two systems in once.

Pilot Implementation:

Not Possible implementing new system at once in the pilot implementation system and in small parts usually new system implemented in the organization. If users want to new system they can fully replace with old system in any organization. Pilot Implementation is less risky comparatively others implantation method and most followed process in software development.

Justification of Implementation:

Since there is no similar system of the project and it is fully new in our country, so there are no need to replace with other system. “Daffodil Idea Portal” project need Big Bang implementation method which is best and is cleared from the above discussion.

Load Balancing:

When make how many users are inserting in the system at a time is called Load Balancing. To maintain the load need cloud server that will be need. More data are generated when traffic is high that will need more storage power, processing power in day time. At that time we can scale up our resources easily and faster but at night, when traffic is low then less data is generated will consume less processing power and storage so that we can scale down our system resources easily. Which certainly ensure that, the optimized used of our resources and also reduce costs where load can be monitored in the system.

Chapter-13: Critical Appraisal and Evaluation

Project Objective that met:

In this chapter describe some objectives on the below which is met the project objectives

Students can able to submit the Project Idea:

New Students have many problems to choice technologies, to build up their skills, to develop projects based knowledge, to know technology based contests; workshop and seminars but DIU idea portal will solve these problems properly. Students are able to know technology based workshops and also attained in proper time. Students can help easily from their senior students. As a result students can help to understand project idea technology based support make easily choice expected worked platform and invents creative project idea and also developed properly according to their related technology based platform.

Success Factor:

The main objectives of the system is to grow the student's skills, quality, get good job positions, teachers and students relationship, junior and senior student relationship, to know best project idea, new technology in the world. Therefore, using the system DIU will be able to show their best students' performance, popularity and also setup good job facilities. It also helps the other institutions of Daffodil to improve share their project related work, skills and make strong relationship.

Problem Face:

I think that some feature are more challenging to manage those parts like add post, submit project options, find friends and select semester or year wise best project and also provide feedback opportunity which have different types attributes and operation and also need to make relationship among them.

That way I overcome the problem:

I have used normalization technique to overcome those problems easily and Data normalization can help me to get rid from the problem in short time.

Students can able to get project feedback and guideline from the system:

The proposed system will be solve the problem for those who are not idea or guideline to make a project and also adopted with the technology for new invention. The proposed system interface will be more user friendly and secure for any type of user where user can be post, view project. So this system will be used to make opportunity for create innovative project idea between AI and IOT based technology and ensure effective guidelines for new programmer or students.

Success Factor:

In Web-development program, I have apply some features how for sending email using API. I have also pass project data through the constructor that is created a better understanding opportunity for me.

Problem Face in system:

Recovery email or sending email there is need primary email to be on less secure apps. But I have less bit confusion about that.

That way I overcome the problem:

I have learnt and practice online article and video and I also understand how to on low secure app in email.

To produce a complete documentation for this project:

If anyone need a successful project make then documentation is important part and this part helps the solution developer to learn more about the project deeply. Anyone can improve their project by the documentation and it also help to improve skill for developer. Documentation part is added more important factors of a project.

Success Factors:

This project documentation part has divided into several chapter and each chapter have added sub part. The project document guideline better helps to complete the project document and system. Documentation guidelines also help to make draw diagram for explained system processes.

Problem faced:

Project documentation is not so easy task and it is well difficult and long process problem for the system. It was the well hard to understand since it is academic project. I think that it is very difficult as short time.

How to overcome this problem:

Dedication and hard work helps a lot to complete this document in time and also guideline from supervisor which is very helpful

Good and simple user friendly interface design:

User interface is important part for any kind of web platform and this part user can get good interaction experience during the visit site. So this task easily helps to user for good attraction.

Success Factors:

I think that to make a valuable web platform need good user interface. Need some research and analysis about good interface design for a successful web platform.

Problem faced above the problems:

To make this part properly and well understand in some area like Bootstrap, JS code, HTML and CSS. Sometimes this code is broken if online connectivity failed.

The solution how overcome:

I have learned many sources to solve this problem when code error. Finally I have solve the problem by the help online platform and YouTube.

Objective value that partially met:**Provide various reports:**

Report generate is a complex task from the system. This system has some types of report that will produce from different kinds of data types. In this report admin can view and manage users posts, project category, project confirmation and also chatting. Dynamic report system is added some graph to represents the total performance of the system.

Success Factors:

For success report need analysis factors and carefully investigate and collect information from the user that helps very well.

How overcome:

These requirements are properly met after further development and also it needs some tasks of advance research which will perform future.

Objectives totally not meet in the system:**Live chat or video options:**

User cannot Live chat or video option from the site will gives a great opportunity both supervisor and students to contact fluently. If it is implemented then it will be no need to call by the phone to know project related speech. And it will do in the system as further development.

Features that not complete:**Mobile messaging:**

If there are no apps of this system so mobile messaging is not possible to the system. If this part is important to send message to confirm the message to the users.

Why not touch:

Since this project is academic and there is no other developer without me. For the budget scarcity I have not used Tom active SMS service although it is an important part.

What need to do?

To complete above this requirements need more budget and long time and also need more effort.

Chapter-14: Lessons Learned

Introduction:

Finally I have gathered more knowledge on during the development of “Daffodil Idea Portal” project and by the time, I have faced many problems that help me to find out solution and make build up my skills properly. So I certainly say that I have learnt a lot of things from developing time of this project and I will try to represent some are in this chapter on the below.

Pre Project Review Closing:

I have made some idea and thought that how to implement a real-life project and it was analyzed before developing “Idea Portal”. To develop the project I have level growth of my technical skills and also gathered different types of knowledge from different aspects of the project development. I have made myself and acquired more confidence to developing a project terms of which are analyzing, planning, implementing and testing. So I really feel happy and pretty much and I confidently say that the skills and experiences will help me in future developing tasks and carrier.

What I have learned:**In short time opportunity to gather knowledge:**

Within the short time to complete this project was the challenge for me since this project has huge requirements. After that I had to identify a methodology which was best appropriate for the features of the projects. Make a proper plan for project phases, testing and management in the planning of the project. Some problem has made when only me worked this project at a time in certain field like coding, design, security

planning, and database design because of I'm not perfect in all kind of development knowledge. Finally I have taught me how to develop a project in short time and lack of my knowledge in some area taught me the opportunity to learn a lot of things.

Gained Professional Knowledge:

Since this project have used web platform and it added different language like PHP, JavaScript, J-Query, MySQL, Bootstrap which are help to work in professional knowledge. I have learnt a lot of things about new technology and framework that is essential for as professional developer. In this project I have also learnt MVC design pattern and how it implements in this project. So certainly say that I am enabling to build skill up my knowledge in LARAVEL framework technology and also learning how to develop an enterprise web application using it.

Learned about Project development methodology:

First time I have learnt a lot of things about different types of methodology for choice a methodology in this project. I have represented comparisons between four methodologies and which is best for this project perspective. Although it is an academic project so no methodology directly suits for this projects. After analyzed methodology I have made a hybrid methodology for "Daffodil Idea Portal" by create it and I have gather or acquire a lot of information and also well understand how to make a hybrid methodology for a professional project.

Testing Knowledge:

In this project I have used various types of testing techniques where I have learned a lot of things specially how a system organized work by checking through the test method. So I think that it is the important part after implement the project.

Analyzed and bring out requirement of the project:

Through this section I have learnt different types of requirement gathering techniques for collecting requirement for the project. **MosCow** technique is used to prioritize the requirements and also enrich my knowledge about project development.

What I have faced problem to implement the project:

Although I have worked in third year final project and also other project but I have no enough knowledge about project development. At this situation I have faced some problems to developing the project. Now I have represents some key problems from the project which I have recovered properly that's on the below:

Problem number: 1

I cannot get enough time to implement this project and all development phases, I have handle by once. I realized that it's quite difficult to implement the professional project within short time including its all main features.

Problem number: 2

As usual methodology was for a team work but the whole development, I have to complete it at one hand by making different types role in different times.

Problem number: 3

Since This project is an educational and academic process so requirements information collection is quite difficult at main reasons shortage time and limited users. Although some users may help to gather project related information. So I think it was quite difficult to carry out proper information from those users.

Problem number: 4

Since time is short so easy tasks like general reports with charts and graph was a little bit hard for myself because of it was some critical problem to maintain it before.

Problem number:5

To choosing the right methodology for this system is some critical problem and there are lots of options available. The project development and on time delivery fully depend on the methodology. All phases from a methodology would not applicable for this system because this project is academic project.

What I can solution above those problems:

I have need some of the steps area are listed for solving the problem that affect during the project and I have represents that on the below:

Solution of problem-1:

For solution that problems I do analyze and divide my task which has several tasks. I solve this problem to complete this project in time through the Time-boxing and doing proper plan.

Solution of problem-2:

I do all phases alone, I have to work properly and having experiences of working under the pressure. I have made scheduling properly for all phases that help me to play different role in different solve the problem.

Solution of problem-3:

I investigation some similar business to solve this problem and go to some users and ask them some related question so that get right information.

Solution of problem-4:

I have took help from the online forums and my supervisors so that I can properly solve this issue.

Solution of problem-5:

I have search different methodology to solve this problem. Although DSDM atern was the most appropriate for this system whereas all phases of DSDM was not applicable for this project.

Chapter- 15: Conclusion

Introduction:

In this chapter added the whole overview of the projects and also provide the summery of the whole projects that will be visible in the chapter. Here added some special

features like project goals, value and success of the project will be discussed step by step on the below.

Summary of the project:

This proposed system has many features and functionalities which are enough for students to grow their skills, support educational activities, varsity best project, best awarded projects etc.

To make **strong bonding** or relationship between students and department teachers to make their projects idea, project development, get proper guideline to overcome the projects difficulties. Students will get help easily to develop or make project idea or development process from their senior students anytime anywhere through the proposed system. Third year or final year students have often fall problem for project idea, to choose platform and also development process. DIU idea portal can good impact to overcome these problem.

New Students have many problems to choice technologies, to build up their skills, to develop projects based knowledge, to know technology based contests; workshop and seminars but DIU idea portal will solve these problems properly. Students are able to know technology based workshops and also attained in proper time.

The main purpose of the proposed system is to grow the student's skills, quality, get good job positions, teachers and students relationship, junior and senior student relationship, to know best project idea, new technology in the world. Therefore, using the system DIU will be able to show their best students' performance, popularity and also setup good job facilities. It also helps the other institutions of Daffodil to improve share their project related work, skills and make strong relationship.

Goal of the proposed project:

The main Goals of the project is statements that describe what the project will accomplish, or the business value the project will achieve (kidasa, 2018). Project goal is added some special features like revenue, cost reduction, efficiency, productivity and information. But my project main goal is to create a platform for project idea submitting option, communication between senior's students and teachers, project feedback

option, project selling options. Now I have explained those project goals describe on the below:

- ❖ To more utilize the recent project and make innovative project idea
- ❖ To improve new student programming skills and give proper guideline
- ❖ To qualified the students for technology based system
- ❖ To prepare the students for best job positions with strong skills
- ❖ To make benefit for selling project or idea
- ❖ To make strong relationship between students and teachers
- ❖ To make opportunity for seminars, job and technology related post

Success of the Project:

The aims of the proposed project are fully perform according to the project proposal where students can able to post to their needed information and also project submitted options. This project have 5 options for submitted project and these options are idea submitted option, conversation with other persons, post options, project sell options, show the best project options (semester wise, year wise, ICT carnival), project view options, find friends options and project feedback options. All users can easily view posts and submitted project. The department head and Supervisor may able to contact with admin if they face any problem. Admin must have opportunity to take legal action or updating information if the any students will do properly through the system.

In Our country there are no online platform like this which will be used not only help for others and it is the Academic purpose achieved so that varsity no need advertising options and they easily increased their popularity. It is also encourages students to build skills as result they can worked with best renewed company. Most of the features are included in this system and it is ready to run on the market place reasons of all requirements that have been fulfilled properly. So I think that this system is more demandable and also successful.

What I have done in this document:

Over all whole documentation of Daffodil Idea Portal project and there are many types of works, stages, activities, diagrams and also plans have been done.

The primary stage, I had to do initial study of the project where includes project proposal, what problems are solved by the project and how it recover those problems. Then, In literature review, I had to discuss on about the scope of the product and comparison with the existing system and why the proposed system was logical to developed. And what the problem it would recover what other could not do. After that I had to identity a methodology which was best appropriate for the features of the projects. Make a proper plan for project phases, testing and management in the planning of the project.

To analyze on the project to identify it feasible in some feature are economically, technically or operationally. I have to follow various data gathering technique to gather information and identify requirement and listed out in the documentation and I puritanized the requirements using MoSCoW technique. Here I had to describe the system using different diagram which was created a visual presentation of the system. After that I added development of the project with the sample code of the project and various testing result with visual images or pictures. At the last time of the project, I had to describe how I will implement the project and added an evaluation of the system. And finally, I have added what I had been learning at the time of doing the project.

Value of the Project:

Daffodil idea portal will be introduce such a web platform that may able to create a great system and helping properly to the varsity where students get benefit to build their skills. There are three categories students are actual benefited and also increase the varsity reputation. New Students have many problems to choice technologies, to build up their skills, to develop projects based knowledge, to know technology based contests; workshop and seminars but DIU idea portal will solve these problems properly. Students are able to know technology based workshops and also attained in proper time.

As I have made my professional skill strongly during this project and it can be very useful for me to scope up with global world working environment. I will be used this project as an example of my programming and other development and technical skill. To implementing situation of the project then I will face any viva or interview for the job perspective, which will more valuable for me to complete the project.

My Experience:

After completing Daffodil idea portal project, I have confident in PHP technology which is helpful for me in my future life to get job in PHP technology. Before initial stage of the project, I have no knowledge in PHP web development technology and have less little understanding in PHP standard edition like ISP, Servlets and how they work together, LARABEL framework and how mapping it with SQL, how to implement a project using MVC design pattern. How to collect information from students and alumni students, the ways of planning for developing a project effectively and the way of testing to make the project efficient and secure. I have a lot of learned during implementing the project and I have worked with limited resources with time limitations which was huge pressure for me. I have been working under this types of pressure was a completely new experience. I think that this worked experience in professional life, these experiences will help me to work in situation in job market.

Appendix-A

System Interface show on the below:

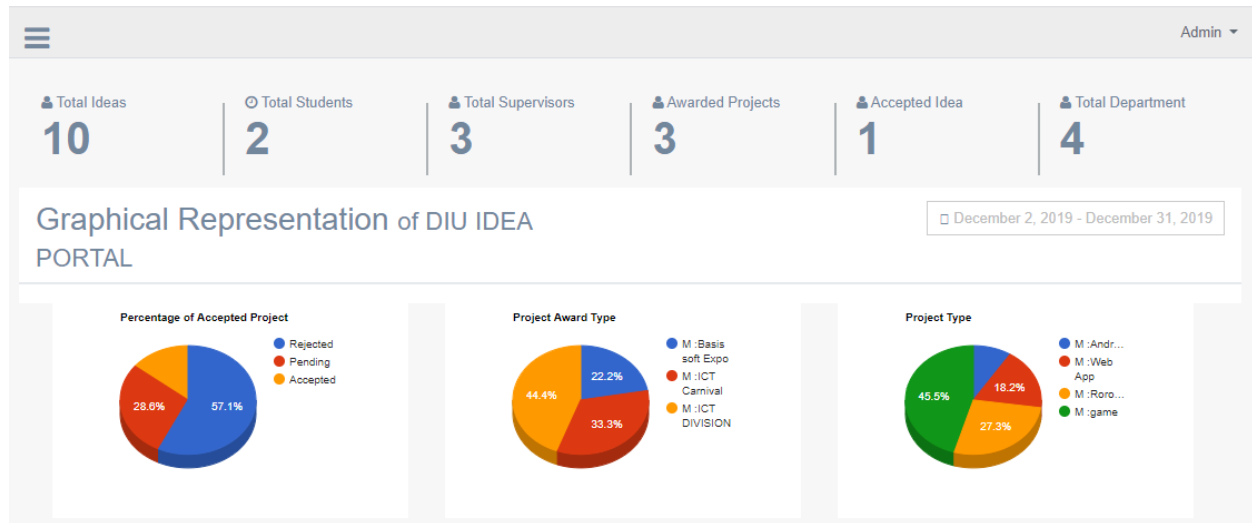


Figure 65: Graphical Representation of Admin Dashboard

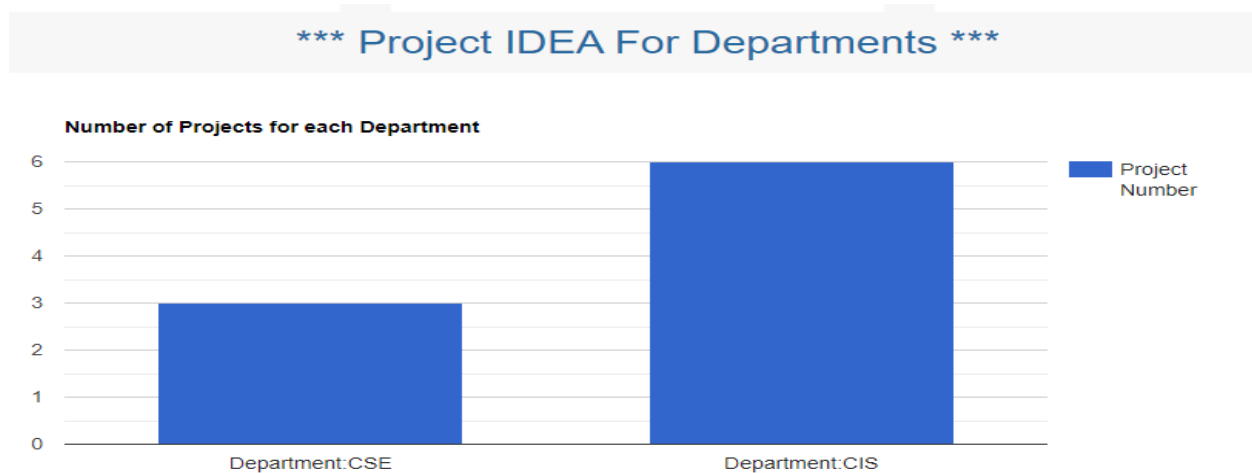


Figure 66: Department show in the diagram

Add User form of the system:

Add Users

Name *

Email *

Department*

Select Department ▼

Semester *

Select Semister ▼

Language *

Php,Laravel,Bootstrap

Type *

Select Type ▼

Submit

Figure 67: User add form of system

View Students table:

User Table

Print

Name	Email	Department	Semister	Language	Type	Action
aminul	aminul@diu.edu.bd	CIS	Spring	Php,Laravel,Bootstrap	student	View
rakib	mahmud@diu.edu.bd	CIS	summer	Php,Laravel,Bootstrap	student	View

Figure 68: Students view table

View Supervisor and Department head table on the system:

Supervisor Table

Print

Name	Email	Department	Semister	Language	Type	Action
khaledd	khaled@diu.edu.bd	CIS	summar	Php,Laravel,Bootstrap,css	supervisor	View
Rafi haq	rafi@diu.edu.bd	CIS	summar	Php,Laravel,Bootstrap,css	supervisor	View
Naima Rahman	naimaRahman@diu.edu.bd	CIS	Spring	JAVA, Android	supervisor	View

Department Head Table

Print

Name	Email	Department	Semister	Language	Type	Action
alauddin	alauddn@diu.edu.bd	CSE	summar	Php,Laravel,Bootstrap	department Head	View
Akterur	akter@diu.edu.bd	CSE	summer	Php,Laravel,Bootstrap	department Head	View
Towhid Buiyan	towhid@diu.edu.bd	summer	SDLC, JAVA	department Head	View	
Sarwar Mollah	sarwar@diu.edu.bd	CIS	Fall	SDLC, Network Security	department Head	View

Figure 69: view supervisor and department table

Announcement Table:

Admin

Announcement

Announce different form elements

Title *

Description/Link *

Submit

Notice Table

SL	Announce Title	Announce Description	Date	Action
1	f	f	2019-12-27 03:52:59	

Figure 70: Admin announcement table

Add Department table:

Form Elements

Form Design
different form elements

Department Name *

Department CD *

Add


Notice Table

DepartmentName	Department CD	Action
CSE	1	
CIS	2	
Software	3	
Multimedia	4	

Figure 71: Department add table

Appendix-B

Test ID	Test Case	Description	Expected Result	Actual Result	Action
	User view of post details without authentication	User can only view post details if he logged in the system. User doesn't log in the system don't able to view post details.	User cannot able to show post details when doesn't login and redirect to homepage.	As expected,	No need



Sign in to DIU Idea Portal

Warning! email or password not matched! ×

Username or email address

Password

[Forgot password?](#)

Sign in

New to DIU Idea Portal? [Create an account.](#)

Figure 72: User error login form

View Department head and students Message:

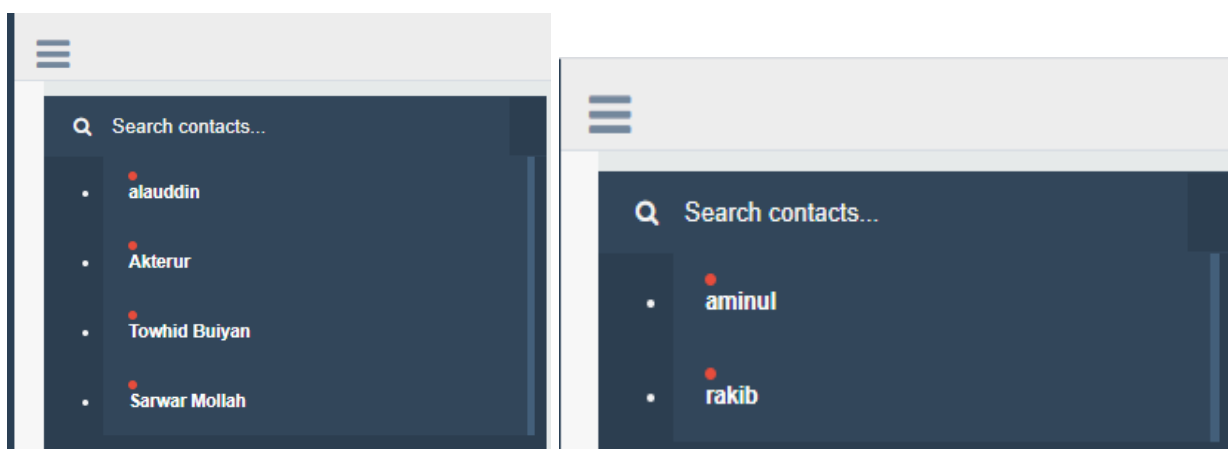
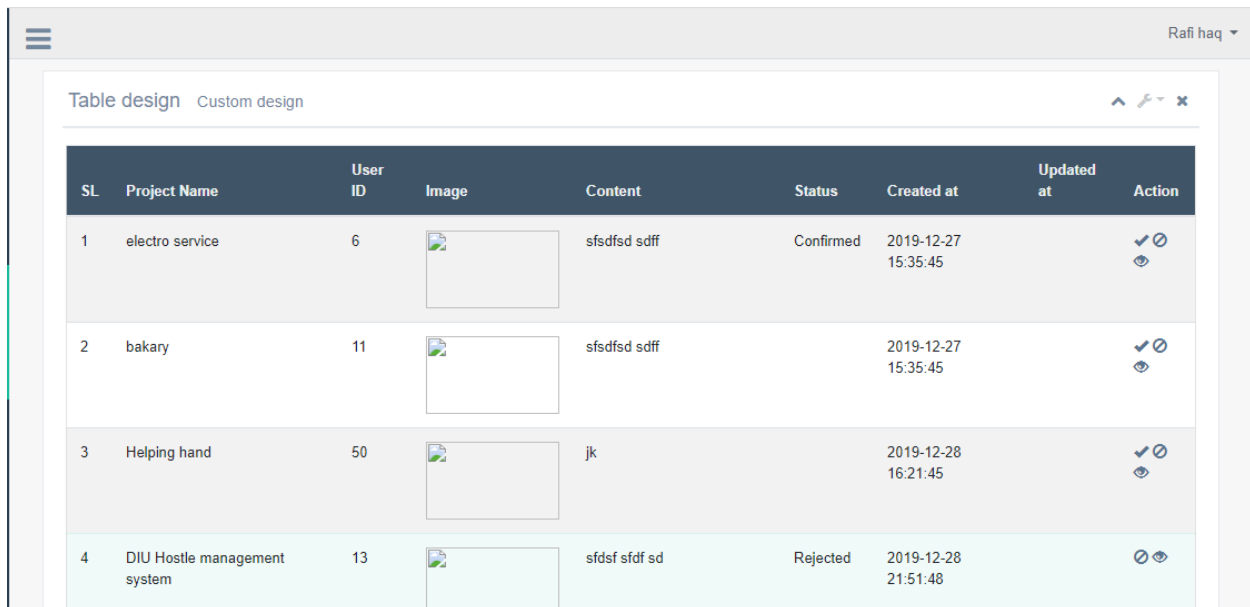


Figure 73: View message

Test ID	Test Case	Description	Expected Result	Actual Result	Action
	Admin will be able to go from one page to another within admin Dashboard.	Go to admin dashboard and click one button or link to go Another page.	After click a link button admin can go from one page to another page.	As expected	No need

Supervisor View project list:



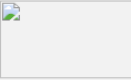





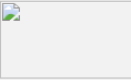





SL	Project Name	User ID	Image	Content	Status	Created at	Updated at	Action
1	electro service	6		sfsdfs sdff	Confirmed	2019-12-27 15:35:45		 
2	bakary	11		sfsdfs sdff		2019-12-27 15:35:45		 
3	Helping hand	50		jk		2019-12-28 16:21:45		 
4	DIU Hostle management system	13		sfsdf sdf sd	Rejected	2019-12-28 21:51:48		 

Figure 74: Supervisor view projects

View and add Department of the system:

Admin

Form Elements

Form Design

different form elements

Department Name *

Department CD *

Add

Notice Table

DepartmentName	Department CD	Action
CSE	1	
CIS	2	
Software	3	
Multimedia	4	

Figure 75: View all Departments in admin panel

View Ideas Table:

Ad

Table design

Custom design

Print

Project Type Id	User Id	Name	Image	Action
1	6	electro service	img/upload/idea/5e0855912234e-56.jpg	
1	11	bakary	img/upload/idea/5e067a0aa9298-9.png	
1	50	Helping hand	img/upload/idea/5e07d579d966a-31.png	
1	13	DIU Hostle management system	img/upload/idea/5e0822d492824-7.jpg	
1	6	DIU Hostel Management	img/upload/idea/5e067a0aa9298-9.png	
2	12	Auction Management System	img/upload/idea/5e067a0aa9298-9.png	
2	14	DIU Donation	img/upload/idea/5e067a0aa9298-9.png	
3	6	Autonomous Cycle	img/upload/idea/5e084c7b2735e-49.jpg	
4	6	Islamic Games	img/upload/idea/5e08536377b86-51.jpg	
2	6	hotel management system	img/upload/idea/5e08557d7cf3e-23.jpg	

Figure 76: View idea table

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https://www.tutorialspoint.com/sdlc/sdlc_waterfall_model.htm
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<https://www.castsoftware.com/glossary/lean-development>
- agilebusiness*. (2018, 2 21). Retrieved 12 16, 2019, from [/www.agilebusiness.org](http://www.agilebusiness.org):
<https://www.agilebusiness.org/page/TheDSDMAgileProjectFramework>
- airbrake*. (2018, 12 21). Retrieved 12 16, 2019, from airbrake.io:
<https://airbrake.io/blog/sdlc/rapid-application-development>
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