

**AN INTERACTIVE STUDENT PORTAL**

by

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This Report Presented in Partial Fulfillment of the Requirements for the Degree  
of Bachelor of Science in Multimedia and Creative Technology.

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**DAFFODIL INTERNATIONAL UNIVERSITY**

**Dhaka, Bangladesh**

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## **APPROVAL**

This Project titled “**An Interactive Student Portal**”, submitted by **Jabed Hossain Bhuiyan** to the Department of Multimedia and Creative Technology, Daffodil International University, has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of B.Sc. in Multimedia and Creative Technology and approved as to its style and contents. The presentation has been held on **29/11/2018**.

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## **Declaration**

I hereby declare that, this project has been done by us under the supervision of **Dr. Shaikh Muhammad Allayear, Associate Professor and Head, Department of MCT** Daffodil International University. I 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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I would like to thank our entire course mate in Daffodil International University, who took part in this discuss while completing the course work.

Finally, I must acknowledge with due respect the constant support and patients of our parents.

## **Abstract**

Rapid development of communication technology make our life more easier than before. Over network now we can communicate to any people within in a couple of second who have access to the network. Basically aim of this project is to allow student to connect more information through a interactive student portal.

The concept is very simple. It's an easy to use portal for the student and teachers of MCT which has the similar features as social media website. But this portal will be a combination of some tools that help student about their study. It also help the teachers to observe students activities and statistics. The tools includes Real time communication, Student Portfolio Gallery, Project management, Sharing and Finding Resource and a virtual assistant which help student interact with each other and collect more information about their study in less time ever than before.

The web based platform is basically created to increase the communication between student to student, student to teacher and teacher to student. It also allow both group to connect with a large number of presorting data where they will able to find any data by asking it to the virtual bot which is connected to the portal.

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# Chapter 1

## Introduction

This is a project which based on the same concept of social media communication. But instead of time spending on many different things, this web portal will allow the student to focus on the contents which is related to their study. They can share and build their portfolio here as well as seeing other student's project and portfolio. It also allow student to contact with each other through realtime built in chat, propose and maintain their project through the project management tools. Documents sharing features allow them to easily share documents to multiple group peoples (which includes student, classmates, specific person or with teacher) and easily find previously shared documents with an advance sorting and searching system and a virtual robot will help student to easily find information about any topic that they want to learn.

During my programming courses I got an overall idea about the basics of coding and different types of algorithm. After learning about basic coding and different AI algorithm i was thinking about to build a bot that can help a student about their related study. The concept was more simple than current one that time. But that time i face a problem. To get the exact information i need to get idea about the person who are using the system. So, that the system can identify the student to personalize the bot and using MI (Machine Algorithm) it can growing it's base of knowledge by time without any help of manual input on it. It wasn't a easy things to do. First problem is information. If i build with a anonymous login system it will be really hard to detect someone. As it's contain a MI algorithm it learn from the people who are using it. So, there is chance to misusing it, it will create a bad impact on the knowledge base of the bot.

To get rid of the problem i was thinking to build something where user can easily put their information securely and customize or personalize the bot as their need to make it more effective. For it i come with a idea about a interactive student portal which will be connect to our official student portal of Daffodil International University through a Rest API.

After making a basic plan i was discussing with some of my teacher who are taking course about the relevant subject to make the plan much better. They give me some plan such as Alumni Portal, Project management tools, Teacher Portal and Statics Section about the information provided by the student.



After collection information and making a basic shape of the concept now it's time to make a final plan for me. In my final plan i divided the project in four different part. Which includes **(a) Common Tools (b) Student Tools (c) Teacher Tools (d) Alumni Tools.**

Common tools refer the tools that will available for both teachers and student. These includes Login/Registration Using diu email id, Access to a customizable Dashboard, Advanced Search, Statistics, Profile Edit and Real-Time communication with other user.

Student Tools includes a set of tools that are only available for students. This section includes Documents Index, Interests, Reminders, Wisdom Bot, Portfolio, Real-Time Communication and Helpline.

Third part of the portal contain the teacher tools. Which includes Statistics, Project Management Tools, Rating and Appreciation Tools, Real time notification tools, Task management tools and finally documents sharing and finding tools. We also some add some tools the alumni also. After passing the final defense a student role will be automatically changed to alumni.

The objective of project is to increase the interaction between student to student and student to teacher to promote the concept of sharing and exploring knowledge. Not only this, this project also help student to get access to other students project,portfolio,documents, assignment,question and notes paper automatically from student who already passed the course to the student who are currently assign to the courses. That will help the student to easily get idea about a course and it's project so that can start learning about the basic things of the course immediately on starting.

As we are student of multimedia. We have a lot course in different sector of study. From drawing sketching to the game development our course plan includes a lot of things includes, 2D Animation. 3D Animation, Film making, Programming and lot of others. After taking some of common course about them every student fix there goal about their most favourite subject. But in this current situation, it's become a really complicated for the teacher to get idea about a student's dream. To solve this problem i have assign a tools to the system. Using it a student can easily define their favourite/interested subject so that before taking a course or assign a project to someone a teacher can predict the student choice. The tools also can be used to observe over a student to portray his psychology with the data of his activity on the system.

If i need to talk about broad uses of the project, i think the model i build for specific for student of MCT it's can be implemented for the student of any department. I short i can say that, this project will help student to communicate with each other of a same mentality. It also provide a large number information easily to the student and student don't need to do same things multiple time cause they will get idea about what previous student already and what they need to do. I hope it also increase communication between student and teacher also.

## Chapter 2

### Research and Studies

To build something as the concept required to study about a lot things. Such as which programming language and framework need to use, which database system will be appropriate for it and lot of other technical things need to be check.

So i make list of the technical things which need to fixed. I'm starting with the list below.

- 1) Backend programming language
- 2) Backend Framework
- 3) Javascript Framework
- 4) CSS Framework
- 5) Database Management
- 6) Hosting

So, first things first. I'm starting with the finding Backend programming language.

#### 2.1 Selecting Backend Programming Language

Currently most popular backend programing language available in market are, (a) PHP (b) Python and (c) Ruby. These languages are used on the server side and are therefore back end. While PHP is almost exclusively paired with web development in the LAMP (Linux Apache MySQL PHP) stack, Python has a rich history in systems administration as well. node.js: Node allows the use of JavaScript on the server side.

Among all of them i know the structure of PHP and Python only. So, build something on web i need to select one between them.

After some research about them i found PHP is the most popular among them. Also release of PHP's latest version which is called PHP 7 it's becoming the most faster one also. So, i select PHP as the Backend Programming Language for this project. In the bellow i write some point why i select PHP.

#### **PHP is much easier to learn and use.**

People, perhaps like me without any formal programming training can write. PHP scripts with ease after reading this one book. In comparison, ASP.NET requires an understanding of VBScript, C#, or another language; and CGI requires Perl (or C). These are more complex languages and are much more difficult to learn.

**PHP is both free and cross-platform.** Therefore, i can learn and use PHP on nearly any computer and at no cost. Furthermore, its open source nature means that PHP's users are driving its development, not some corporate entity.

**PHP was written specifically for dynamic Web page creation.**

Perl (and VBScript and Java and Ruby) were not, and this fact suggests that, by its very intent, PHP can do certain tasks faster and more easily than the alternatives. I'd like to make it clear, however, that although I'm suggesting PHP is better for certain things (specifically those it was created to do), PHP isn't a "better" programming language than Java or Perl—they can do things PHP can't.

**PHP is the most popular tool available for developing dynamic Web sites.**

As of this writing, PHP is in use on over 75% of all Web sites and is the fourth most popular programming language overall. Many of the biggest Web sites—Yahoo!, Wikipedia, and Facebook, just to name three—and content management tools, such as WordPress, Drupal, Moodle, and Joomla, use PHP. By learning this one language, i will provide myself with either a usable hobby or a lucrative skill.

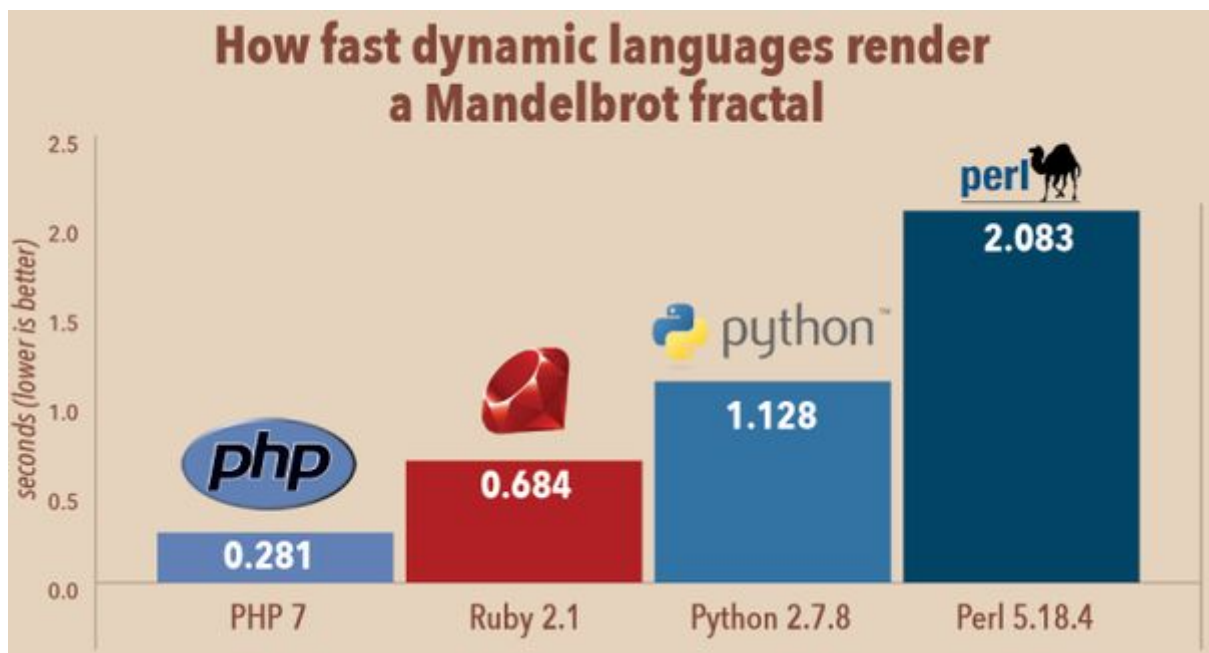


Figure 2.1.1: PHP took less time than other to execute code

So based on the four point and as php 7 is comparatively took less time than all other alternative. I think php is the best option for my project.

## 2.2 Backend Framework

A system is regularly a layered structure showing what sort of projects can or ought to be assembled and how they would interrelate. Some PC framework structures likewise incorporate real projects, determine programming interfaces, or offer programming devices for utilizing the systems. As I select PHP as programming language for my project now it's time to select a framework for the project. Some of most popular php framework are includes Laravel, Symfony, CodeIgniter, Yii 2 and Phalcon.

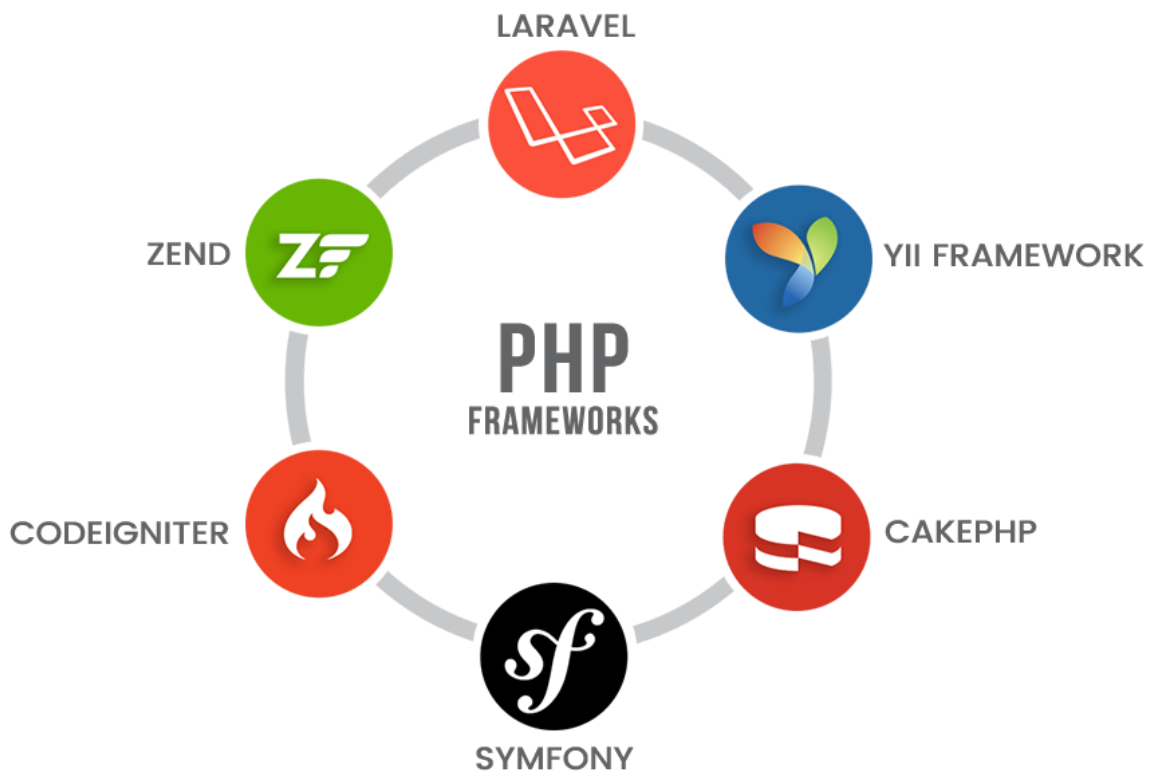


Figure 2.2.1: PHP Frameworks

From them i select Laravel for the project as it has a lot functionality included to it with a secured registration and authentication system which help me to save a lot of time while developing.

Also it's come with a CLI called composer which also help me to easily install any library to it.

## 2.3 Javascript Framework

A JavaScript framework is a big set of functions and facilitating tools, with its own control flow. As an abstraction, a framework provides a comprehensive development platform, one standard way for building applications. It can provide a dependency management, a file

system structure and routing capabilities, for instance.

In practice, a JavaScript framework can be only a single JavaScript file included in the web application. Then, the developer can use all the functions of the framework. However, there can be so many functions and tools replacing the native JavaScript versions, that the code does not look or feel like JavaScript code, but entirely new programming Language.

Determining the best JavaScript frameworks is challenging, as the options considered as the best are changing continuously. In year 2018, the most popular JavaScript frameworks include at least: AngularJS, Angular, React.js, Vue.js, Ember.js, Meteor.js, Aurelia.js, Polymer.js, Backbone.js, Knockout.js and Mercury.js. These are common JavaScript frameworks or libraries, which are being actively developed and have a large user base.

React is one of the most popular of them. It's rich and easy to use. This framework also maintain by Facebook large developer team and lot's of open source programmer making it more bigger day by day. But for this project i need a more simpler one and more lighter one.



Figure 2.3.1: JS Frameworks

I search on the google a lot of times but didn't able figure out something that i want. Since React is one of my favourite framework so i want build a framework based on it especially for the task.

After researching on different framework i figure out the way how a framework works. So, next couple of days i was building a custom js framework which need to faster, smaller, easier and customizable than any other framework already exist in the market.

## **2.4 CSS Framework**

Nowadays, web development is much simplified because of the emergence of different frontend frameworks. In the last few years, dozens of frontend frameworks have become available for web developers and to mention a few Bootstrap, Foundation and Semantic User Interface (UI) are some of them. This thesis will focus mainly on two frontend frameworks, which are Bootstrap and Foundation. They are Hypertext Markup Language (HTML), Cascading Style Sheets (CSS) and JavaScript frontend frameworks, which are retained to develop responsive websites.

As this project i use Bootstrap as it has a lot of premade components which help me lot to do a lot of complex things in a short time.

## **2.5 Database Management**

The Web is no longer static; it's dynamic. As the information content of the Web grows, so does the need to make Websites more dynamic.

In my project i need create a lot of page which contain a lot of dynamic information. If build the project as a static page i need to create all page with proper data for every new user. Which is not possible or not a standard way to do. So, to load user wise information based on authenticated user credential we need to use a database. Database is information (numeric and text form) storage of a web app. Where we can securely store data and easily can sort or search on demand easily.

SQL is the standard query language for interacting with databases. MySQL is an open source, SQL database server that is more or less free and extremely fast.

MySQL is also cross platform. As it is cross platform and also available with preinstalled php package of almost all shared hosting server i decide to use it for my project. MySQL not is the fastest Database Management system but it is the most efficient one. Specially for a experimental project.

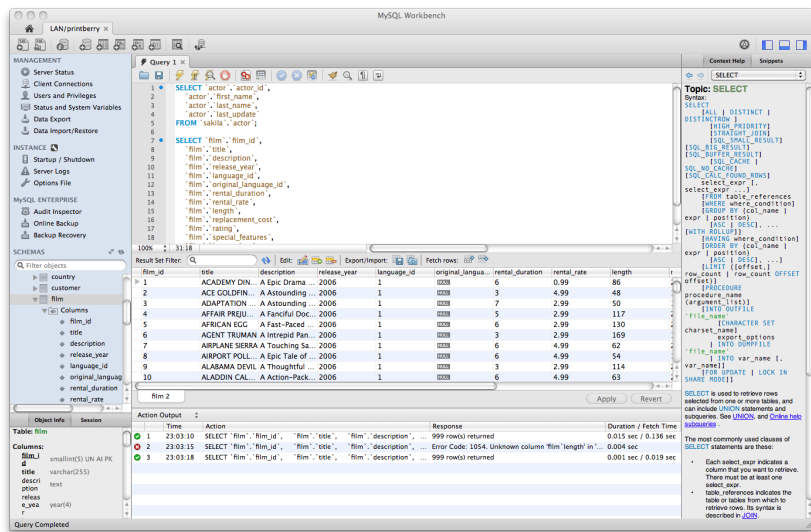


Figure 2.5.1: Interface of MySQL

## 2.6 Hosting

Web hosting is the activity or service of providing storage space to individuals or organizations, for the websites that are accessible via World Wide Web. So to run a web based portal we must need to host it online so anyone who have access to the internet can easily access to the web app. So before buying a hosting we must need to check couple of things based on our project requirement. For example, how much storage capability we need, how much bandwidth we need and how much processing capability we need. After calculating the amount and approximate visitor per month i decide to buy a shared hosting with 20GB space and 200GB bandwidth per month.



Figure 2.6.1: How a web hosting work

Another reason for buying a shared hosting is it affordable, pre configured and include a pre installed Cpanel. Cpanel includes all the necessary tools to manage a web app. It is secured, simple and really very easy to use.

## **Chapter 3**

### **Project Workflow**

#### **3.1 Idea generating**

Idea is the purpose of a development process. It is like “Why it matters?”. It is also known as need finding. Without any need the development should not exist in the first place. Because doing so will mean nothing in the end.

#### **3.2 Project Plan**

After generating the idea, i write the idea to make a proper project plan. It's includes list of all features and it's explanation. Also i make a diagram of the project to which help to design the database which contain the relationship of table with each other.

#### **3.3 Pre Dev Suggestion**

With my draft plan i meet with my project supervisor who help me a lot with different new features which i can add to the project to enrich it. He also help me to make my project plan more accurate and easy to execute.

#### **3.4 UI & UX Design**

When my project plan is final, now it's time to design the UI and plan a UX for it. I'm use a prototype and design tool called Adobe XD for it. With adobe XD i design the UI for my project and prototyping it i make a plan how i can execute it and how user can easily interact with the user interface.

In the below i explain the step of UI design:

##### **3.4.1 Login Page**

To determine the people who visiting the our is a student of DIU we must need to add Login to authenticate and Sign Up page to create a new account page. I design the page by the concept of no loading concept. That means a student or user can easily swap to the login and registration page without any loading of the window. Figure 3.4.1 is represent the UI design of the login page.



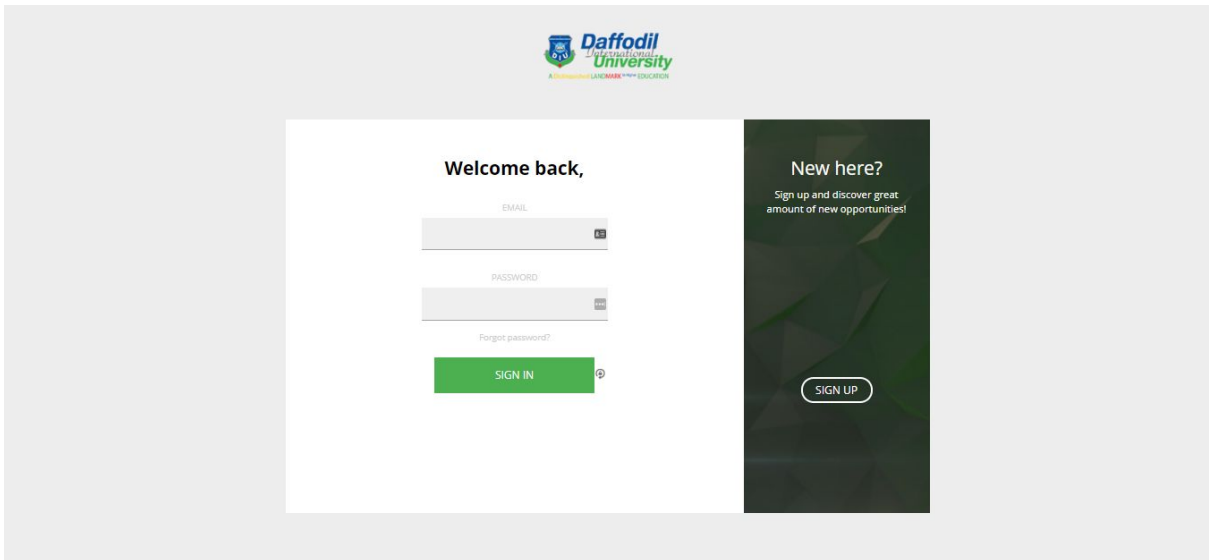


Figure 3.4.1.1: User Interface of Login Page

### 3.4.2 Dashboard

To design the dashboard page i took the idea from facebook timeline design. Dashboard page is a page where user can see there basic information and the newsfeed. They can also interact with the newsfeed through comment and the appreciation button (love button). Figure 3.4.2 is represent the UI design of the dashboard page.

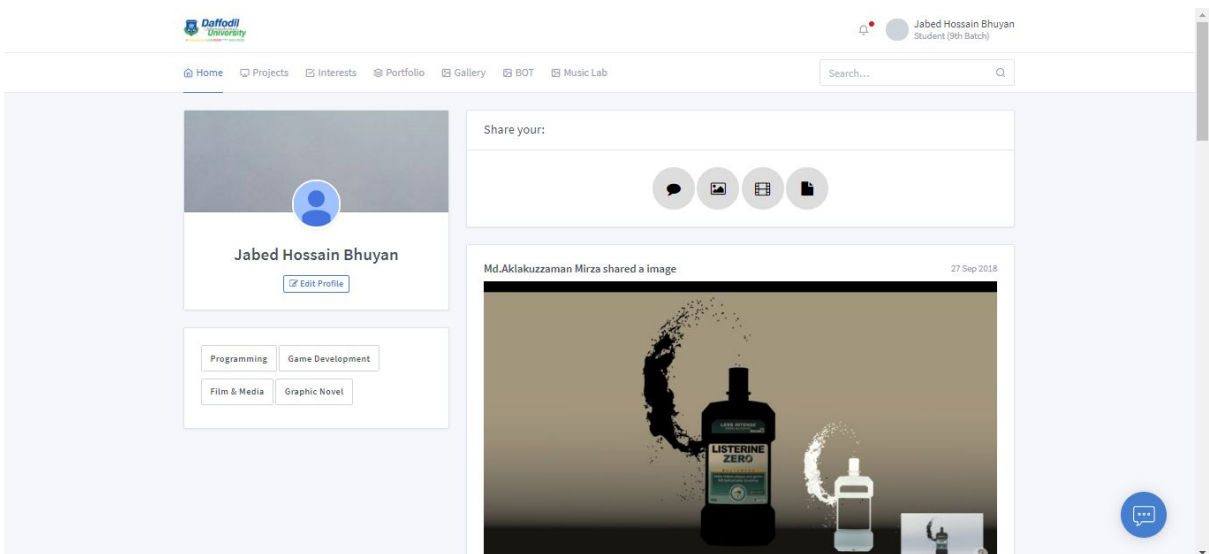


Figure 3.4.2.1: UI of Dashboard.

### 3.4.3 Project List and Details Project Page

In projects page a student can propose a project to the department and when department approve the project they divide their project in multiple task and complete the project on

time. Every project in project list page also contain a single details page where they can manage the task and project description.

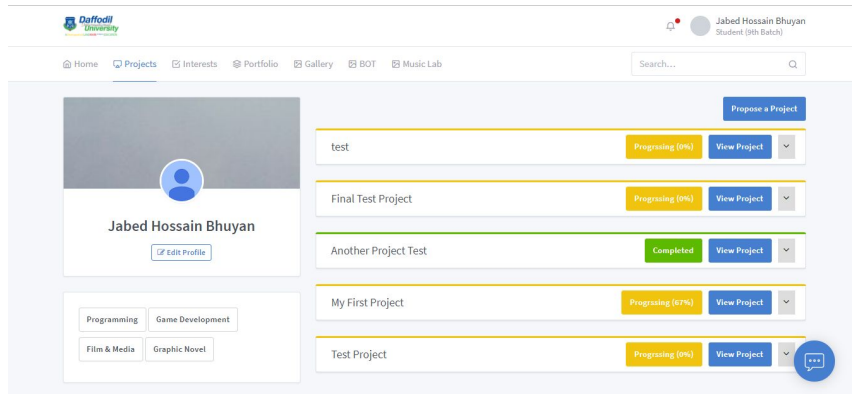


Figure 3.4.3.1: Project Page

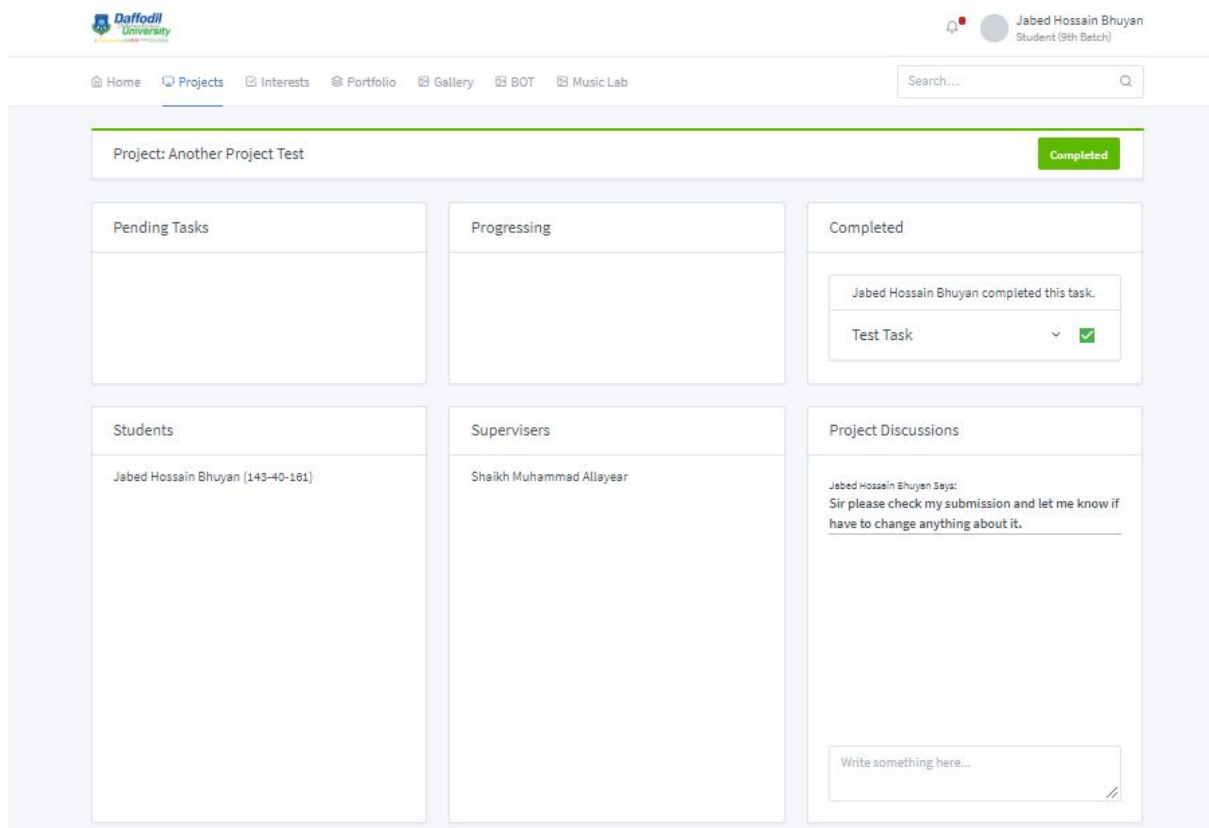


Figure 3.4.3.2: Project Single Page

Most noticeable part of the project page UI is the color. Yellow color use for the all pending task and green color is used for the all completed task. It will help user to easy to understand which project they have pending and which project is already completed.

### 3.4.4 Gallery and Portfolio

Gallery and Portfolio page contain a lot of photo and video. So design the page as grid style. Three grid on a single row will help user to understand the containing image without opening/zooming it. Also i add some basic information like who share, when share and how much people appreciate the content on the footer of each grid panel.

### 3.5 Development

After completing the design of each page now each time for development. Like any other development process this development also divided to two different state. First one is Frontend Development and the last one is Backend Development.

#### 3.5.1 Frontend Development

Converting the design which is done with adobe XD to a browser readable format is known as frontend development. This is the part of the development where need to build the ui for the user based on the design. Basically HTML and CSS is use to do it. HTML (Hypertext Markup Language) is use to create the base structure of the layout and using CSS i add color, design and animation to it.

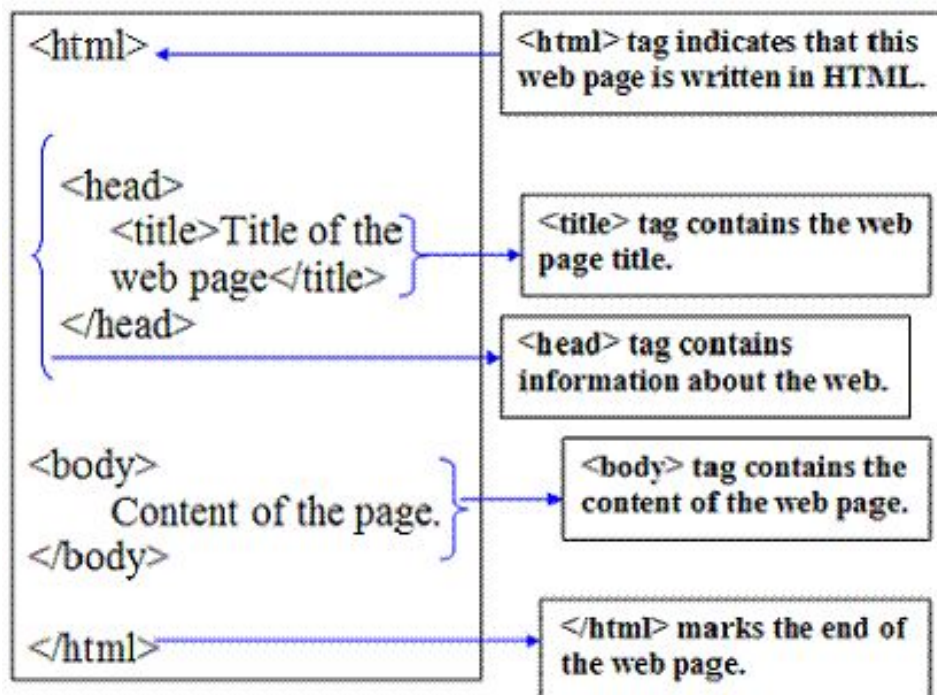


Figure 3.5.1.1: Basic Structure of a HTML document

# The Display Property

- **Block Level elements**, such as DIVs, paragraphs, headings, and lists, **sit one above another** when displayed in the browser.

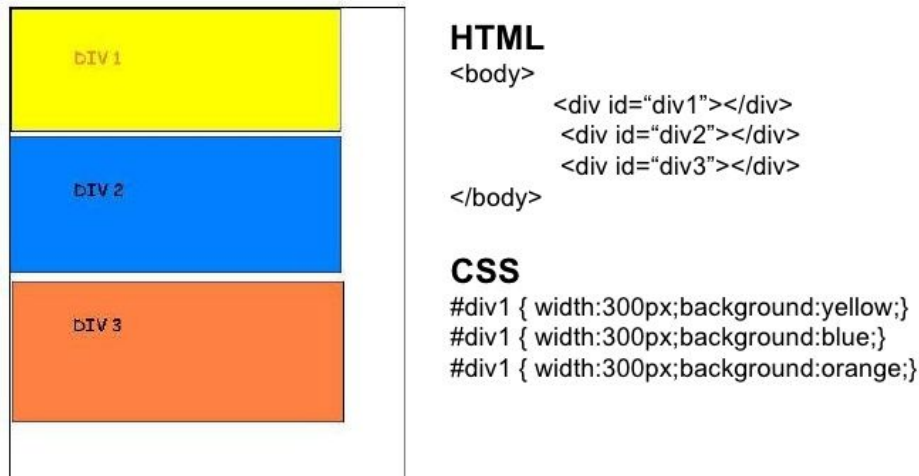


Figure 3.5.1.2: Effect of using css

## 3.6 Backend Development

The back-end, or the "server-side", is basically how the site works, updates and changes. This refers to everything the user can't see in the browser, like databases and servers. Usually people who work on the back-end are called programmers or developers. Back-end developers are mostly worried about things like security, structure and content management. They usually know and can use languages like HTML and CSS, but that's definitely not their focus. Back-end developers, or at least back-end development, is required to create a dynamic site.

A dynamic site is a site that's constantly changing and updated in real-time. Most sites are dynamic sites, as opposed to static sites. Facebook, Google Maps and this blog are all considered dynamic sites. Blogs are dynamic sites, since their content is constantly changing and updating. A dynamic site requires a database to work properly. All information, like user profiles or images they've uploaded, or blog posts, are stored in the database. Web developers work with programming languages like PHP or .Net, since they need to work with something the database understands. The code i write communicates with the server and then tells the browser what to use from the database. It give to the user the ability to update dynamically without going back to the designer.

In backend i'm using php (Laravel framework) to build the rest API to populate the data through Javascript.

In the below Figure 3.6.1 is showing how get the data from through restful api to build the dynamic page.

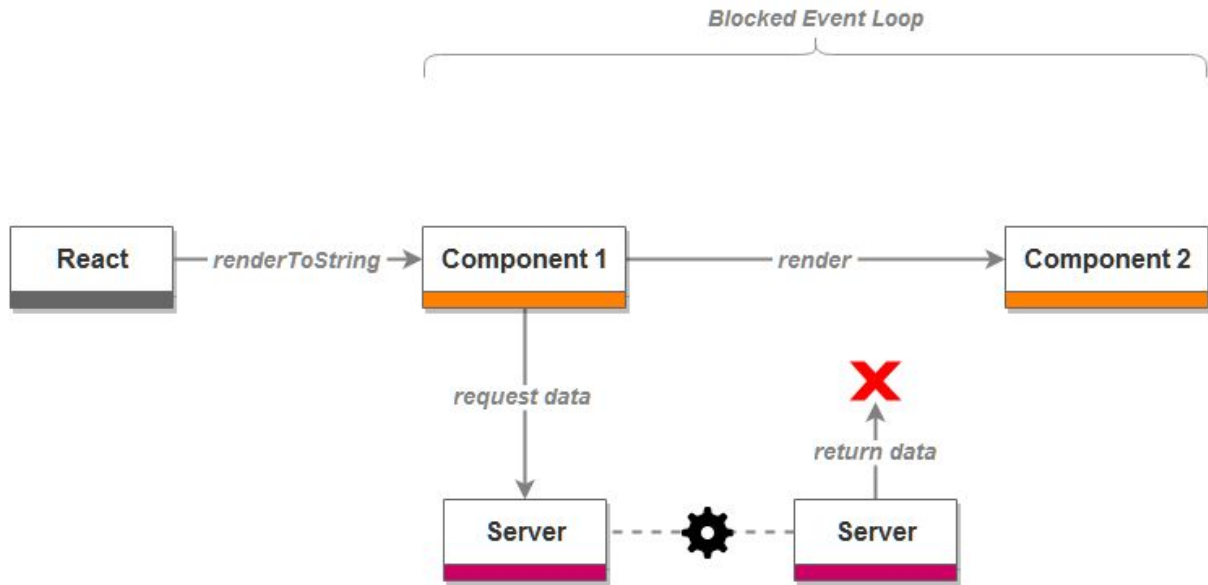


Figure 3.6.1: How React working with Server data

### 3.7 Structure of the Database:

To build a project i need to design a database model where table are connected to each other with one to one and one to many relationship.

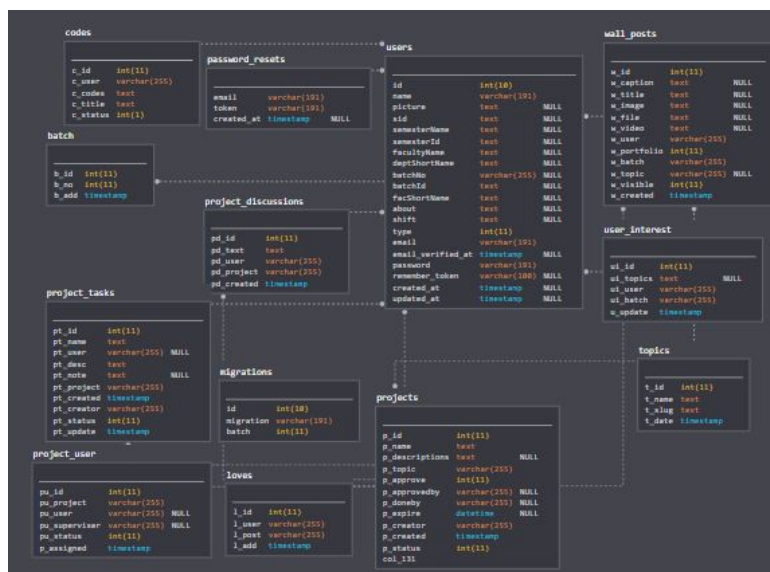


Figure 3.7.1: Database Design & Tables Relationship

```

id          int(10)
name        varchar(191)
picture     text          NULL
sid         text          NULL
semesterName text        NULL
semesterId  text          NULL
facultyName text        NULL
deptShortName text      NULL
batchNo     varchar(255) NULL
batchId     text          NULL
facShortName text        NULL
about       text          NULL
shift       text          NULL
type        int(11)
email       varchar(191)
email_verified_at timestamp NULL
password    varchar(191)
remember_token varchar(100) NULL
created_at  timestamp NULL
updated_at  timestamp NULL

```

Figure 3.7.2: Structure of the users table

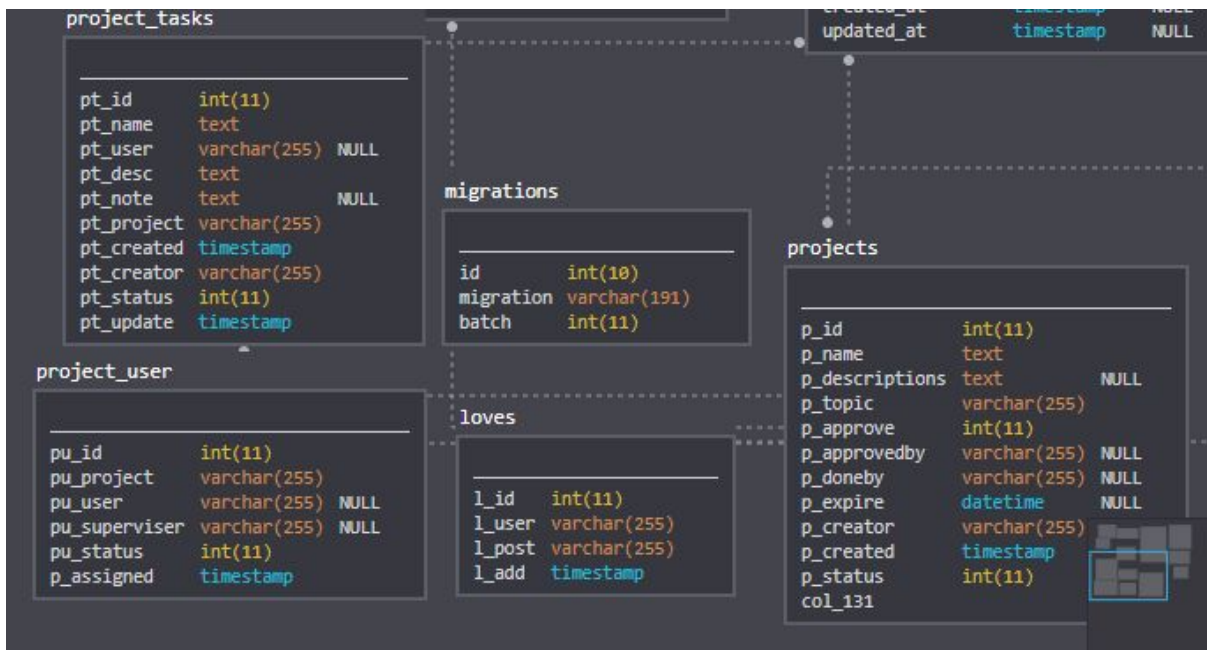


Figure 3.7.3: Relation between Projects tables

### 3.8 Testing and Debugging

After completing the Development process now it is the state where i'm going to test the web app to check if all function is properly working. Not only function i'm also check the security

system. It's a very important step of a project. Cause if there any bug or security issue exist on the web app user who use the app they can face a lot issue. So to testing and checking i assign some of my classmates as test user and give them a docs where they can write issue they found.

Based on there suggestion and the bug they found i run the debugging state. In debugging step i solve the issues given by the test user.

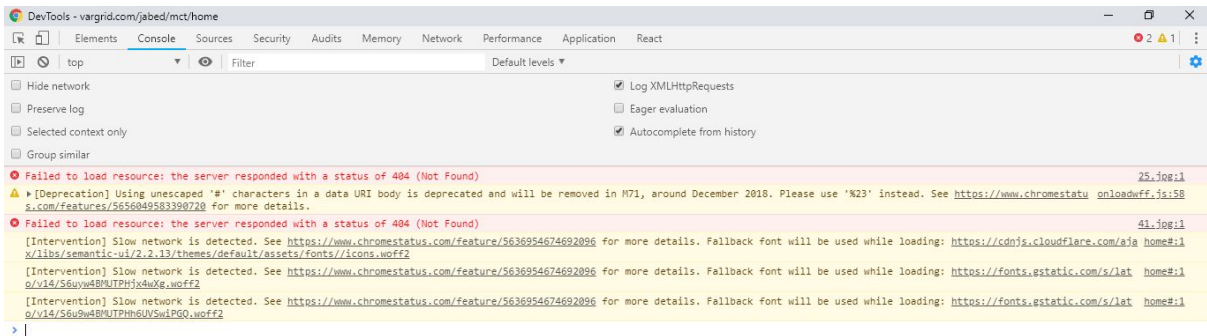


Figure 3.7.1 Debugging console of Chrome

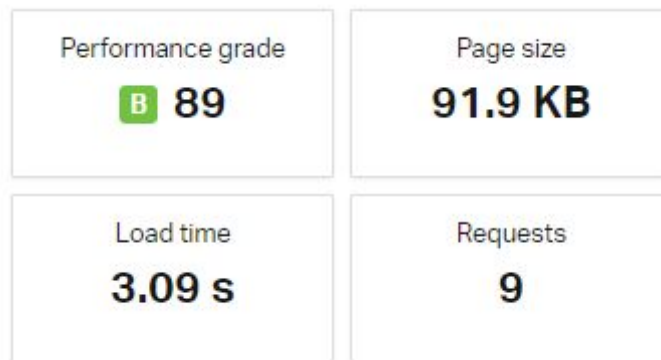


Figure 3.7.2 Pingdom Speed test

Improve page performance

GRADE	SUGGESTION
<b>F</b> 34	Add Expires headers
<b>F</b> 40	Use a Content Delivery Network (CDN)
<b>C</b> 80	Use cookie-free domains
<b>B</b> 89	Compress components with gzip
<b>A</b> 100	Avoid empty src or href
<b>A</b> 100	Put JavaScript at bottom
<b>A</b> 100	Reduce the number of DOM elements

Figure 3.7.3 Page Performance Test

## Chapter 4

### Project Explanation

A simple and easy to use portal for the student and teachers of MCT. Basically this portal will be a combination of some tools that help student about their study. It also help the teachers to observe students activities and statistics.

#### 4.1 Features

The features of the portal web app is divided to three different parts.

- a. Common Tools
- b. Student Tools
- c. Teachers Tools

##### 4.1.1. Common Tools

Common tools refer the tools that will available for both teachers and student. These includes:

**a. Login/Registration:** This is the welcome page for all unauthenticated user who need to login or create a new account to access the site. As the system only allow to login/registration with only a diu email id the system also prevent all other user who are a student of Daffodil International University to access the portal.

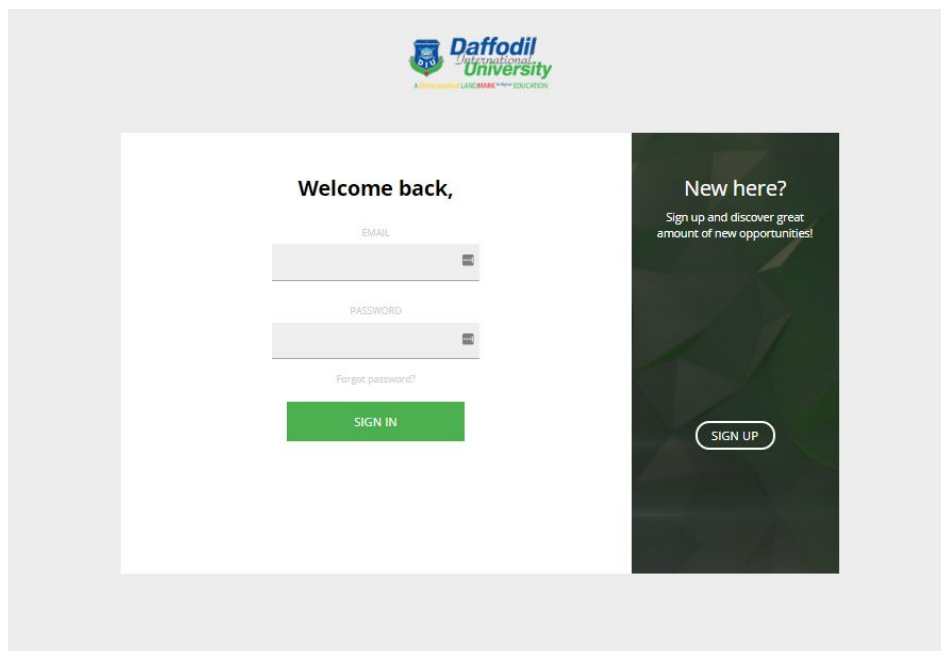


Figure 4.1.1.1: Login Page



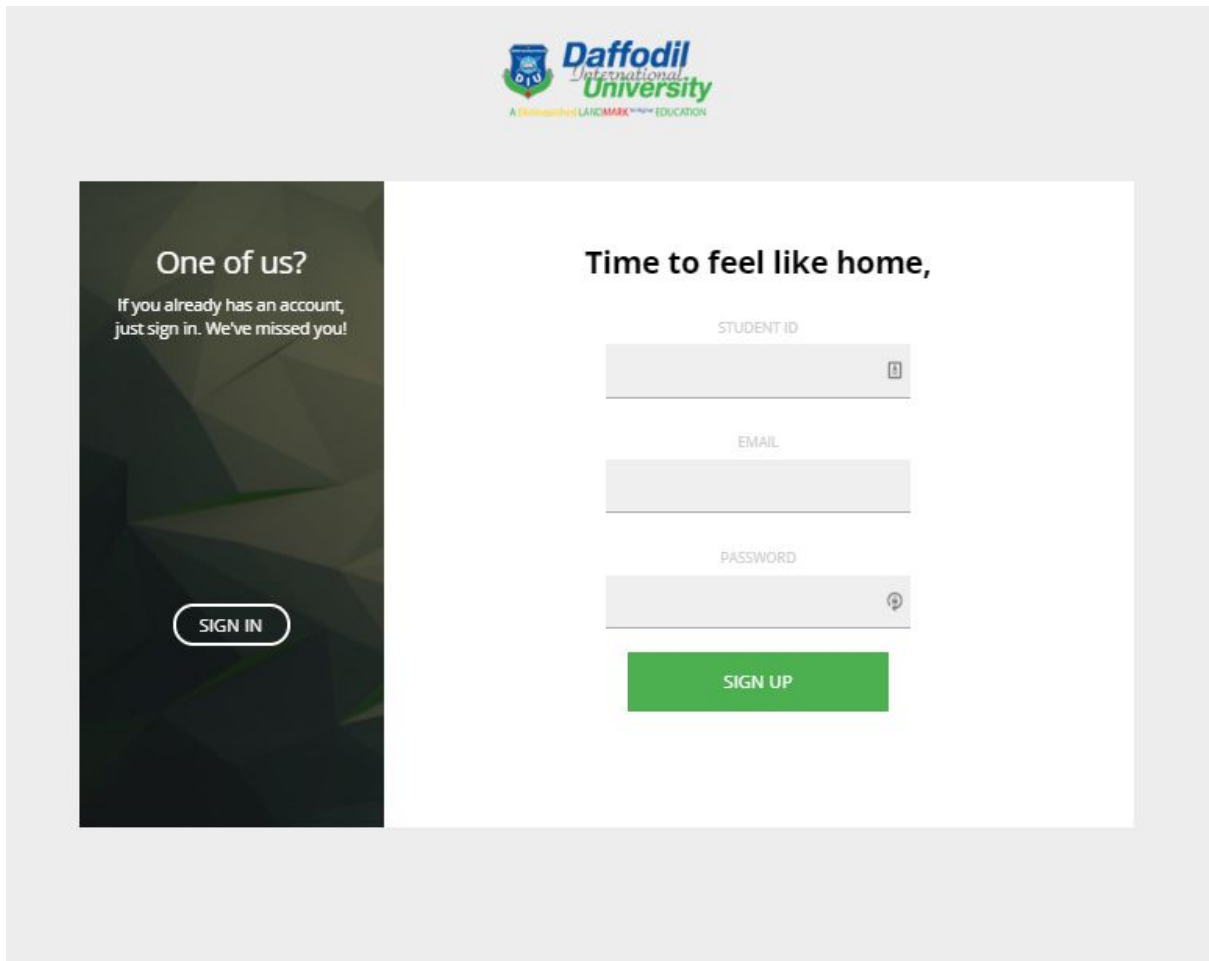


Figure 4.1.1.2: Registration Page

**b. Home:** A Common Dashboard for all the user based on the concept of newsfeed. Here user can see other user public activity. For example if any share any image,video,blog or documents it will show in the Dashboard timeline. Other user appreciate it also they can put a comment on it.

From there user can also see there basic information like name, profile picture, cover picture and skill list etc. The Home page divided to three different part. First one is the creator panel. From the creator panel any authenticated user can add new image,video,blog and documents to the newsfeed. Also if they mark the image or video as portfolio the video or image also be added to there portfolio list also.



Figure 4.1.1.3: Creator Panel

In the second part of homepage is used to show the newsfeed available for currently logged user. Any user will see with the role of All public, Own Shared, Only Shared with him/her and Only shared with the batch data on there news feed.

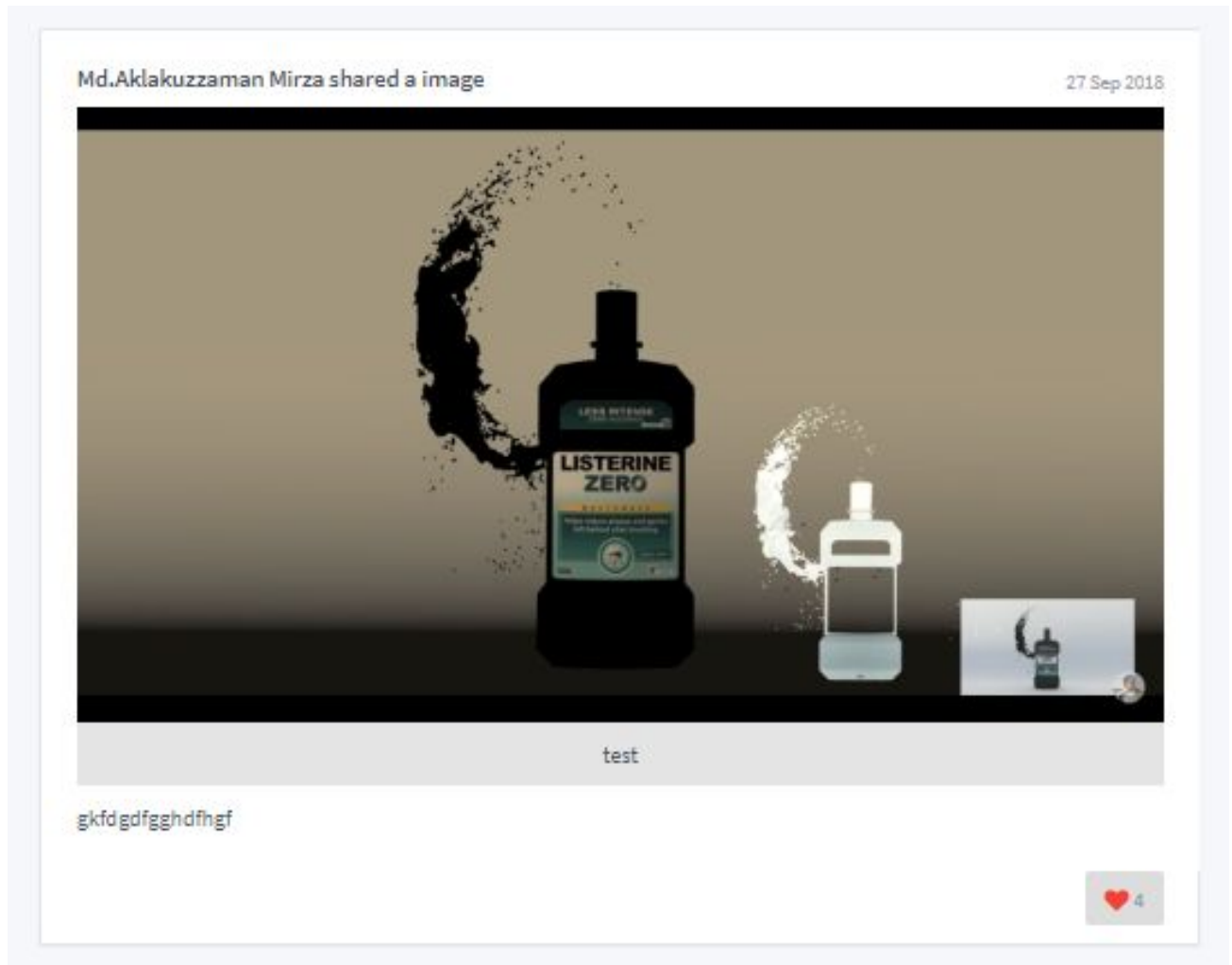


Figure 4.1.1.4: Newsfeed

Third or last part of the Home page is used to show user basic information like there name,skills/interest, Cover photo and the profile photo.

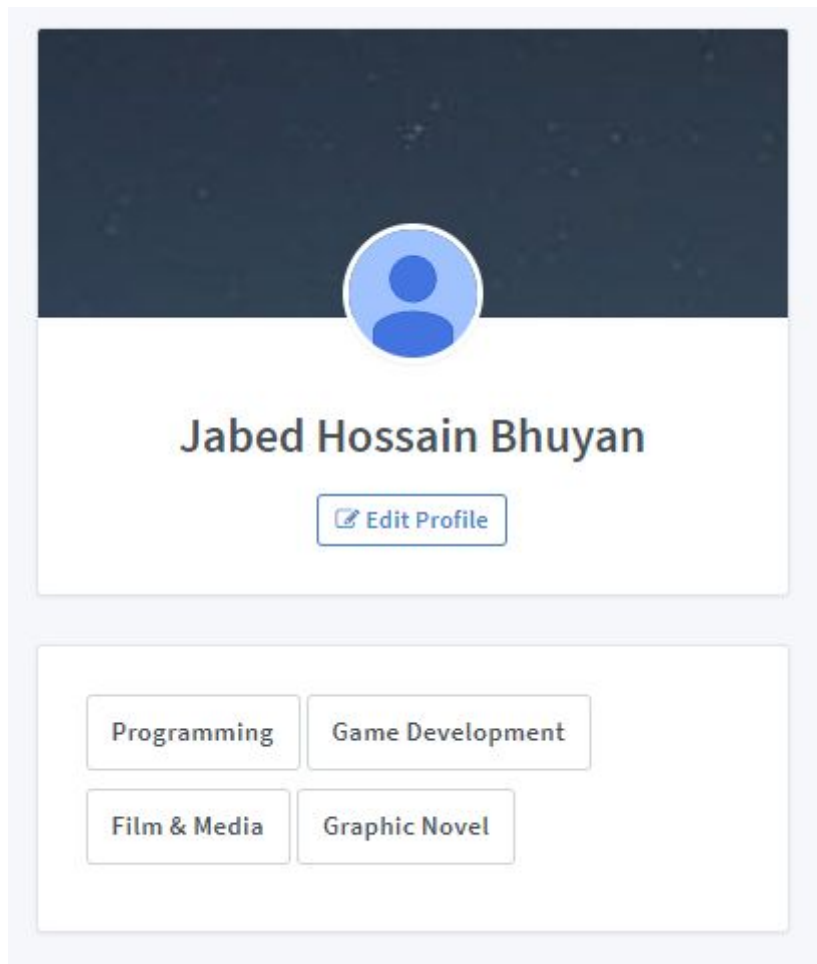


Figure 4.1.1.5: User info area

**c. Advanced Search:** Search area is use to find people and there shared blog,image and video. The term of the search keyword is automatically detected and filtered. User don't need to select a custom filter to search.

The algorithm i used to make the search option is explained below:

This is a very but working so accurately in that case. First user user input something on the search input from, we automatically send them to the backend on every input through ajax request. The response of the request will send to the search controller to find that in multiple case like most the query is relevant to a name or a blog or a image title or a video title. If it matched with only single term it will directly suggest user to go to the user profile. If the search is matched with multiple term it will show a list of the matched term contain in different section

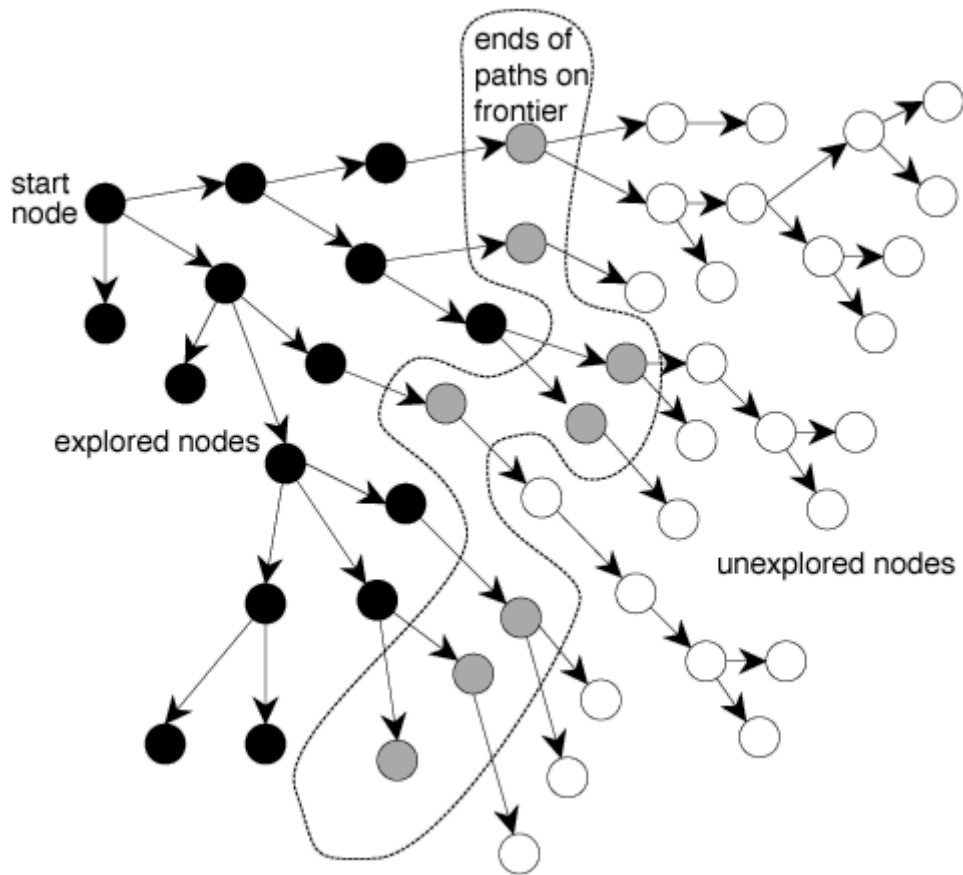


Figure 4.1.1.6: Search algorithm

**d. Statistics:** This is a section where a teacher can able to see different type statistics about student activity. He statistics can be able to fileterate by different option for example All students or batch wise. This statistics section section will help teacher to find out student activity and there area of interested field of study. I think for a Multimedia based department it's a mandatory tool to to follow up student.

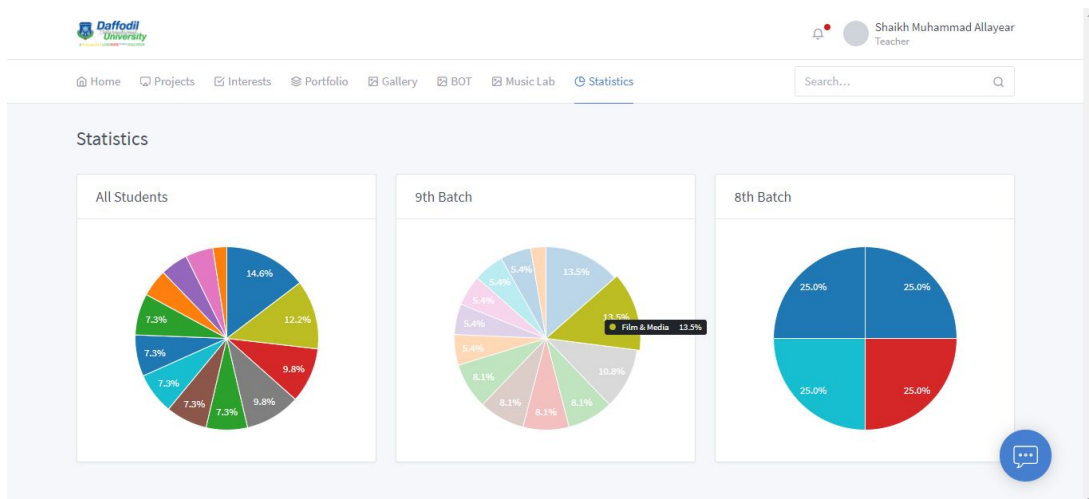


Figure 4.1.1.7: Statistics Panel for Teacher

**e. Profile Edit:** This is a page where a user can change and customize their profile. Such as changing their password, name, email and bio etc.

**f. Real-Time communication with other user:** Basically it's a real time chatting system. Where a user can find any other user to send a message and if both are online they can also able realtime chat on the system.

By default the chatting panel will be show as floating button.

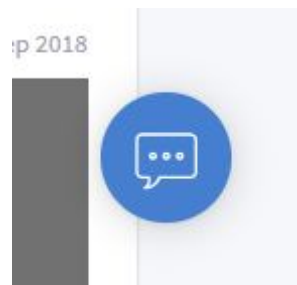


Figure 4.1.1.8: Floating Chatting Panel

By clicking on the floating button we can easily expand the chat panel to search someone and chat with him.

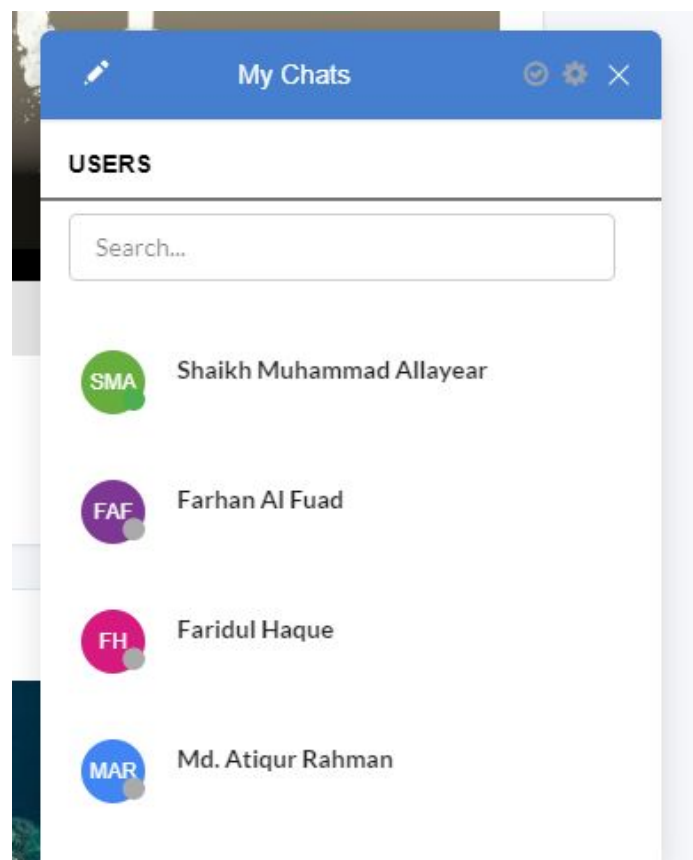


Figure 4.1.1.8: Chatting Panel

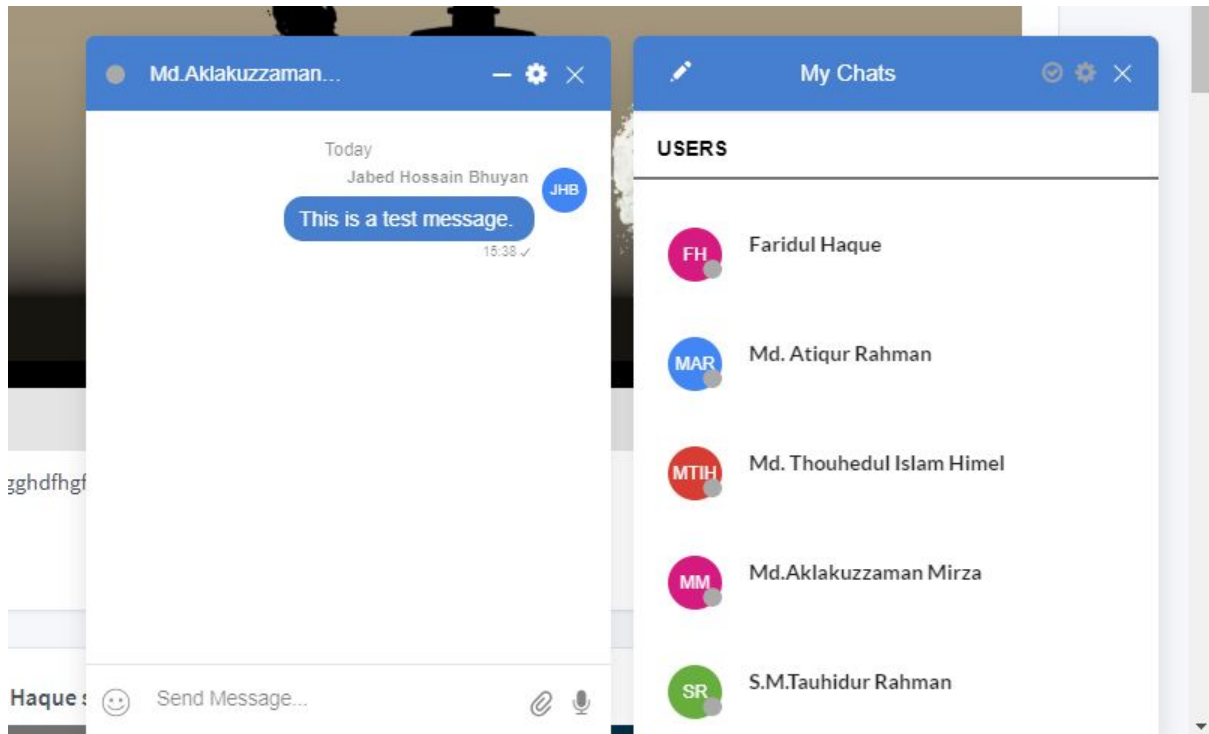


Figure 4.1.1.8: Chatting Screen

Also there is a expanded full screen available for the chatting which is called Inbox in the system.

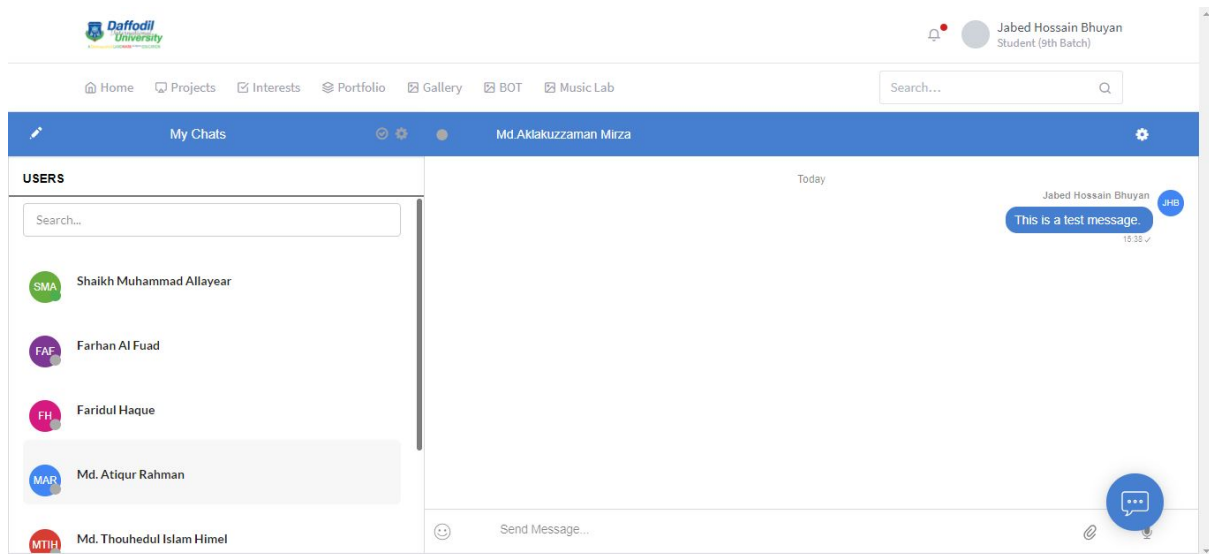


Figure 4.1.1.9: Expanded Chatting Page

#### 4.1.2 Student Tools:

These set of tools is only available for Students:

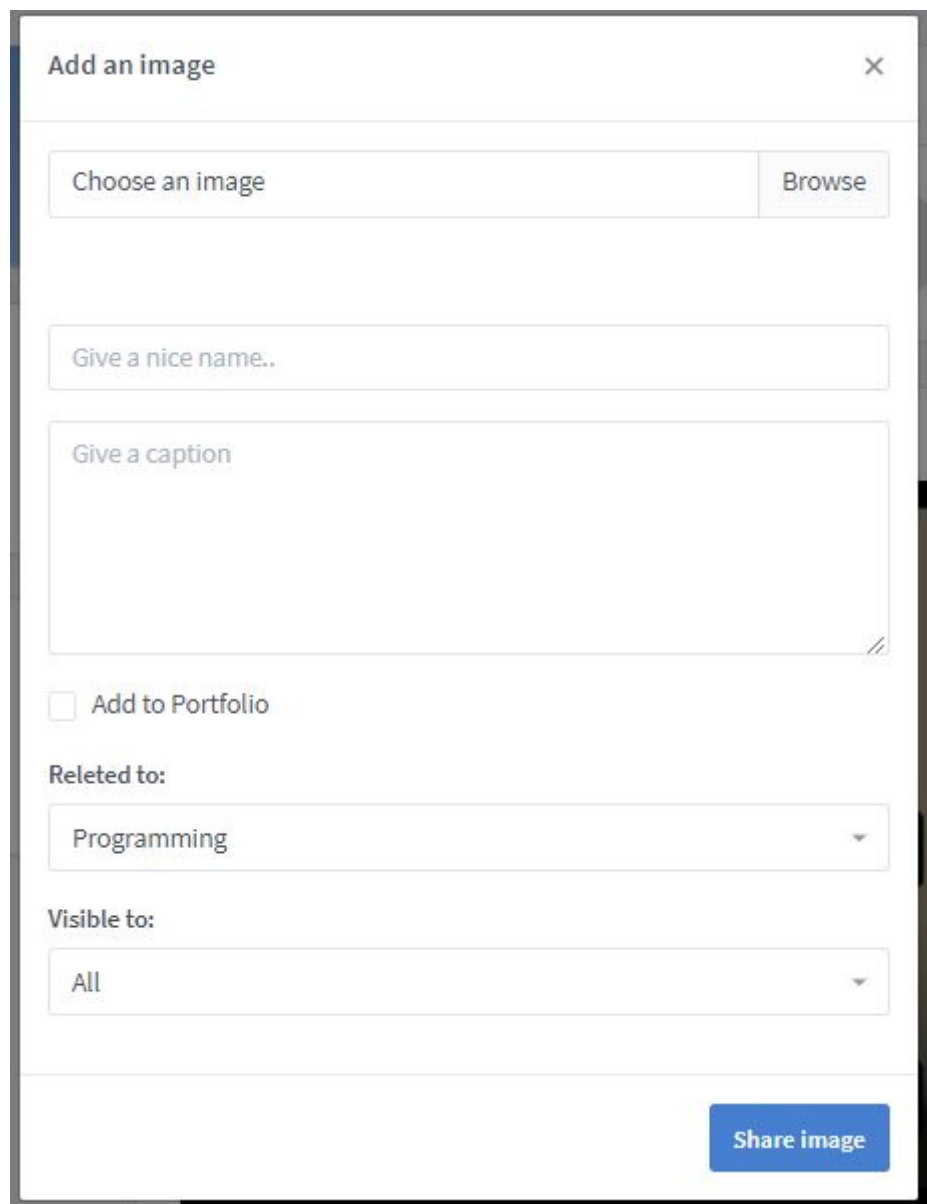
**A. Documents Index:** Students can share any type of documents (Assignments, Reports, Notes, Research paper etc) here. They will get four different privacy options.

**Only Me:** The documents is only visible to him/her.

**With Batch:** He can select one or multiple Batch to share the documents.

**With Teacher:** He can select one or multiple teacher to share the documents.

**Public:** Will be visible to all who has access to the portal.



**Add an image** [X]

Choose an image [Browse]

Give a nice name..

Give a caption

Add to Portfolio

Related to:  
Programming [v]

Visible to:  
All [v]

Share image

Figure 4.1.2.1: Student Creator Tool Modal

**B. Interests:** This is a features where a student can select one or multiple interest about the sector he/she like to work. (For example: Design, Animation, Programming).

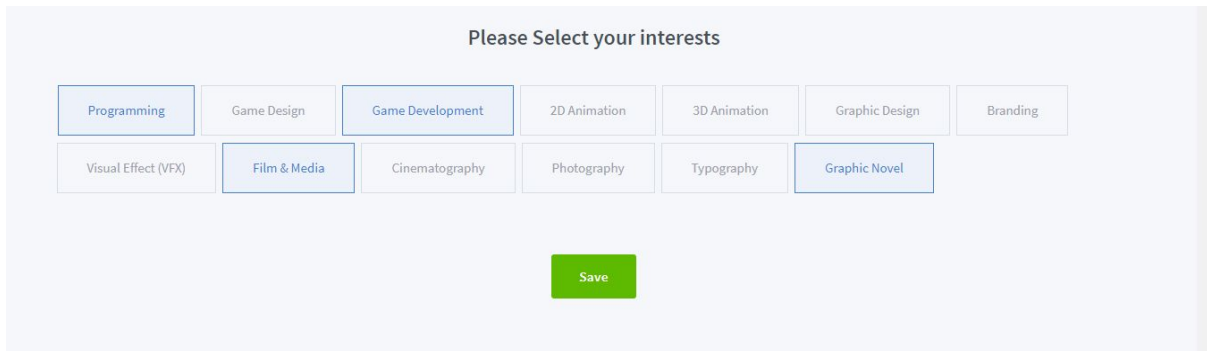
The image shows a web interface for selecting interests. At the top, it says "Please Select your interests". Below this, there are two rows of buttons. The first row contains: Programming, Game Design, Game Development, 2D Animation, 3D Animation, Graphic Design, and Branding. The second row contains: Visual Effect (VFX), Film & Media, Cinematography, Photography, Typography, and Graphic Novel. A green "Save" button is centered below the buttons. The buttons for "Programming", "Game Development", "Film & Media", and "Graphic Novel" are highlighted with a blue border, indicating they are selected.

Figure 4.1.2.2: Interest selection page

**C. Reminders:** This is features which give you student reminder about different upcoming events/occasion/task. Student can Reminders manually. He/She also get reminders about exam,class etc.

**How automatic Reminders Works:** A bot/crawler crawl to diu notice board on daily basis and collect the information. After analyzing the information with a algorithm it will associate the reminder with the specific students.

**D. Wisdom Bot:** This is a bot which learn from students and help others students about their course guideline. Basically it's analyze the previous semesters students activity and help new students.

**E. Portfolio:** Student can share their works here, and also can see others works here. They can also search by interest here.

**F. Real-Time Communication:** Students communicate with each other with realtime chat.

**G. Helpline:** Using this tools anyone can share their problem and ask for help. For example, if i want to get help about programming issue, i can simply click on the helpline, share my problem and select the problem topic as "Programming".

The problem will go to all students who has interest on Programming and anyone can help me about it.



### 4.1.3. Teachers Tools

These set of tools is only available for Teachers.

**Statistics:** Teacher can see different types of statistics about the students here. Such as, they can see a graph about the interest of students. The statistics is also can be filterable by batch.

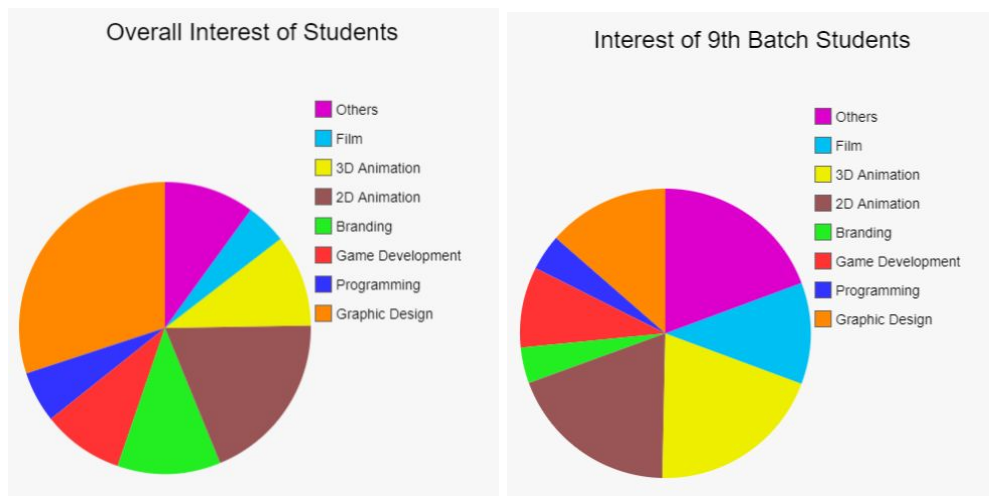


Figure 4.1.3.1: Some Example Statistics

**Assign project with interest:** A teacher can select a range of student about their area of interest and assign them project or send a message to about a project.

**See students portfolio and rate them:** A teacher can see the students works and rate them to verify the quality of the work.

**Send Real Time notification/Message:** A teacher can send batch, interest or project wise notification to the student.

**Assign and Update task:** Assign a task to a single or multiple students.

**Share documents with students:** Same as students a teacher can also share documents with a group of teacher or students.

## Chapter 5

### Discussion

#### 5.1 DIU Online Discussion Forum

DIU Online Discussion Forum is an open place for the all DIU student who can register there and post article anything about the category available there. The blog section of my project is also similar to it. But Instead to interaction with the information to student like Online Discussion Forum my project is more focusing on the student to student interaction.

Also Forum is not something where can share their portfolio. My project allow student to share there project also with there targeted people only. For example, Forum has no option to select a post visibility based on the batch no.

Forum is only focused on the text medium of expression instead of focusing Video, Text, Image. Basically an Online discussion forum (ODF) is a web-based application that brings people together with shared interest and mind-set. The use of online discussion forum (ODF) has emerged as a common tool and an effective way of engaging students outside the classroom.

#### 5.2 Features of an Online Forum that i take in my project:

1 . ODF is an e-learning platform that provides students with privilege to post messages to the discussion threads, interact and receive feedback from other students and instructor, and hence create a deeper understanding of the subject matter being discussed. In education, they have been deployed to complement traditional learning techniques such as lectures and tutorials

2 . Online discussion forums (ODFs) harmonize with the educational philosophy that makes communication a necessary tool and fundamental mechanism for effective learning

3 . It was discovered that the interaction of the learners with both human and inanimate objects, and their participation in technology mediated education, were essential for the quality of their learning experience, which can enrich the process of knowledge exchange among participants and has positive effects on the students' performance

4 . Consequently, online discussion forums (ODFs) can be successful in enhancing collaborative learning by attracting students to participate and interact.

So comparatively i took the concept of discussing through about something from the concept of an online discussion forum but i present it as a more simple way so that a user (here a student) can easily understand what they need to do.

### 5.3 Social Network Concept

We define social network sites as web-based services that allow individuals to (1) construct a public or semi-public profile within a bounded system, (2) articulate a list of other users with whom they share a connection, and (3) view and traverse their list of connections and those made by others within the system. The nature and nomenclature of these connections may vary from site to site.

While we use the term "social network site" to describe this phenomenon, the term "social networking sites" also appears in public discourse, and the two terms are often used interchangeably. We chose not to employ the term "networking" for two reasons: emphasis and scope. "Networking" emphasizes relationship initiation, often between strangers. While networking is possible on these sites, it is not the primary practice on many of them, nor is it what differentiates them from other forms of computer-mediated communication (CMC).

What makes social network sites unique is not that they allow individuals to meet strangers, but rather that they enable users to articulate and make visible their social networks. This can result in connections between individuals that would not otherwise be made, but that is often not the goal, and these meetings are frequently between "latent ties" (Haythornthwaite, 2005) who share some offline connection. On many of the large SNSs, participants are not necessarily "networking" or looking to meet new people; instead, they are primarily communicating with people who are already a part of their extended social network. To emphasize this articulated social network as a critical organizing feature of these sites, we label them "social network sites."

About the student to student and student interaction i was influenced by social network concept. I think concept is very much additive. So, i thought if need to make study and works more attractive to the student then it's compulsory to make the student addictive to the study and the student.

Actually what i try to provide is merging online discussion forum along with the social network concept build something that a student like to use it, if he/she using it his/her concentrare will be diverted to spending time on something that valuable.

## **Chapter 6**

### **Conclusion**

Over network now we can communicate to any people within in a couple of second who have access to the network. Using the advantage of the technology my aim of this project is to allow student to connect more information through a interactive student portal and be interactive with each other about sharing knowledge.

The web based platform is basically created to increase the communication between student to student, student to teacher and teacher to student. This is a project which based on the same concept of social media communication. They can share and build their portfolio here as well as seeing other student's project and portfolio.

We already passed era of making note and hiding it from all others student so only who make note can do the good result. Now it's time to share everyone knowledge and combine them to make something great. If a student developing a concept about a project it may take a long time. So my concept is making place for that student where they can easily share their knowledge about what learn or doing and also can get an idea about how to do something that already done by someone.

My project which is called "MCT Interactive student portal" is made on purpose of doing four different things in a single place which includes (1) increasing interaction between student to student building a community of large number student (2) Increasing the communication between student's with the teacher (3) Making a mentality to share something that a student know instead of hiding it from others and (4) Give student a better project sharing and management tools.

In this project also i merged the online discussion forum and social networks and project management tools to a single platform. It's make student more comfortable to use the web app as they are already familiar to that type of concept. Such features like writing blog, live chatting with each other, sharing project photo and video, finding information through virtual robot and the project management tools will encourage them to do project with a lot of fun.

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