

E-SUPERVISION SYSTEM

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This Report Presented in Partial Fulfillment of the Requirements for the
Degree of Bachelor of Science in Computer Science and Engineering

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DHAKA, BANGLADESH

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APPROVAL

This project titled “E- Supervision System” submitted by Atosi Das ID: 151-15-4912, Humayra Himu ID:151-15-4814 and Khursida Jahan ID:151-15-5190 to the Department of Computer Science and Engineering, Daffodil International University has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of Bachelor of Science in Computer Science and Engineering and approved as to its style and contents. The presentation has been held on December 2018.

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DECLARATION

We declare that this project has been conducted by us under the follow up of our supervisor Nusrat Jahan, Lecturer, Department of CSE Daffodil International University. We also declare that neither this project nor any part of this project has been submitted elsewhere for award of any degree or diploma.

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We would also like to wish our deepest heartiest gratitude to Prof. Dr. Syed Akhter Hossain Head, Department of CSE for his lot of deepest help to fulfill our final year project and also thanks to other faculty members and the employees of CSE dept. of Daffodil International University.

At last, we need to disclose our gratefulness towards our parents and supervisor Nusrat Jahan for their greatest co-operation, encouragement and gave us brave to successfully complete our project.

ABSTRACT

The appropriate and successful integration of technologies into learning environment over the previous ten years period has left great gap between the amount of technology available and the support for teachers. As we know, the capacitor supervision very important exactly in primitive interval for the beginning teachers and must be in convergent periods of time.

In other hand, the forerunner teachers also need to integrating technologies in their occupational framework to decrease gab between teachers and the using of technologies. From this point of view, we consider a more effective way to establish a convenient way of communication between teachers and their supervisors by building an electronic-supervision system (E-Supervision).

The E-Supervision process aimed to creating an educational collaboration environment between supervisors and teachers which include acquiring more skills, experiences, attitudes, and teaching strategies and others. In the other side, it aims to give the supervisors nearly, continuous and open support to their teachers which will relieve their task stress and less daily time through communicating with teachers through E-Supervision system. The purpose of this study is to design an electronic supervision system (E-Supervision) environment to assist the professional development for the supervision process, which aim to design the main frontage of E-Supervision system (ESS) and to connect educators on the topic of elementary of the teaching development. We believe the ESS will increase positive communications and interaction between educators and it will form an integrated information management system for the learning and teaching processes.

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CHAPTER 1

INTRODUCTION

1.1 Introduction

The general components for any e-system are communication type, feedback evaluation, technologies based, appropriate software, effective environments, and networking. Despite of existence of several technologies in computer world, web-based and Internet-based are forth-going and most appealing; hence they are generally used for many E-system. Within any system, collection of appropriate tools is being developed that allow e-system to take place quite effectively in an environment and support the components and technologies.

The E-Supervision model appears to be a natural complement to the increasing use of distance learning technologies and support the learning process currently available. We believe that the future of education, not only within continuing education, will more and more be reliant on web-based, on-line educational material. In-order-to continue developing electronic education and learning, we must first know about all of the supervision process.

Certainly, in our E-Supervision model we have the key components that include teacher and supervisor management, appropriate software, and feedback evaluation. E-Supervision system, in its simplifying version, is a web-based system using multi-agent technologies with client/server approach to access and receive information from databases to helping supervisors to achieving their work. It will facilitate many issues of working such as reduce visiting to classes, increase time to do administrative works, easy access all information about teachers and increase communications to teachers and other issues.

1.2 Motivation

The main aim of our project is to provide an application based on supervising system. It will be an easy way for students to connect with supervisors to develop their skills in time. Through this application process the students will get regular support, instruction & feedback as developing their projects. The provides excellent security of data at every level of user system interaction and also provides reliable storage and backup facilities. It will

be helpful for students to select their mentors as their choices & will be trained in the proper way from the supervisor teachers.

1.3 Objectives

The main task to computerize all details regarding supervisors & project reports. Scheduling the supervisor details list as their time, interested area & student selection. Scheduling the direct notification based on selection & proper details both of students & teachers. Providing an exact timing system to develop projects maintained by rules. The information of the students should be kept up to date and their record should be kept in the system for historical purpose as their developing project.

1.4 Expected Outcome

We expect the outcome from our project -

- Main facilities available in this project for both of students & teachers.
- Maintaining records of students developing results in time.
- There will be the proper connection way for supervisors and students.
- Database of projects, updated idea will be kept for developing in a better way.
- Students will be select their supervisors as a group & the notification will go to those teachers that's why they will can choose their interested project ideas.
- Related project reports & details list of records can be generated as per user requirements.
- Both of users can search the related projects record by his/her name or their email.
- If user forgets his/her password, then it can be retrieved by hint question.

1.5 Report Layout

In this project a full overview of our system and related work and terminologies are given gradually. We recently made a survey on this similar work and try to what is more scope to develop this existing project. Then we would try to solve it with new algorithm and techniques.

In chapter 2 we describe the challenges and facing problem which is make difficult to us. Another chapter 3 we describe the three stage of background. We also describe the requirement specification and try to disclose users demand. In, chapter 4 and 5 we disclose how we solve the problem and what we use to implement the project.

Finally, in chapter 6 we remark some concluding and suggestions for future works.

CHAPTER 2

BACKGROUND

2.1 Introduction

Supervision with induction to the collaboration working and giving professional knowledge, skills, and attitudes to supervisors and teachers. Assessing, performance management, training and development the competence and performance of the supervisors and teachers to undertake the specified task. Withal the supervising, review for teachers. Putting the plans, suggestions, observations and strategies for curriculums, teaching and supervision process.

2.2 Related Works

There are a lot of communication elements to communicate with teachers and students. But there is no proper way to communicate and connect easily to guide and learn any educational task or project of student. “E-Supervision System” is the web-based project where students can connect to their expected supervisor to complete the project in proper way easily. So, we hope that this platform will be helped to student and supervisor eagerly.

2.3 Comparative Studies

We have developed our project for using as a completely web-based benefit to fulfill the system according to smart level. For this, we have researched some features on educational system based on software or application. The various system of supervision has published, but our project will be better to use easily.

The purpose of this study is to design an electronic supervision system (E-Supervision) environment to assist the professional development for the supervision process, which aim to design the main frontage of E-Supervision system (ESS) and to connect educators on the topic of elementary of the teaching development.

We believe the ESS will increase positive communications and interaction between educators and it will form an integrated information management system for the learning and teaching processes.

2.4 Scope of the problem:

The main aim of our project is to provide a web based on supervising system. It will be an easy way for students to connect with supervisors to develop their skills in time. Through this online process the students will get regular support, instruction & feedback as developing their projects.

The provides excellent security of data at every level of user system interaction and also provides reliable storage and backup facilities. It will be helpful for students to select their mentors as their choices & will be trained in the proper way from the supervisor teachers.

2.5 Challenges:

The challenge of the supervision process is to provide a safe, supportive opportunity for individuals to engage in critical reflection in order to raise issues, explore problems, and discover new ways of handling both the situation and one self. A critical aspect of supervision lies in its potential to educate.

CHAPTER 3

REQUIREMENT SPECIFICATION

Introduction

Requirements specifications state what needs to be done by a system. The requirements specification states what needs to be done in order for the organization to fulfill their purpose.

3.1 Business Process Modeling

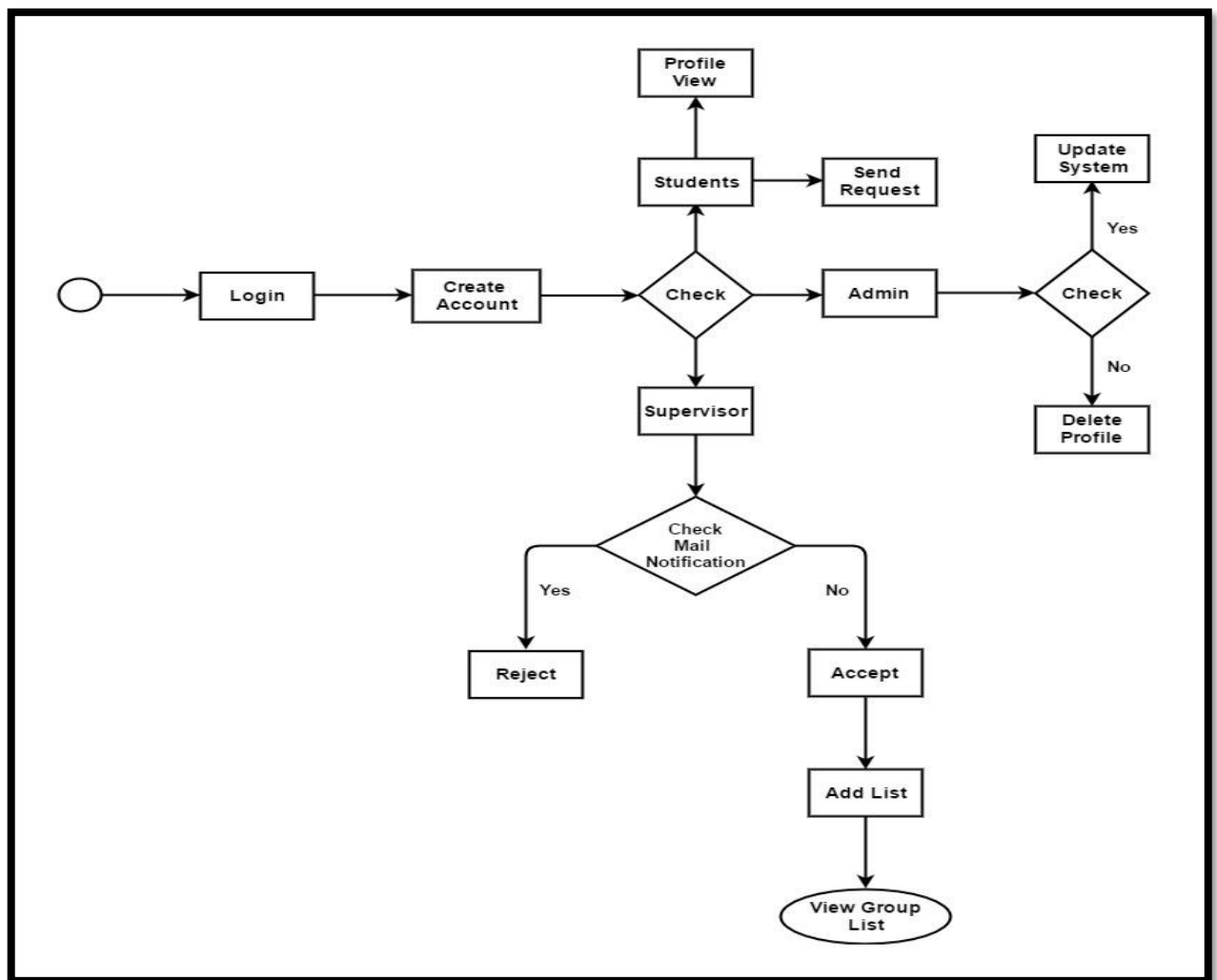


Figure 3.1: Business process modeling

3.2 Requirement Collection and Analysis

When it comes to any type of project, requirement collection plays a key role. Requirements collection is not only important for the project, but it is also important for the project management function. Requirement collection is the most important step of a project. If the project team fails to capture all the necessary requirements for a solution, the project will be running with a risk. This may lead to many disputes and disagreements in the future. Therefore, take requirement collection as a key responsibility of the project team. So that we are collected our project requirement as soon as possible. Then we started our work.

3.2.1 Software Development Life Cycle (Agile)

The agile model is a popular version of the systems development life cycle model for its linear sequential criteria, which means each phase must have to be totally completed before the next phase has start. At the end of every phases, a review was taken to determine the project is on the right path.

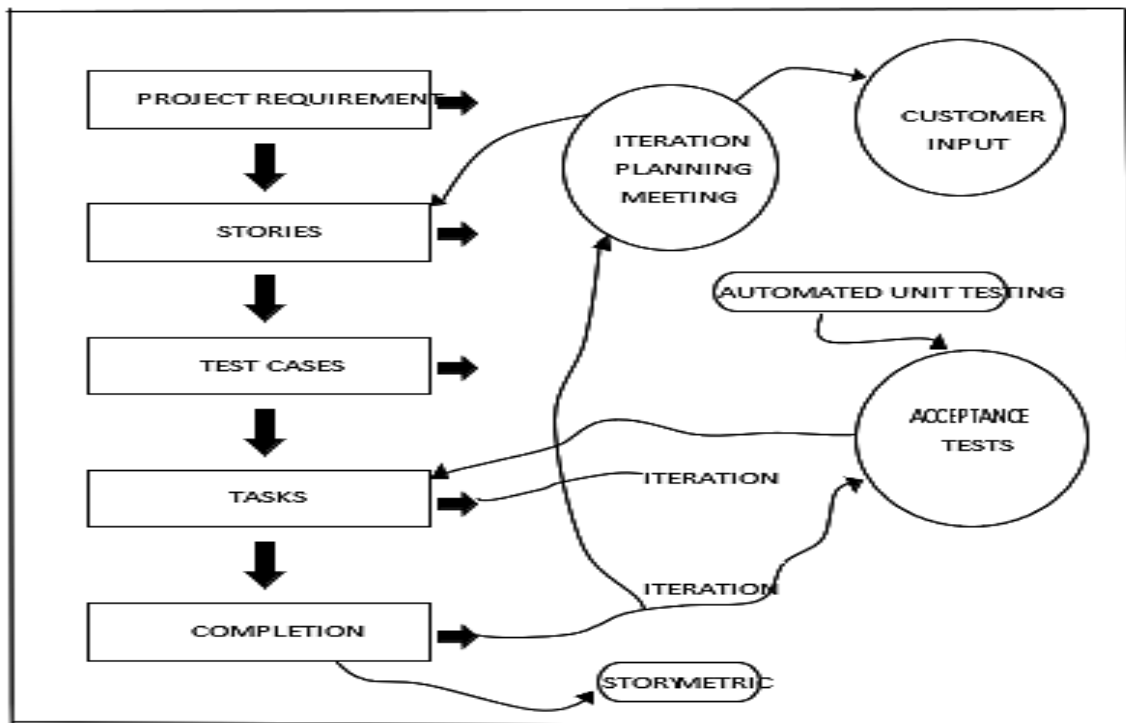


Figure 3.2.1: Software development life cycle (agile)

3.2.2 Flow Chart

The processes of our E-Supervision System given below-

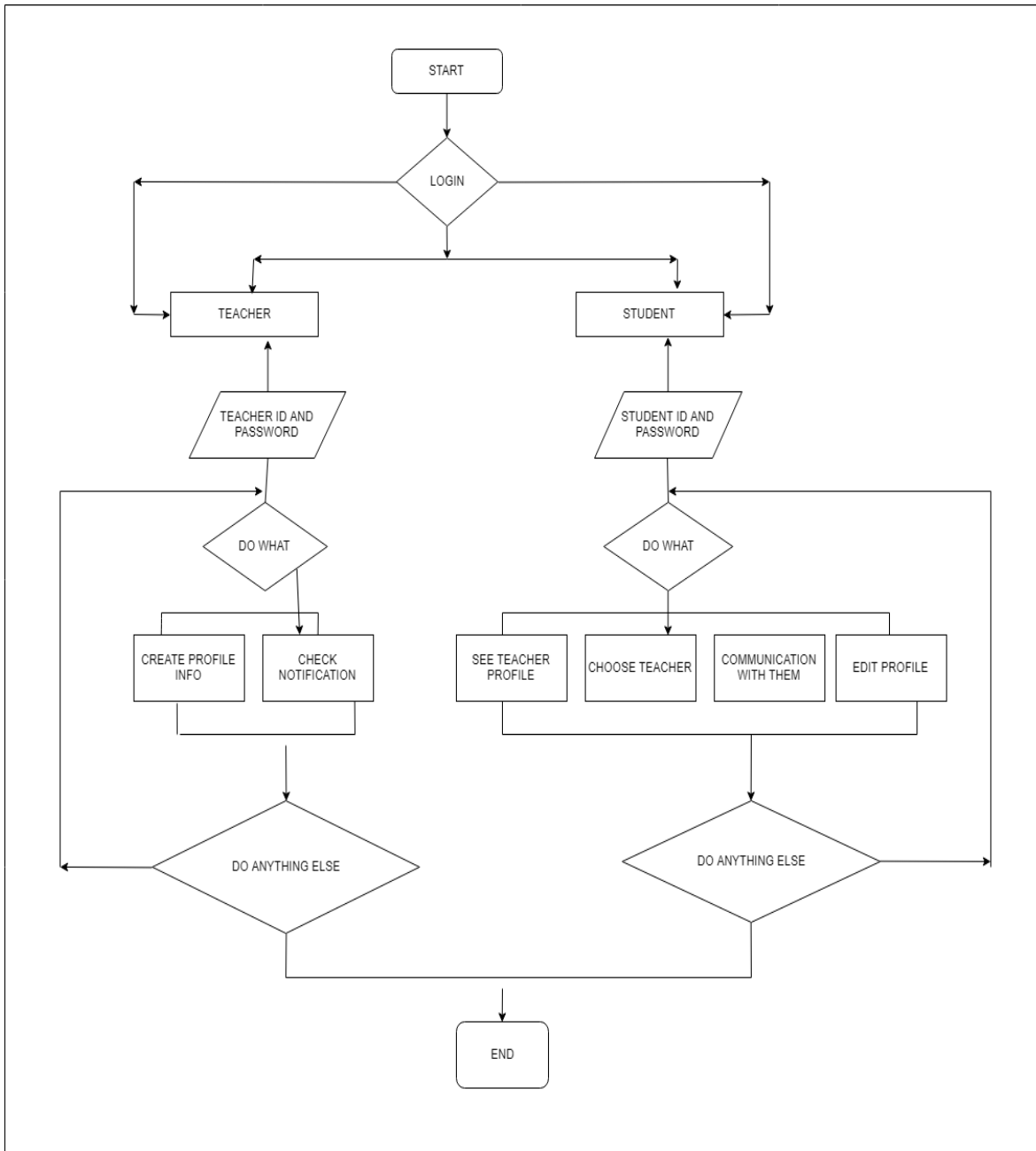


Figure 3.2.2: Flow Chart for E-Supervision system

3.2.3 Dataflow Diagram

A data flow diagram (DFD) is a graphical representation of the "flow" of data through an information system, modeling its process aspects. A DFD is often used as a preliminary step to create an overview of the system, which can later be elaborated. DFDs can also be used for the visualization of data processing (structured design).

The below DFD shows what kind of information will be input to and output from the system, where the data will come from and go to, and where the data will be stored.

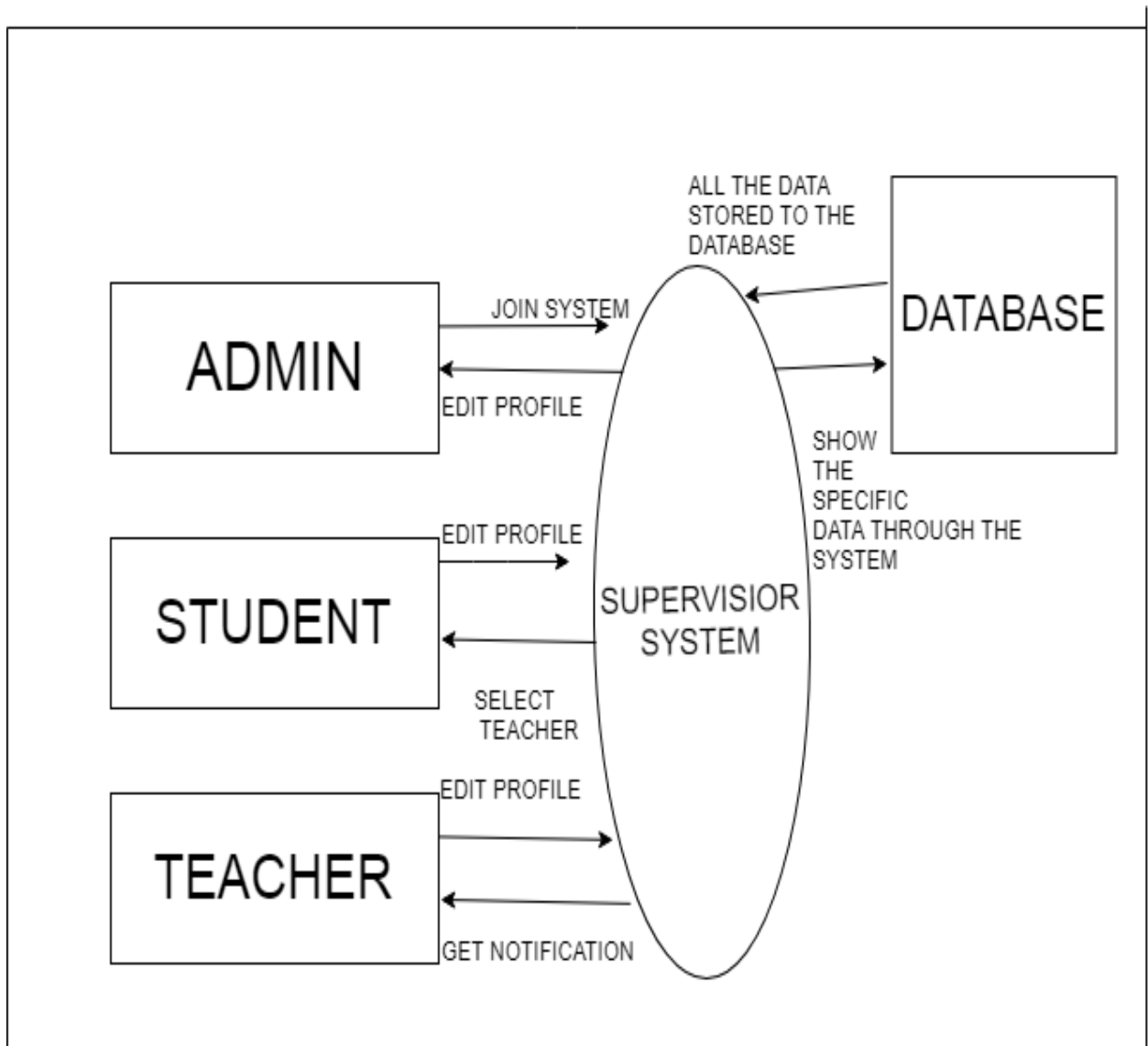


Figure 3.2.3: Data Flow Diagram For system

3.2.4 Entity Relationship Diagram

An entity relationship diagram (ERD) is a data modeling technique that graphically illustrates information systems' entities and the relationship between those entities. An ERD is conceptual and representational model of data used to represent the entity framework infrastructure.

The elements of an ERD are:

- Entities
- Relationship
- Attribute

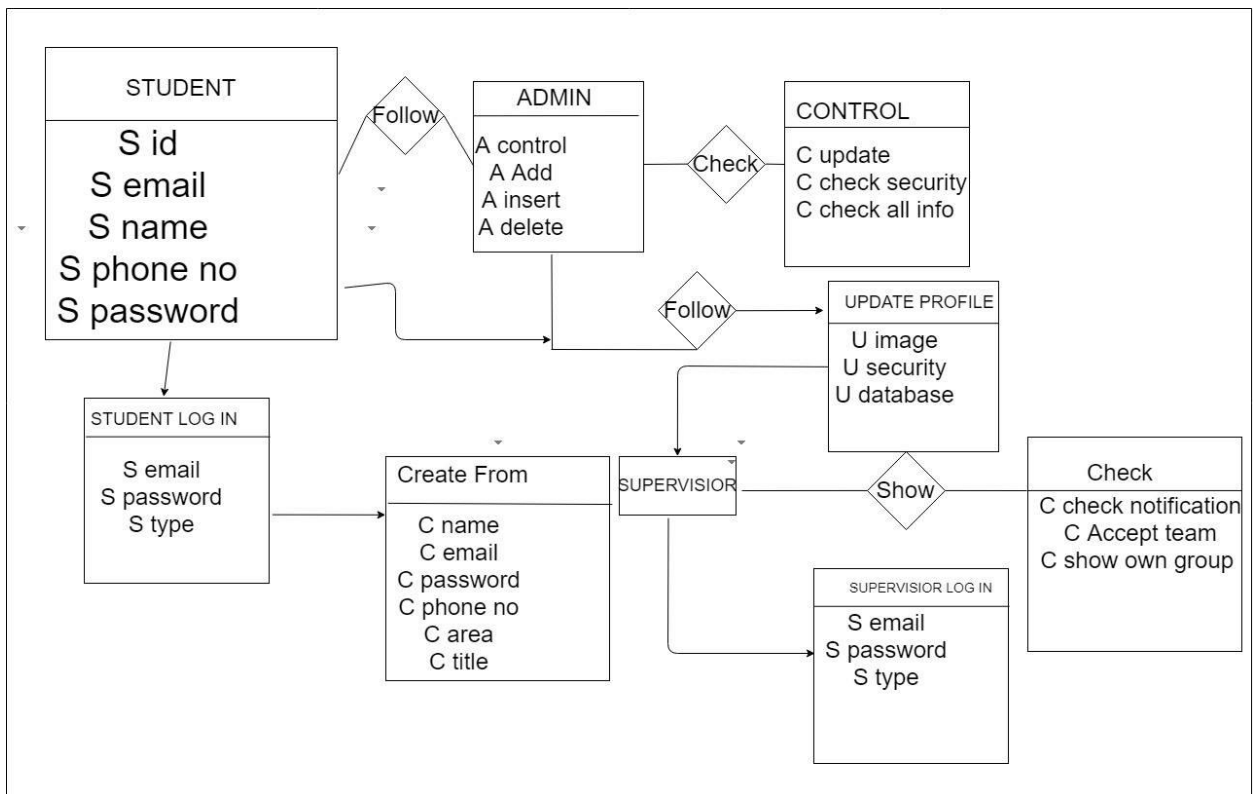


Figure3.2.4: E-R Diagram of the system

3.3 Use case modeling and description

The system after careful analysis has been identified to be presented with the following actor.

The actors involved are:

- ❖ Student
- ❖ Supervisor
- ❖ Admin

3.3.1 Use case for student

In the student module is prepared for the students who are the login for the choice supervisor. The admin can accept or delete. The students get their email and password from the register for login in the “E-Supervision System”. When the students get their login information, and then they login to the “E-Supervision System” in the student part. They can only see their individual information. The students can see the supervisor profile, work field etc. Then they can select the supervisor and sent request them.

Table 3.3.1: Use case description of Student

Use case name:	STUDENT
Actor:	Admin, Supervisor
Pre-condition:	None
Primary Path:	Enter Student ID Enter Student E-mail Click “Login” Button
Exceptional Path:	Invalid E-mail Invalid ID

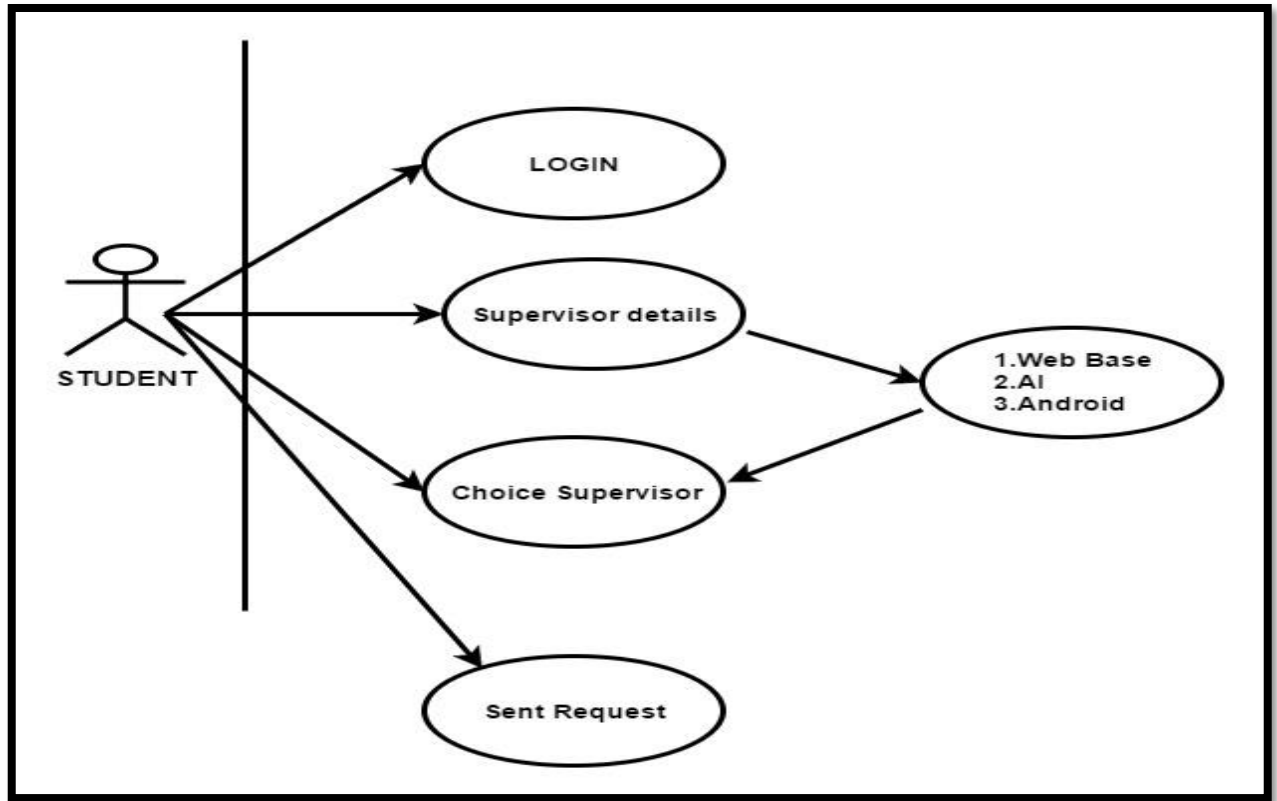


Figure 3.3.1: Use Case modeling For Student

3.3.2 Use case for supervisor

Supervisor module has only three options. In Login pages, the supervisor sees the student profile details. In the 2nd page supervisor get notification from the student. The last page is viewing student profile then she/he can add student for work with him/her. And supervisor give feedback to which student are can't work with him/her.

Table 3.3.2: Use case description of Supervisor

Use case name:	Supervisor
Actor:	Admin, Student
Pre-condition:	None
Primary Path:	Enter Supervisor ID Enter Supervisor E-mail

	Click “Login” Button
Exceptional Path:	1. Supervisor ID is invalid Supervisor E-mail is invalid

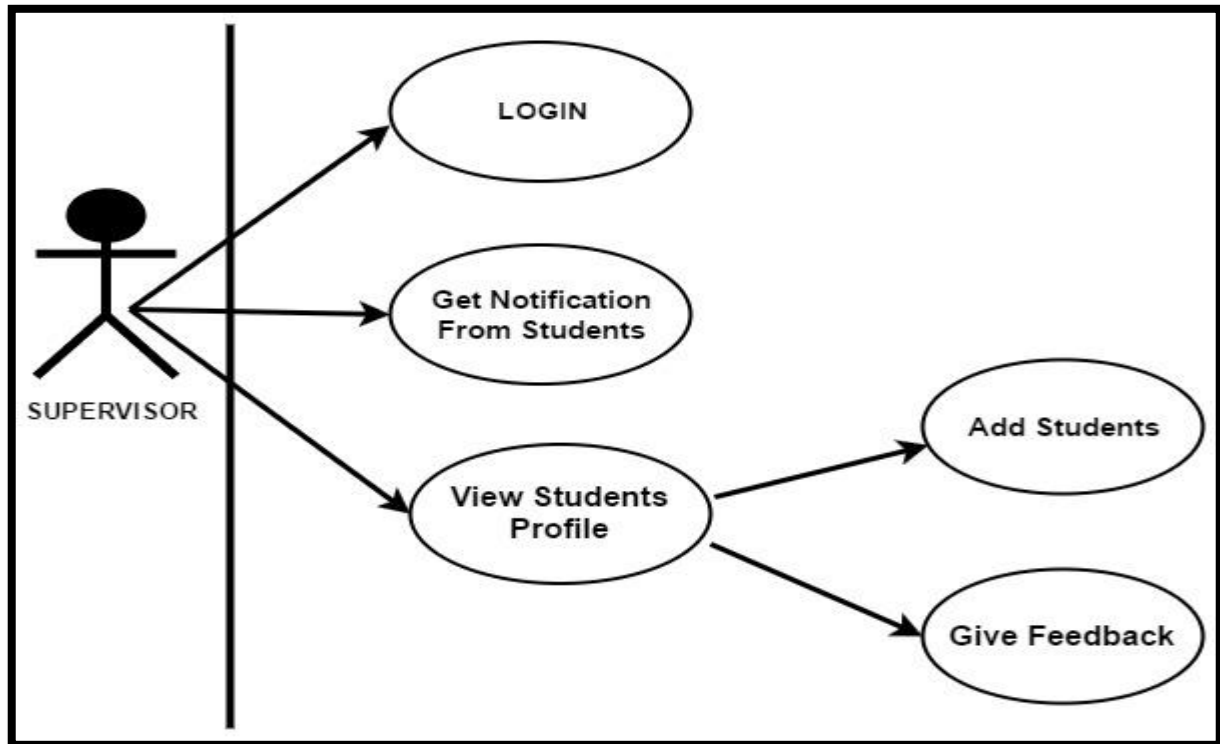


Figure 3.3.2: Use Case Modeling for Supervisor

3.3.3 Use case for admin

In this module, have mainly three parts in our “E-Supervision System”. Admin is the people who have to login first then he/she can manage the User, update the full project, remove the profile form student and also can accept the request from users.

Table 3.3.3: Use case description of Admin

Use case name:	Admin
Actor:	Admin
Pre-condition:	Login

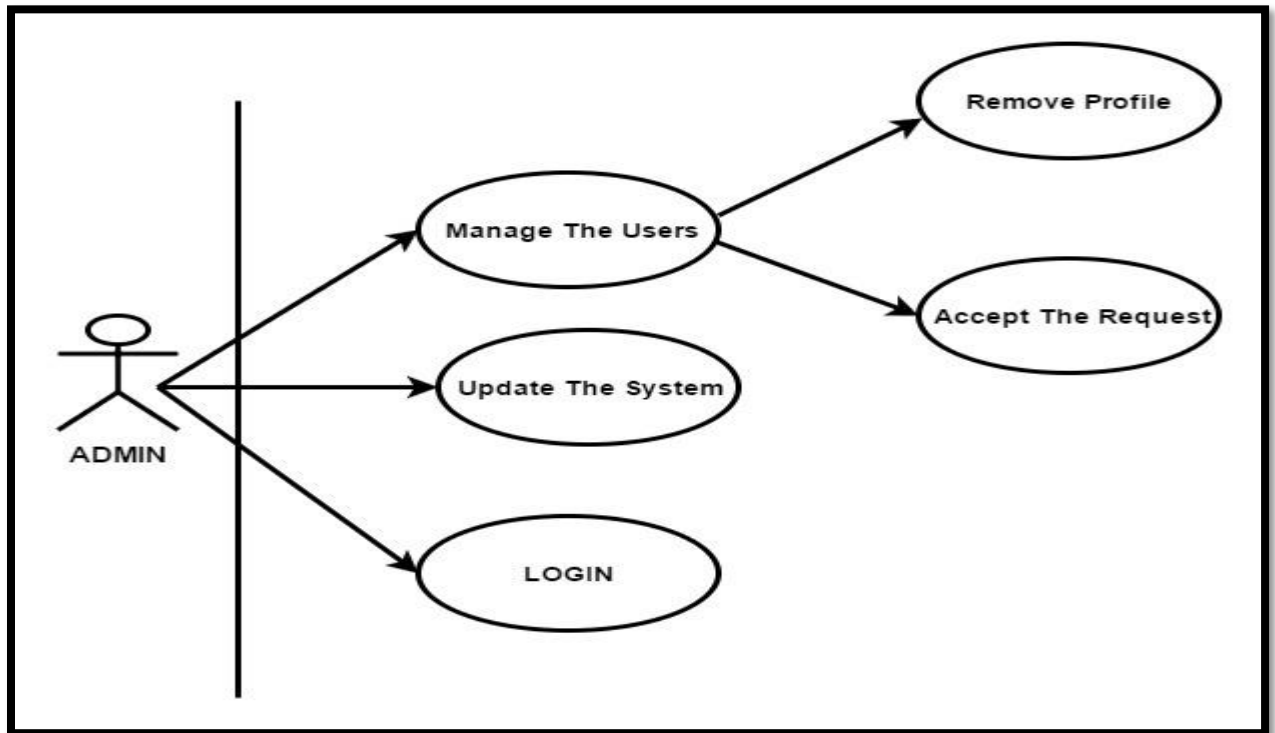


Figure 3.3.3: Use Case modeling for Admin

3.3.4 Use Case Description

It contains information about full part of the Use case Model shown in the below picture. We have already described about every use case through a table and picture in the above section.

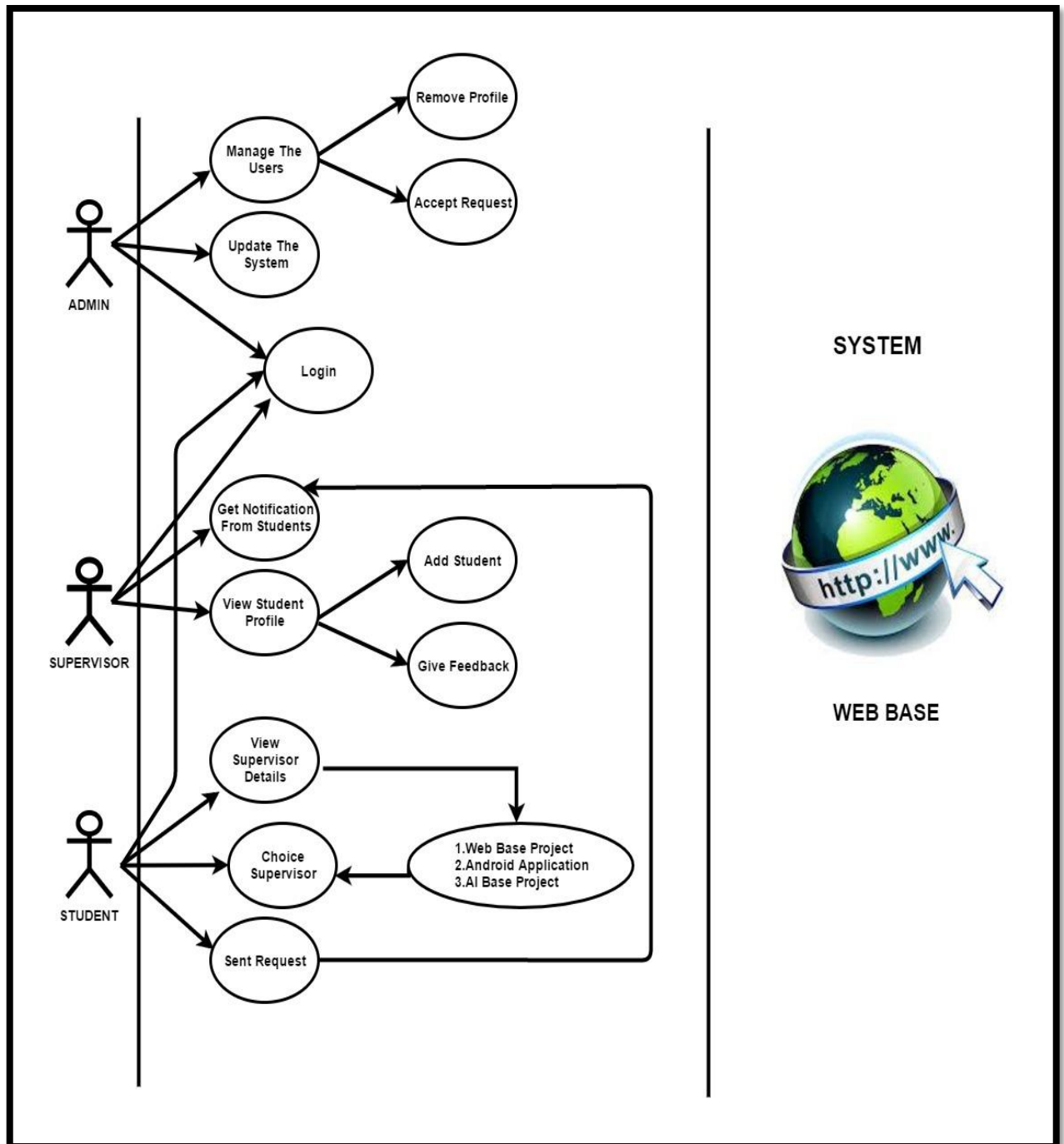


Figure: 3.3.4 Use Case Diagram

3.4 Logical Data Model

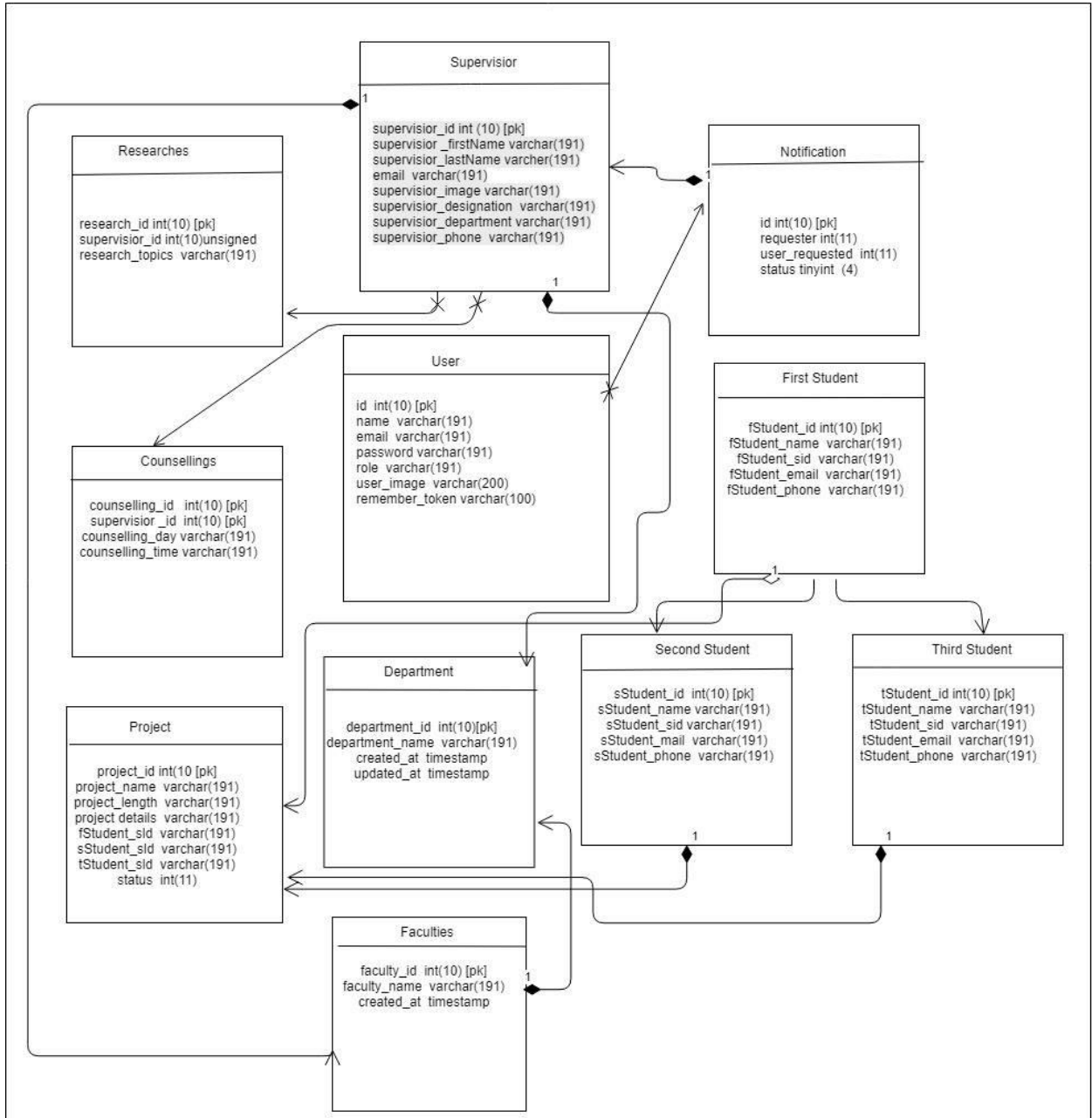


Figure 3.4: Logical data model of the project

3.5 Design requirement

Systems design is the process of defining the architecture, components, modules, interfaces, and data for a system to satisfy specified requirements. In this chapter overall system design of our application has been showed, where architectural design, use case diagram, flow chart and data flow diagram included. Whole design of this project is user friendly. Modern and updated design tools have been used for this project. Also new concepts have been considered to make it user friendly. In future any kind of edit is allowed as time permits.

3.5.1 Architecture Design

The architecture design of a system emphasizes the design of the system architecture that describes the structure, behavior, and more views of that system and analysis.

Our application's architectural design shows that-

- User writes the web address of our application through the web browser.
- This link request goes to the web server.
- PHP Files fetch the data from database and the web page is showed to the user.

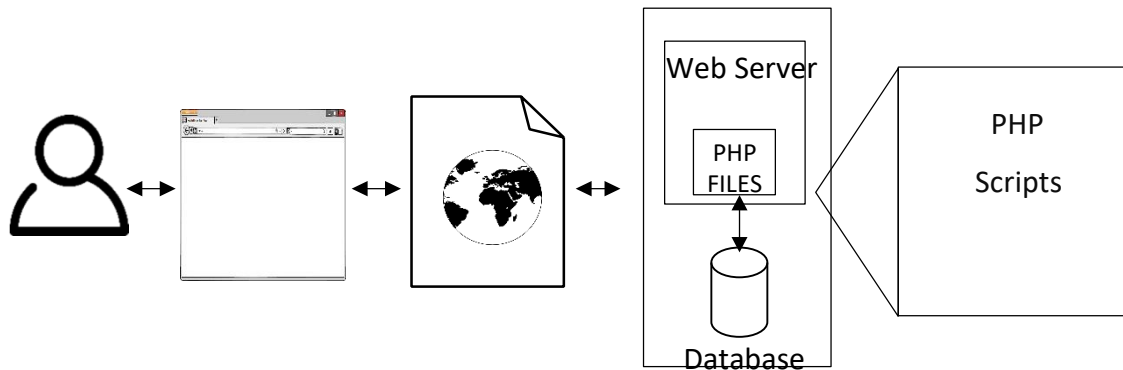


Figure 3.5.1: Architecture Design

Database design is the organization of data according to a database model. The designer determines what data must be stored and how the data elements interrelate. With this

information, they can begin to fit the data to the database model. Database design involves classifying data and identifying interrelationships.

Two essential settings for a database are:

- Primary key: - The field that is unique for all the record occurrences.
- Foreign key: - The field used to set relation between tables. Normalization is a technique to avoid redundancy in the tables.

CHAPTER 4

DESIGN SPECIFICATION

4.1 Front-end Design

Front-end tools, which are used in developing our ESS system, are given in the following-

- PHP
- HTML5,
- CSS3,
- JAVA SCRIPT

4.2 Back-end Design

Choosing a right php development framework to develop a web application for the business can be a very difficult task because there are so many optional available from the past few days we at.

Value Coders are using Laravel framework on a regular basis. In the backend design, we use MySQL tools for our application. In near future we use oracle for the backend implementation. MySQL is the popular tools for database management system.

PHP:

version	RELEASE DATE	SUPPORTED UNIT
5.5	20 June 2013	10 July 2016
5.6	28 August2014	31 December 2018
7.0	3 December 2015	3 December 2018

MY SQL:

RELEASE	GENERAL AVAILABILTY	LATEST MINOR VERSION	LATEST RELEASE	END OF SUPPORT
5.1	November 14,2008,9 years ago	5.1.73	2013-12-03	December 2013
5.5	December 3,2010,7 years ago	5.5.61	2018-07-27	December 2018
5.6	February 5,2013, 5 years ago	5.6.41	2018-07-27	February 2021

LARAVEL:

Version	Release	Bug Fixes Until	Security Fixes Until
5.0	4 February, 2015	4August, 2015	4 February, 2016
5.1	9 June, 2015	9 June, 2015	9 June, 2018
5.2	21 December, 2015	21 June, 2016	21December, 2016

4.3 Interaction Design and UX

DESIGN

Whole design of this project is user friendly. Modern and updated design tools have been used for this project. Also new concepts have been considered to make it user friendly. In future any kind of edit is allowed as time permits.

COMPLETION

This project is going to inform about ESS. Every panel will be updated any time.

PROJECT DELIVERABLES

Project deliverables are the outputs from a project that normally provide beneficial change. Deliverables can be process improvements, new or improved services, service quality improvements, image and reputation artifacts, risk reduction benefits, increases to the flexibility or effectiveness of staff or policy compliances.

RESOURCE ALLOCATION

In software planning, resource allocation is a plan for using available resources, for example human resources, especially in the near term, to achieve goals for the future. It is the process of allocating resources among the various projects or business or educational units.

4.4 Implementation Requirements

Requirements analysis in systems engineering and software engineering encompasses those tasks that go into determining the needs or conditions to meet for a new or altered product or project, taking account of the possibly conflicting requirements of the various stakeholders analyzing, documenting, validating and managing software or system requirements.

NON-FUNCTIONAL REQUIREMENT

Our system has some nonfunctional requirement that is describe in the below: -

EFFICIENCY REQUIREMENT

When our system implemented in any university and organization then they use this system for their working records.

RELIABILITY REQUIREMENT

The system should provide a reliable environment to both students, teachers and authority. All students and teachers should be updated their information through the admin without any errors.

USABILITY REQUIREMENT

Our ESS system is designed by user-friendly environment and very easy to use.

IMPLEMENTATION REQUIREMENTS

Implementation of the system using PHP, CSS, HTML, JAVASCRIPT, JQuery for front-end implementation. PHP will be used for database connectivity. Moreover, MySQL develops the database part. Responsive web designing is used for making the web application compatible for any type of screen.

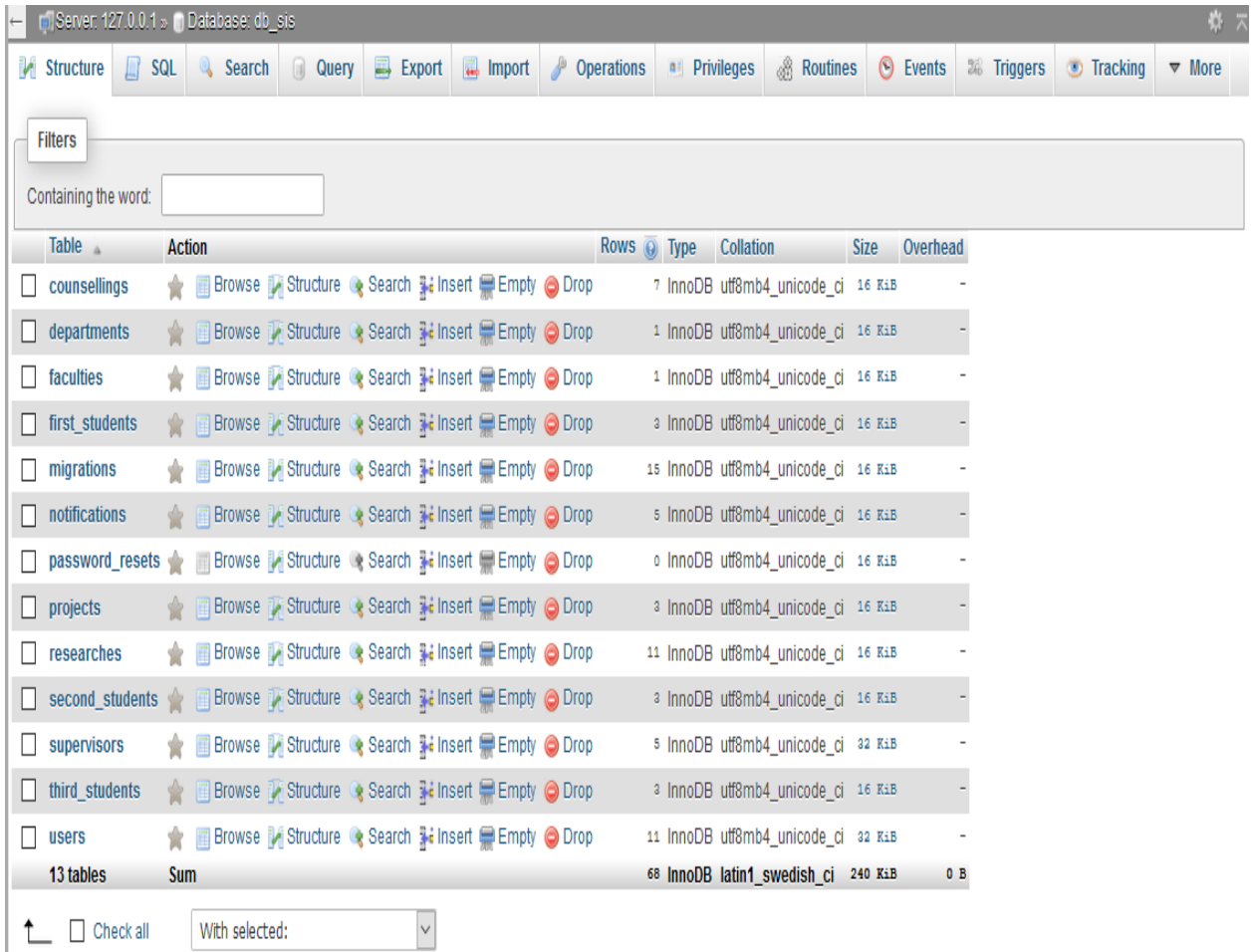
DELIVERY REQUIREMENT

The whole system is expected to be delivered in four months of time with a weekly evaluation by the project guide.

CHAPTER 5

IMPLEMENTATION AND TESTING

5.1 Implementation of Database



The screenshot shows the PhpMyAdmin interface for a database named 'db_sis'. The top navigation bar includes tabs for Structure, SQL, Search, Query, Export, Import, Operations, Privileges, Routines, Events, Triggers, Tracking, and More. Below the navigation bar is a 'Filters' section with a search input field. The main content area displays a table with columns: Table, Action, Rows, Type, Collation, Size, and Overhead. The table lists 13 tables: counsellings, departments, faculties, first_students, migrations, notifications, password_resets, projects, researches, second_students, supervisors, third_students, and users. Each table row includes a checkbox, a star icon, and a set of action icons (Browse, Structure, Search, Insert, Empty, Drop). The 'users' table is highlighted. At the bottom, there is a 'Check all' checkbox and a 'With selected:' dropdown menu.

Table	Action	Rows	Type	Collation	Size	Overhead
<input type="checkbox"/> counsellings	★ Browse Structure Search Insert Empty Drop	7	InnoDB	utf8mb4_unicode_ci	16 KiB	-
<input type="checkbox"/> departments	★ Browse Structure Search Insert Empty Drop	1	InnoDB	utf8mb4_unicode_ci	16 KiB	-
<input type="checkbox"/> faculties	★ Browse Structure Search Insert Empty Drop	1	InnoDB	utf8mb4_unicode_ci	16 KiB	-
<input type="checkbox"/> first_students	★ Browse Structure Search Insert Empty Drop	3	InnoDB	utf8mb4_unicode_ci	16 KiB	-
<input type="checkbox"/> migrations	★ Browse Structure Search Insert Empty Drop	15	InnoDB	utf8mb4_unicode_ci	16 KiB	-
<input type="checkbox"/> notifications	★ Browse Structure Search Insert Empty Drop	5	InnoDB	utf8mb4_unicode_ci	16 KiB	-
<input type="checkbox"/> password_resets	★ Browse Structure Search Insert Empty Drop	0	InnoDB	utf8mb4_unicode_ci	16 KiB	-
<input type="checkbox"/> projects	★ Browse Structure Search Insert Empty Drop	3	InnoDB	utf8mb4_unicode_ci	16 KiB	-
<input type="checkbox"/> researches	★ Browse Structure Search Insert Empty Drop	11	InnoDB	utf8mb4_unicode_ci	16 KiB	-
<input type="checkbox"/> second_students	★ Browse Structure Search Insert Empty Drop	3	InnoDB	utf8mb4_unicode_ci	16 KiB	-
<input type="checkbox"/> supervisors	★ Browse Structure Search Insert Empty Drop	5	InnoDB	utf8mb4_unicode_ci	32 KiB	-
<input type="checkbox"/> third_students	★ Browse Structure Search Insert Empty Drop	3	InnoDB	utf8mb4_unicode_ci	16 KiB	-
<input type="checkbox"/> users	★ Browse Structure Search Insert Empty Drop	11	InnoDB	utf8mb4_unicode_ci	32 KiB	-
13 tables	Sum	68	InnoDB	latin1_swedish_ci	240 KiB	0 B

Figure 5.1: Screenshot of the database table of the PhpMyAdmin

5.2 Implementation of Front-end Design

To design the website all pages like user login, student profile, send request, supervisor profile, admin profile and all other pages are given bellow:

5.2.1 Homepage

This is the homepage of our project. This page is also known as main page and this is the main page of the site. After entering into our site user can see this page first. The user will be the student, the supervisor & the admin. To create account, there is a sign-up button and after that user will sign in with email and password. In figure 5.2.1 show the homepage of ESS.

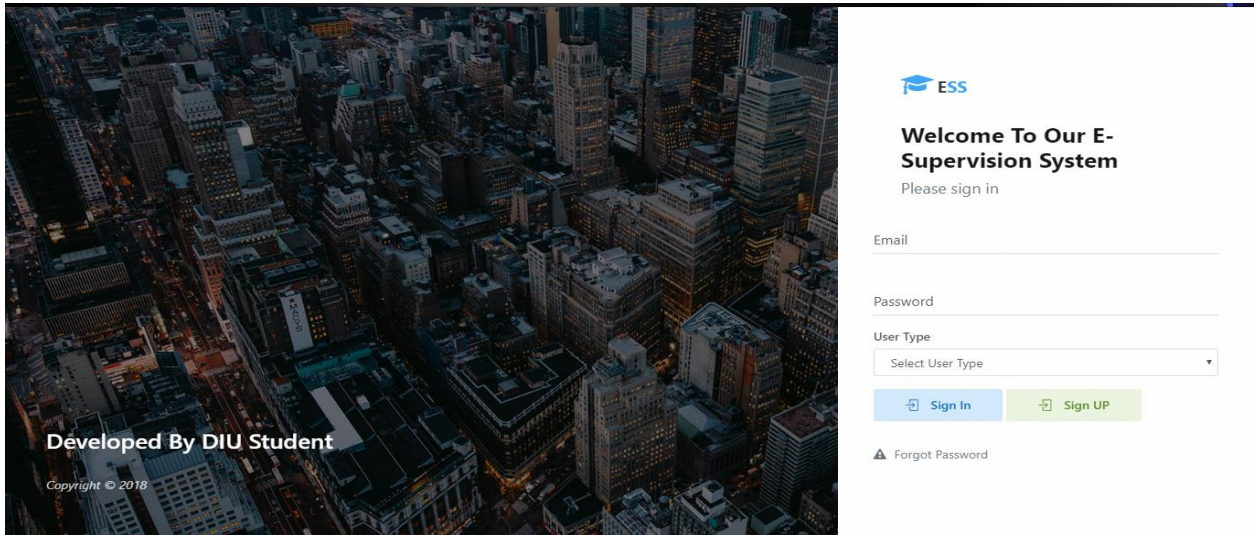


Figure 5.2.1: Screenshot of the homepage of the system

5.2.2 Student Panel

This is the student panel for the students. They will do their work to prepare their project in this panel with their mandatory information. In figure 5.2.2 show the student panel.

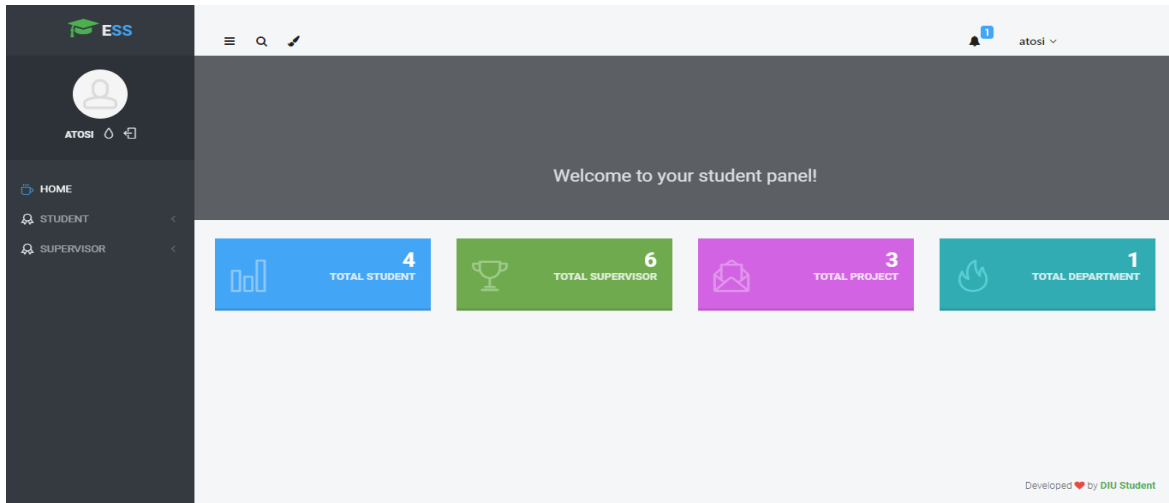


Figure 5.2.2: Screenshot of the student panel

5.2.3 Add Student Information

This is the page to update the information for student. Student will create their group to give the mandatory information. In figure 5.2.3 show the student information add.

Figure 5.2.3: Screenshot of the student information add

5.2.4 Student Group List

Here student can see the group and their project title. In figure 5.2.4 show the student group list.

SL	STUDENT NAME	STUDENT ID	PROJECT TITLE	ACTION
1	Humayra	151-15-3320	Embedded	
	Atoshi	151-15-2330		
	khusi	151-15-2333		
2	Chanchal	141-15-3320	ERP	
	Jahid	141-15-3323		
	Upama	141-15-3126		
3	shakil1	141-15-2222	ESS	
	shakil2	141-15-3333		
	shakil3	141-15-4444		

Figure 5.2.4: Screenshot of the student group list

5.2.5 Student Group Details

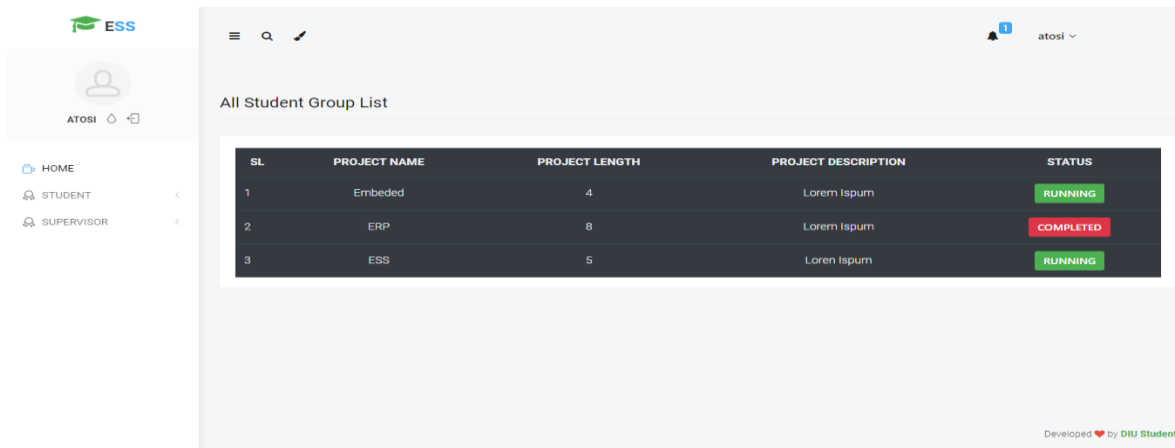
Here student can see their information details and about project details to prepare their project. In figure 5.2.5 show the student group details.

TITLE	DETAILS			
Student Name	Name: Humayra	ID: 151-15-3320	Email: humayra@diu.edu.bd	Mobile: 0176xxxxxxx
	Name: Atoshi	ID: 151-15-2330	Email: atoshi@diu.edu.bd	Mobile: 01923xxxxxx
	Name: khusi	ID: 151-15-2333	Email: khusi@gmail.com	Mobile: 01678xxxxxx
Project Name	Embedded			
Project Length	4			
Project Description	Lorem Ipsum			
Status	Active			

Figure 5.2.5: Screenshot of the details of the student group

5.2.6 Student Project Details

This is the page of student project details. If projects will be running, the status will be running. After completed the project, they will close the project to click the running button turned to complete. In figure 5.2.6 show the student project details.

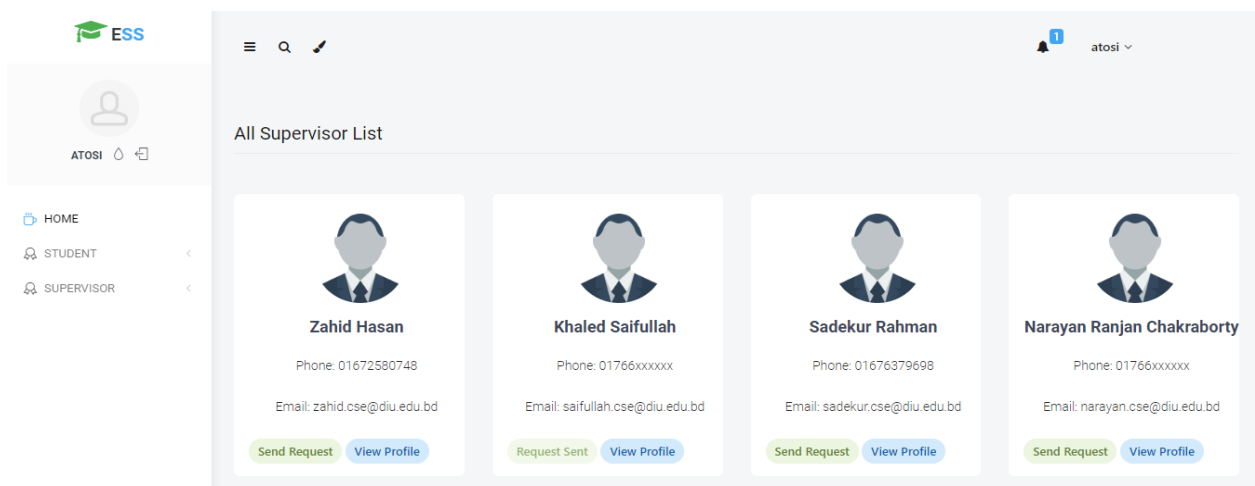


SL	PROJECT NAME	PROJECT LENGTH	PROJECT DESCRIPTION	STATUS
1	Embedded	4	Lorem Ipsum	RUNNING
2	ERP	8	Lorem Ipsum	COMPLETED
3	ESS	5	Lorem Ipsum	RUNNING

Figure 5.2.6: Screenshot of the details of the projects

5.2.7 Supervisor List View

Here students can see the supervisor profile and send request for supervising their project. In figure 5.2.7 show the supervisor list.



Supervisor Name	Phone	Email	Buttons
Zahid Hasan	01672580748	zahid.cse@diu.edu.bd	Send Request, View Profile
Khaled Saifullah	01766xxxxxx	saifullah.cse@diu.edu.bd	Request Sent, View Profile
Sadekur Rahman	01676379698	sadekur.cse@diu.edu.bd	Send Request, View Profile
Narayan Ranjan Chakraborty	01766xxxxxx	narayan.cse@diu.edu.bd	Send Request, View Profile

Figure 5.2.7: Screenshot of the supervisor list

5.2.8 Supervisor Panel

This is the page of supervisor panel. Supervisors will do their work in this panel. In figure 5.2.8 show the supervisor panel.

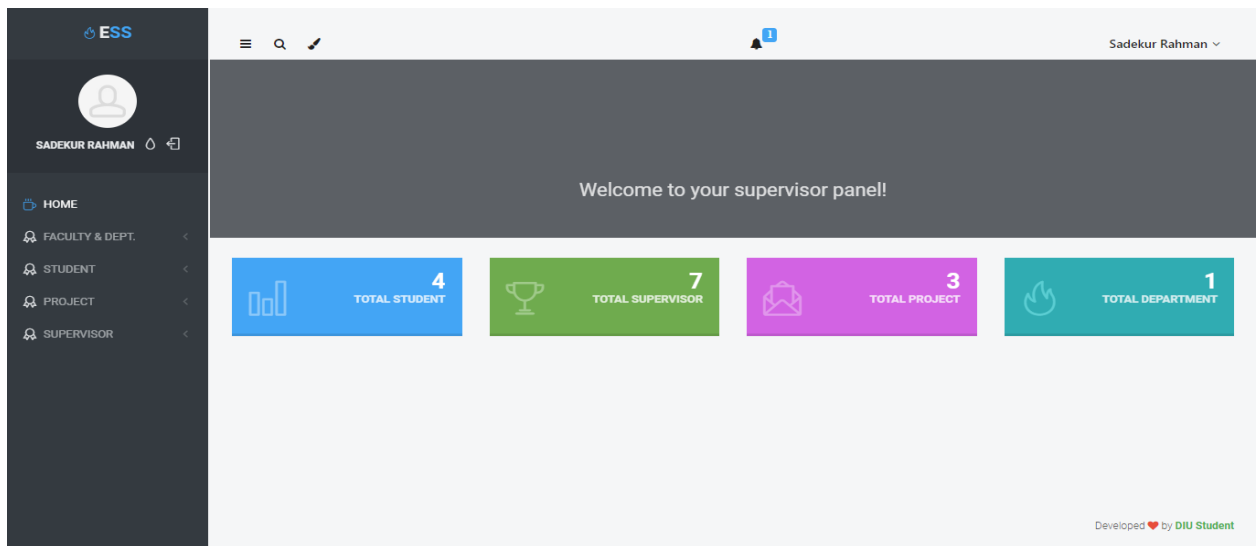
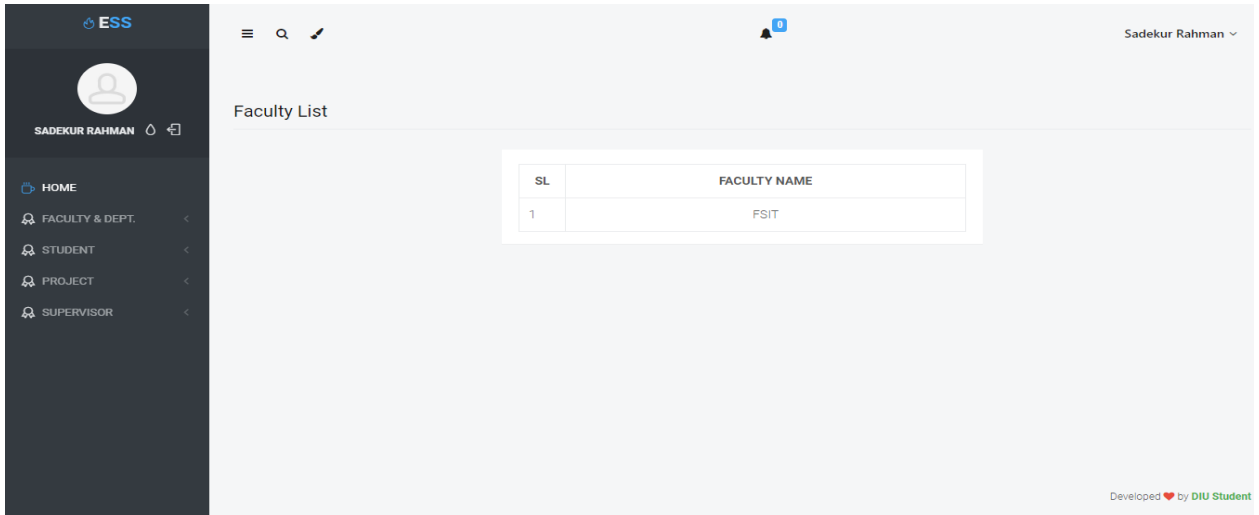


Figure 5.2.8: Screenshot of the supervisor panel

5.2.9 Faculty List

This is the page of faculty list. Here will be record the name of faculty. In figure 5.2.9 show the faculty list.

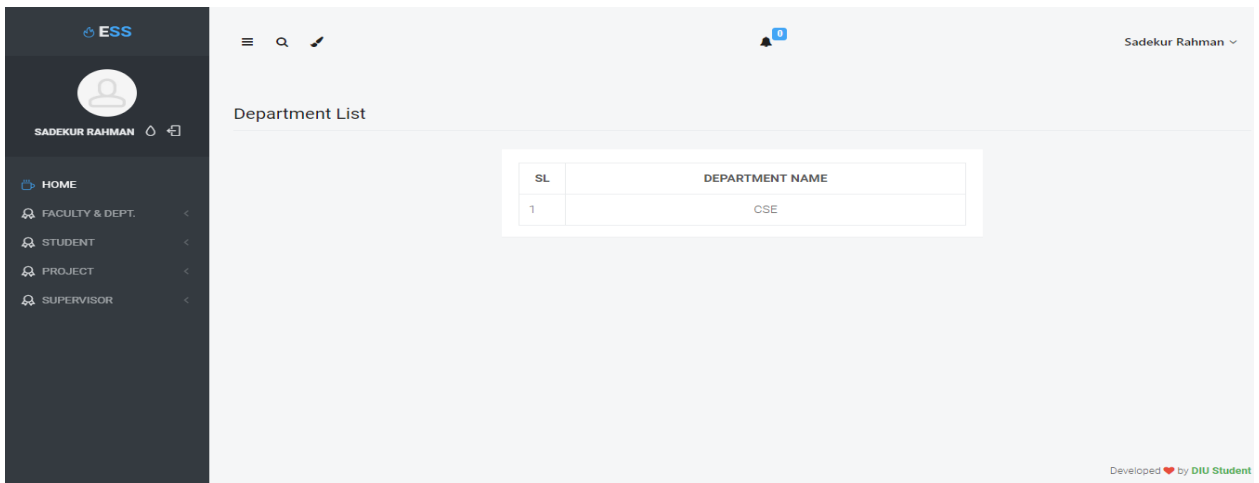


SL	FACULTY NAME
1	FSIT

Figure 5.2.9: Screenshot of the faculty list

5.2.10 Department List

This is the page of department name list. In figure 5.2.10 show the department list.



SL	DEPARTMENT NAME
1	CSE

Figure 5.2.10: Screenshot of the department list

5.2.11 Add Supervisor Information

Here supervisors can update their information to create their profile. In figure 5.2.11 show the supervisor information add.

ADD Supervisor INFORMATION

First Name

Last Name

Email

Phone

Designation

Figure 5.2.11: Screenshot of the supervisor information add

5.2.12 All Supervisor List

This is the page of all supervisor list. Supervisor can see the details of all supervisors in this page. In figure 5.2.12 show the list of all supervisors.

All Supervisor List

#	IMAGE	FULL NAME	EMAIL	PHONE	DESIGNATION	DEPARTMENT	ACTIONS
1		Zahid Hasan	zahid.cse@diu.edu.bd	01672580748	Assistant Professor & Associate Head	CSE	
2		Ishita Nowrin	nowrin.cse@diu.edu.bd	01912xxxxxx	Lecturer	CSE	
3		Khaled Saifullah	saifullah.cse@diu.edu.bd	01766xxxxxx	Lecturer	CSE	
4		Sadekur Rahman	sadekur.cse@diu.edu.bd	01676379698	Assistant Professor	CSE	
5		Narayan Ranjan Chakraborty	narayan.cse@diu.edu.bd	01766xxxxxx	Assistant Professor & Associate Head	CSE	
6		Nusrat Jahan	Nusrat.cse@diu.edu.bd	017xxxxxxx	lecturer	CSE	
7		amit das	amit1@gmail.com	01765432190	lecturer	CSE	

Figure 5.2.12: Screenshot of the list of all supervisor

5.2.13 Supervisor Profile

This is the supervisor's profile view. Here will be the all information about the supervisor. In figure 5.2.13 show the supervisor profile.

The screenshot displays the Supervisor Profile page. On the left is a sidebar with the ESS logo and navigation links: HOME, STUDENT, and SUPERVISOR. The main content area features a profile card for Khaled Saifullah with his email (saifullah.cse@diu.edu.bd) and a 'Message' button. Below this is a 'Researches Topics' section with a table listing two topics: 'Web' and 'Image'. Further down is a 'Counselling Information' section with a table showing counselling days and times. A footer note indicates the system was developed by DIU Student.

SL	RESEARCH TOPICS
1	Web
2	Image

SL	COUNSELLING DAY	COUNSELLING TIME
1	Saturday	1pm-3pm
2	WednessDay	4pm-5pm

Developed by DIU Student

Figure 5.2.13: Supervisor profile

5.2.14 Admin Panel

This is the page of admin panel. Admin can control the site in detail through this panel. In figure 5.2.14 show the admin panel.

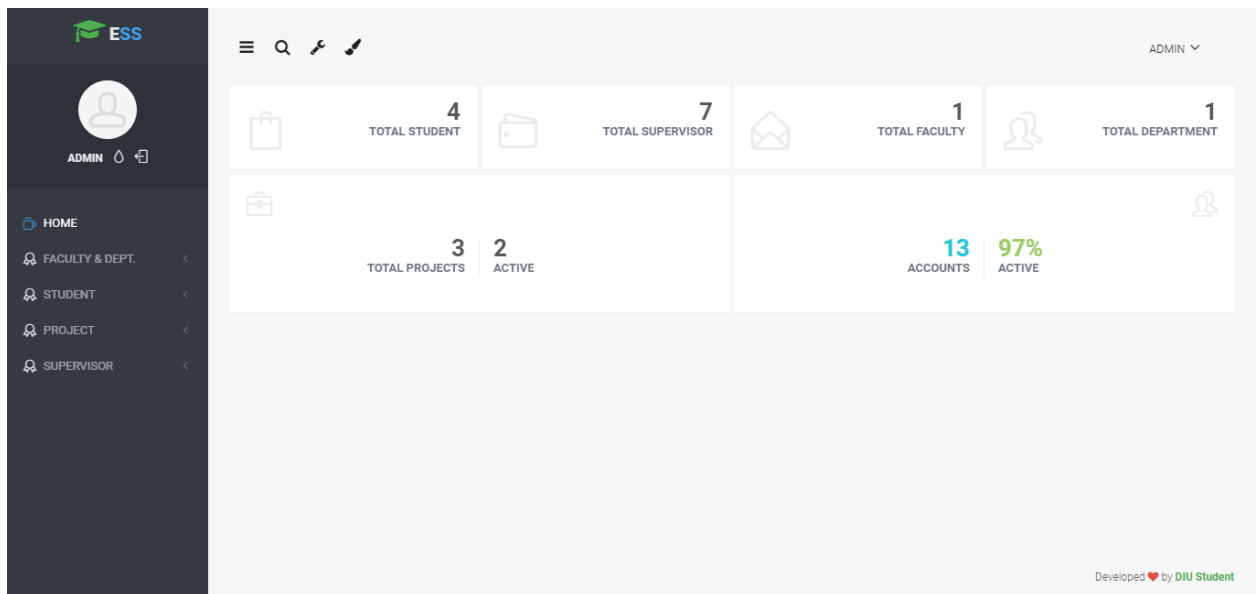


Figure 5.2.14: Screenshot of the admin panel

5.2.15 Add Faculty

This is the page to add faculty. Admin can add the faculty to record the details of users like supervisors, students etc. In figure 5.2.15 show the faculty add.

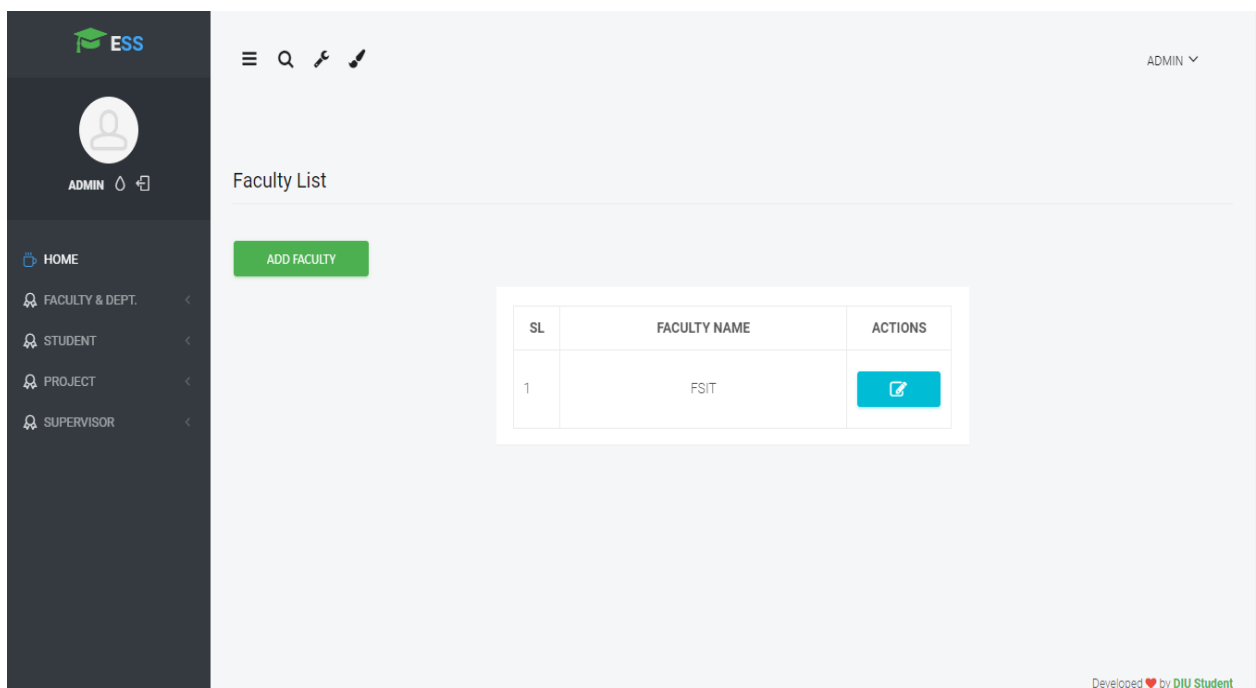


Figure 5.2.15: Screenshot of the add faculty

5.2.16 Add Department

Admin can add the department also to control the secured platform of this site. In figure 5.2.16 show the department add.

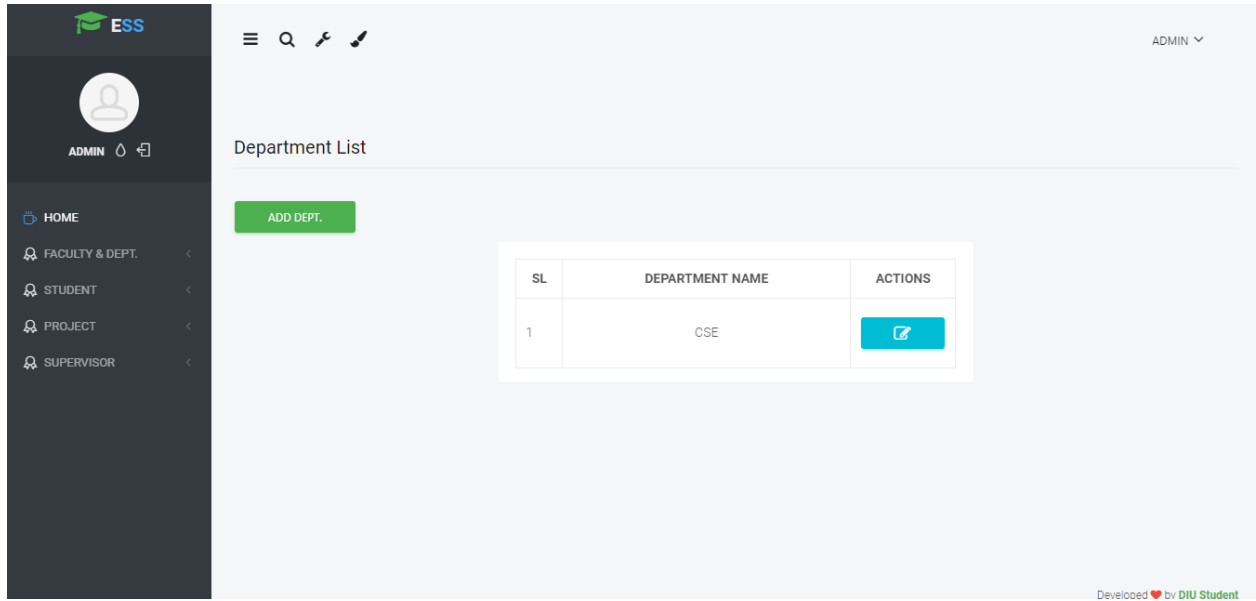


Figure 5.2.16: Screenshot of the add department

5.2.17 Project Information

This is the page of project information. Here admin can see the all information of students and their running projects. In figure 5.2.17 show the project information.

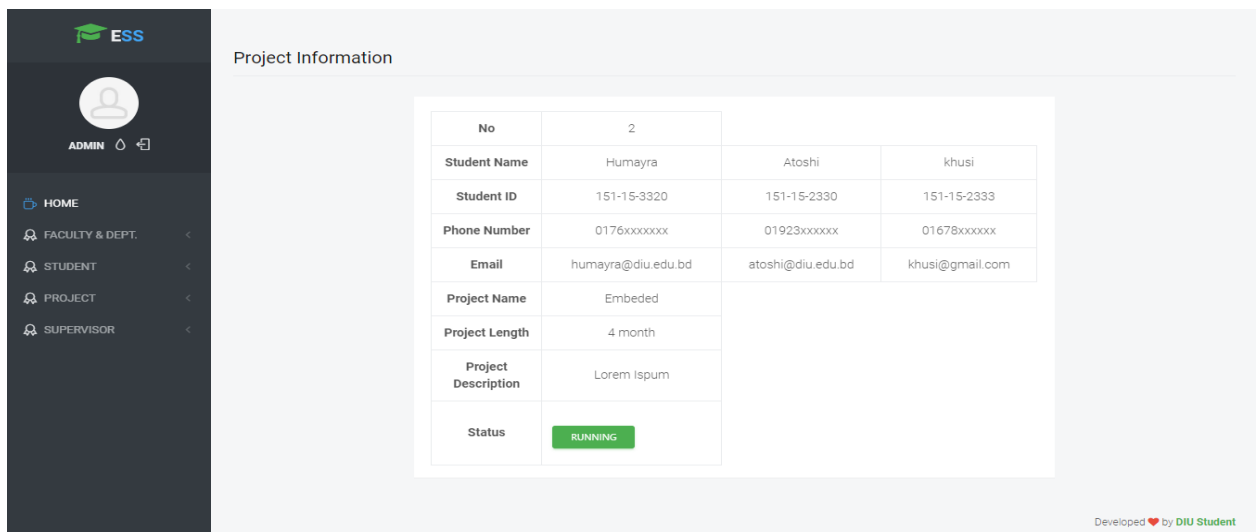


Figure 5.2.17: Screenshot of the project information

5.2.18 Request Notification View

This is the page of notification view of supervisor panel. When students will send the request to their expected supervisor for supervising their group, the notification will show to that supervisor panel. If the supervisor confirms, the accept notification will show to the student panel. If rejects, the notification will not show. In figure 5.2.18 show the request notification view.

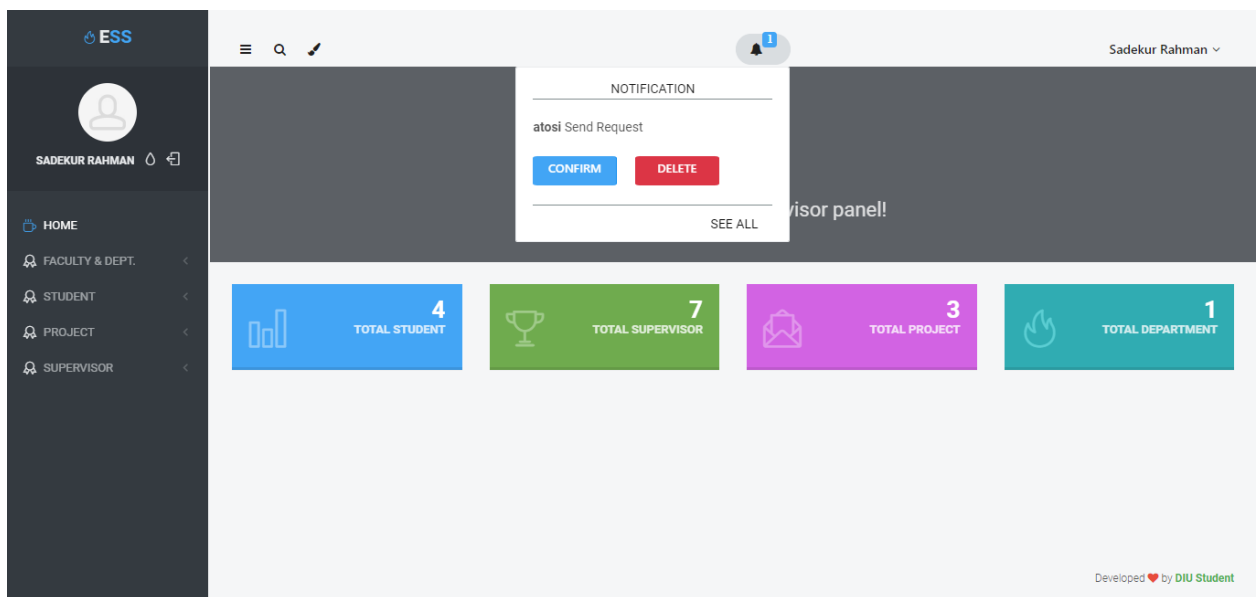


Figure 5.2.18: Screenshot of the notification(request)

5.2.19 Accept Notification View

This is the page of notification where student can see the confirm of their request to supervise. When supervisor confirms, the accept notification comes to this student panel. In figure 5.2.19 show the accept notification view.

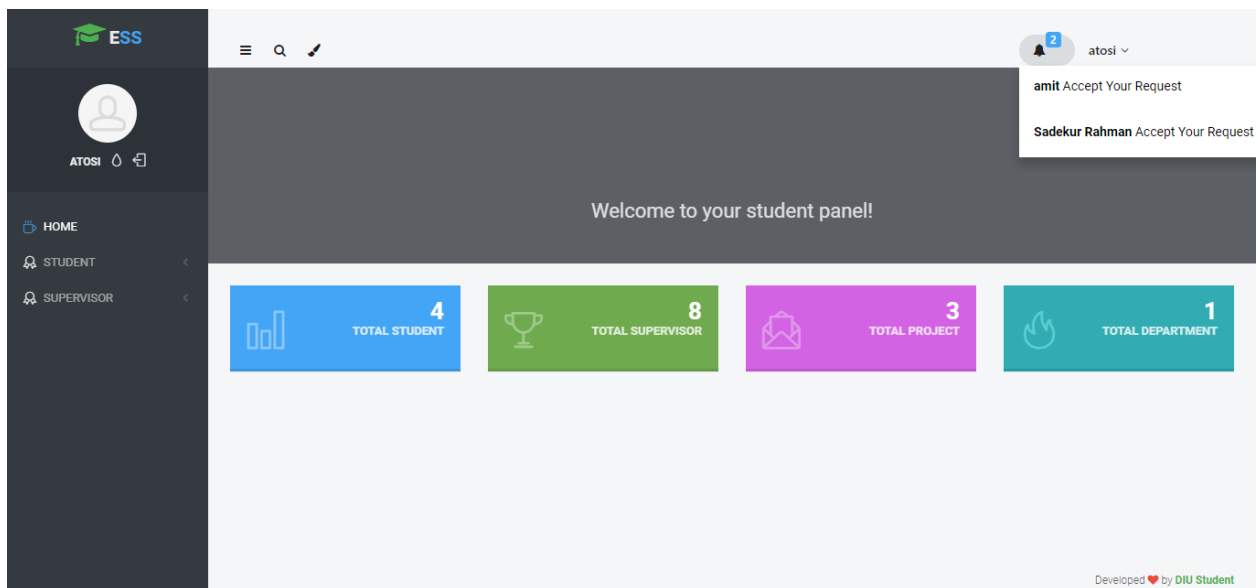


Figure 5.2.19: Screenshot of the notification(accept)

5.3 Implementation of Interactions

Information and communication technology (ICT) innovations created a new dimension of learning which supply several tools and technologies. In particular for educators, it can make explicit particular aspects of activity so that they can be learned, recorded, discussed and evaluated. Many institutions of education are trying to integrate new technologies of information and communications into current curricula or to develop new paradigms for learning.

The E-Learning is one of new stage of education which using e-mail, chat, website, video-conferencing, and other technologies to enhancing and facilitating learning for students. As students, teachers need to necessary and important task call supervision which is they acquire professional knowledge, skills, and attitudes. The broad meaning of educational teaching included visiting, trial teaching, teaching practice, guidance personal teaching, and administrative learning. Also, E-Supervision is new stage of educational teaching which using e-mail, chat, website, video-conferencing, and other technologies to enhancing educational teaching process.

5.4 Testing Implementation

Testing is procedure for testing approaching implementation system where tester or system architect might find cases and spaces, could it be implementable and have limitation. Here we make some basic test to our system. We are given the value below:

Table 5.1: Test Case

Test Case	Test Input	Expected Outcome	Obtained Outcome	Pass/fail
1.Student login	Login via a device with real information	Successfully login	Successfully login	Pass
2.Student Create Account	Empty all the field	Show restriction to fill all the field	Field must be filled by data	Pass
3.Supervisor login	Login via device with fake information	Give real information	Not login	Pass
4. Supervisor registration	Full fill with real information	Successfully registration	Successfully registration	Pass
5.Join with Supervisor	Give the true information	Successfully join	Successfully join	Pass
6.Update information	Give the vaue	Successfully update	Successfully update	pass
7.Supervisor notification	Give the value	Confirm	Reject	Pass
8.Send mail to Supervisor	Give the all information	Successfully send message	Successfully send message	Pass
9.Delete student information	Click the delete button	Successfully remove student	Successfully remove the student	pass

10.View the student all information	Click the view button	View all information	View all information successfully	pass
11.Logout	Click logout button	Successfully logout	Successfully logout	pass

5.5 Test Results and Reports

Test report is required to mirror testing creates a formal way, which supplies a scope to estimate testing result rapidly. It is a paper that records data acquired out of your evaluation experiment inside an organized manner, describe the environment or operating conditions and show the compare of test result with test objectives. Test report is more important that is needed to understand the machine is prepared or not ready for implementation. We must let you know several types of testing. There are numerous types of testing. If the system passed through all these types of testing it is finally ready to lunch so at the end, we can carry out the result as the benefits of usability testing.

Table 5.2: Benefits of usability testing

Benefits of Usability Testing	Yes	No
Good Quality of system	√	
System is easier to use	√	
Application is rapidly accepted by users	√	
Easy to use for the new user	√	
Better UI for interaction	√	

CHAPTER 6

CONCLUSION AND FUTURE SCOPE

6.1 Discussion and Conclusion

We consider the E-Supervision System will be integrated helpful, supportable, servable system to both supervisors and teachers to achieve their works in complete manner. Withal, we believe E-Supervision System reduce the time, cost, effort, and potentials which are needed in supervision processes. With that we access to good performance to our main purpose of this study. E-Supervision System achieve a many of well-done communications, a lot of technologies and facilities, and access to effective goals of educational process. We can say it will be large integrating information system particularly for educators on the level of the region.

6.2 Scope for Further Developments

Gradually our project work will be continued. We will make update our system day by day and try to publish it online so that user face more comfortable to use this site. Later on, we will add more feature that both student and teacher are benefited. We will try to solve the extra small systems also.

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APPENDICES

Appendix A: Project Reflection

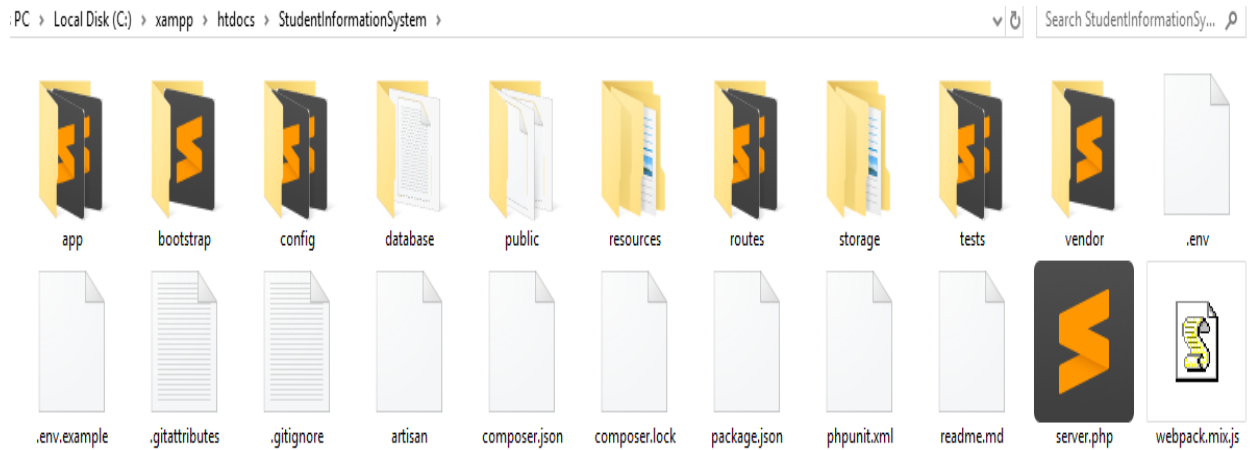


Figure A.1: Project Development Step by Step

Appendix B: Plagiarism