

FRP No. **FYP-MCS7-SP19**

STUDENT'S PROJECTS STUFF

SUBMITTED BY

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RESEARCH REPORT SUBMITTED TO THE FACULTY OF COMPUTER
SCIENCE, MOHAMMAD ALI JINNAH UNIVERSITY, IN PARTIAL
FULFILMENT OF THE REQUIREMENTS FOR THE DEGREE OF
BACHELOR / MCS OF COMPUTER SCIENCE

SPRING 2019

Student's Projects Stuff

Batch – 2018

DEPARTMENT OF COMPUTER SCIENCE
Mohammad Ali Jinnah University. Karachi
July 2019

ACKNOWLEDGMENT

First of all, we thank Almighty Allah who praise us with the ability to think, work and deliver what we are assigned to do. Secondly, we must be grateful to our internal Mr. Ahmed Raza who help us in this project. We also acknowledge our teachers that throughout our studies helps us and guides us, departmental staff, university staff or other then this.

INTRODUCTION TO GROUP MEMBERS



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Master in Computer Science
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FA18-MCSW-0005

CERTIFICATE OF COMPLETION

This is to certify that the following students of MCS of Batch 2018

Shayan Shaikh

FA18-MCSW-0005

have successfully completed their final year project of Student's Projects Stuff

STUDENT'S PROJECTS STUFF

in the partial fulfillment for the Degree of Bachelor of Science in Computer Science.

Ahmed Raza

Designation

Mohamamd Ali Jinnah University

Abstract

We need to create a webpage or a weblog for a particular university for students of B.E, M.E and PHD students to share their final year projects and research ideas so that students of different categories (Software, Computer Science, Biomedical, Electronics, IT, Telecommunication) can communicate with each other in case if they want to use other's field technology (Example any software product can be used in electronics field to make some new product).

For this we need to create a blog where posts and comments are two main parts. In posts, abstract of final year projects will be the content and for comments we need to use API which will count the number of +ve comments and -ve comments on each post after a particular time that will be used to declare a post as a highly ranked post.

Further we will use searching filters as:

- The post with highest Likes
- The post with highest Comments
- Keyword based searching (like artificial intelligence, cloud computing)
- The older post.
- The post older than 1 week.
- Last hour's Posts.

This blog will be developed in PHP and mysql and API for counting number +ve and -ve comments can be in php or in python.

In Post, the project title will also be displayed and category will also be displayed (Forexample : Posted by Admin Under Electronics or Under Bio Medical)

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CHAPTER 1: INTRODUCTION

On day after day, establishments got to manage the large quantity of student information and it may be difficult typically because of its complicated nature. Student Projects Stuff System offers the variety of functionalities that facilitate administrator to create this task simple and error free. This reduces manual employment and work. Student data system package additionally generates varied MIS reports that facilitate establishments within the decision-making method and to visualize student progress.

1.1. Purpose

New reliable and quick “Student Project Stuff” code with the nice AI support. It will assist you along with your daily Student “Projects and research” routines and deliver you from your paper work.

1.2. Product Scope

- Online Student Projects and Researches Dashboard is developing for general purpose and used to replace old paper work system.
- It Will held Student to Add, Save and maintain their project easily.
- Student can also get feedback and suggestion for their stuff.
- And can also give other student suggestions in form of comment.
- This project make student more comfort in creating their projects and research report.

1.3. Product Perspective

The proposed system shall be developed using client/server architecture and be compatible with computer and mobile browser. The front end of the system will be developed using HTML CSS JavaScript and back end will be developed using PHP My SQL.

1.4. Product Functions

- Login System
- Add Post
- Delete Post
- Timeline
- Comments

- Like Post
- View Statistics
- Save Storage
- User Profile
- Search Post

1.5. User Classes and Characteristics

All University's Phd, Master and Graduation Program Students.

CHAPTER 2: BACKGROUND REVIEW

This chapter gives an overview about the aim, objectives, background and operation environment of the system.

2.1 Project Aim and Objective

The project aims and objectives are achieved after following completion:

- Online Project and Reports save
- Get marks from teacher.
- Separately see their posts.
- Student classmates post are visible for guidance.
- Student get comments from teacher and classmates
- A teacher login page where teacher can give marks and comments.
- Admin page where admin see last logins, signups, recent post, most liked post and filter post with time range.
- Admin can create student and teacher account.

2.2 Background of The Project

Student Project Stuff is an application which refers to project storage systems with comments and like feature. Which are small in size. It is used by manage the projects and reports using a computerized system where PhD, Masters Or graduation program students can record various posts and have their own Facebook twitter like timeline. Post are also contain detailed description where teacher give marks, likes and comments and students give comments or likes. With this computerized system there will be no loss record.

In addition, this project is also have statistics feature. Where admin can see the signup, post, likes and comments activity. The user is able to search post which has highest likes and marks with date range filter. All these modules are able to help user to get guide in their projects or reports at a glance.

2.3 Operation Environment

Database	MySQL
Memory	Less than 200MB
Platform	Can be run on any web browser
Server Installation	Required Python and PHP 7 version

CHAPTER 3: SYSTEM ANALYSIS AND DESIGN .

3.1. Software Requirement Specification

The problem occurred before having computerized system includes:

- **File lost**
When there is no computerized environment than files have chances to lost. Due to some human error loss of records occurs.
- **File Broken**
When a computerized system is not there file is always lost due to some accident like spilling of water by some member on file accidentally. Besides some natural disaster like floods or fires may also damage the files.
- **Difficult to look record**
Without proper computerized system there is always a difficulty in searching of records if the records are large in number.
- **Space intense**
When the number of records become huge the space for physical storage of file and records are also increases.
- **Cost intense**
When there is no proper computerized system the to add each record paper will be needed which will increase the cost for the management of library.

3.2. SYSTEM OBJECTIVES

- **Improvement in control and performance**
The system is developed to cope up with the present problems and issues of library .The system will add user, validate user and is additionally bug free.
- **Save price**
Once computerized system is enforced less human force are needed to take care of the library therefore reducing the price.
- **Save time**
Professional is ready to go looking record by victimization few clicks of mouse and few search keywords therefore saving his valuable time.

3.3. System Features

This requirement of the software package are describe per each category of users:

- Admin Creating Students and faculty
- Student sharing and Storing their stuff.
- Faculty member view student's performance.

3.3.1 Admin Creating Students and faculty

- **Description and Priority**

To add student Admin go to the create student page and using their roll no. They can create student. As well as faculty member.

- **Stimulus/Response Sequences**

In create user page there will be a form, which will fill by admin to give all information of the user they want to create.

- **Functional Requirements**

- a. The Form will be POST at PHP page, In this page information will authenticate that,
- b. No same roll no student will enroll to system.
- c. As well as no same faculty id user will enroll.
- d. All roll no of student must be unique.

3.3.2 Student sharing and storing their stuff

- **Description and Priority**

To Share stuff student go to their profile or home and upload their stuff with some description.

- **Stimulus/Response Sequences**

Student will upload their stuff by clicking upload button or drag and drop file, then submit post with some description required.

- **Functional Requirements**

All post of student will save in a database table with date, name, description and link with user unique id. Post will also have their own id.

3.3.3 Faculty member view student's performance

- **Description and Priority**

Faculty member can like, dislike, comment post, search research and report.

- **Stimulus/Response Sequences**

A small comment box will made in bottom of the post which will use for comment. Search bar will always on top of the header, and will be fixed on scroll, so they can be always visible on screen.

- **Functional Requirements**

Comments will be link with user post unique id, which will create at the time the post create.

3.4. Other Nonfunctional Requirements

3.4.1 Performance Requirements

Depend on the server performance.

3.4.2 Safety Requirements

All Important detail should be save in hard copy as well.

3.4.3 Security Requirements

This software will,

- a) Authenticate each user, who logs in;
- b) When the user performs any action, authorize him/her to perform the actions allowed for the user and displays an error message if found to be unauthorized.

3.5. Software Tools Used

In this application we have used:

Front-End:

- 1) JavaScript (ES6 , ES7)
- 2) CSS
- 3) HTML
- 4) Ajax
- 5) JQuery

Back-End:

- 1) Php.
- 2) MySQL
- 3) Python
- 4) Slim PHP Framework

3.6. Table Design

VARIOUS TABLES TO MAINTAIN INFORMATION

User

Field Name	Data Type	Key	Default	Extra
Id	Int	Primary		Auto incr
Role_id	Int			
Name	Varchar			
Maju_id	Varchar			
Password	Varchar			
Image	Varchar		Default.jpg	
Created_at	Datetime			

Role

Field Name	Data Type	Key	Default	Extra
Id	Int	Primary		Auto incr
Role_name	Varchar			

Post

Field Name	Data Type	Key	Default	Extra
Id	Int	Primary		Auto incr
User_id	Int			
Title	Varchar			
Description	Varchar			
File	Varchar			
Teacher_id	int			
post_marks	Varchar		0	
Created_at	Datetime			

Like

Field Name	Data Type	Key	Default	Extra
Id	Int	Primary		Auto incr
User_id	int			
Post_id	int			
Created_at	Datetime			

Comment

Field Name	Data Type	Key	Default	Extra
Id	Int	Primary		Auto incr
User_id	int			
Post_id	int			
Comment	Varchar			
Created_at	Datetime			

Access

Field Name	Data Type	Key	Default	Extra
Id	Int	Primary		Auto incr
access_name	Varchar			

User_Access

Field Name	Data Type	Key	Default	Extra
Id	Int	Primary		Auto incr
User_id	int			
access_id	int			
Created_at	Datetime			

3.7. Data Flow Diagram's

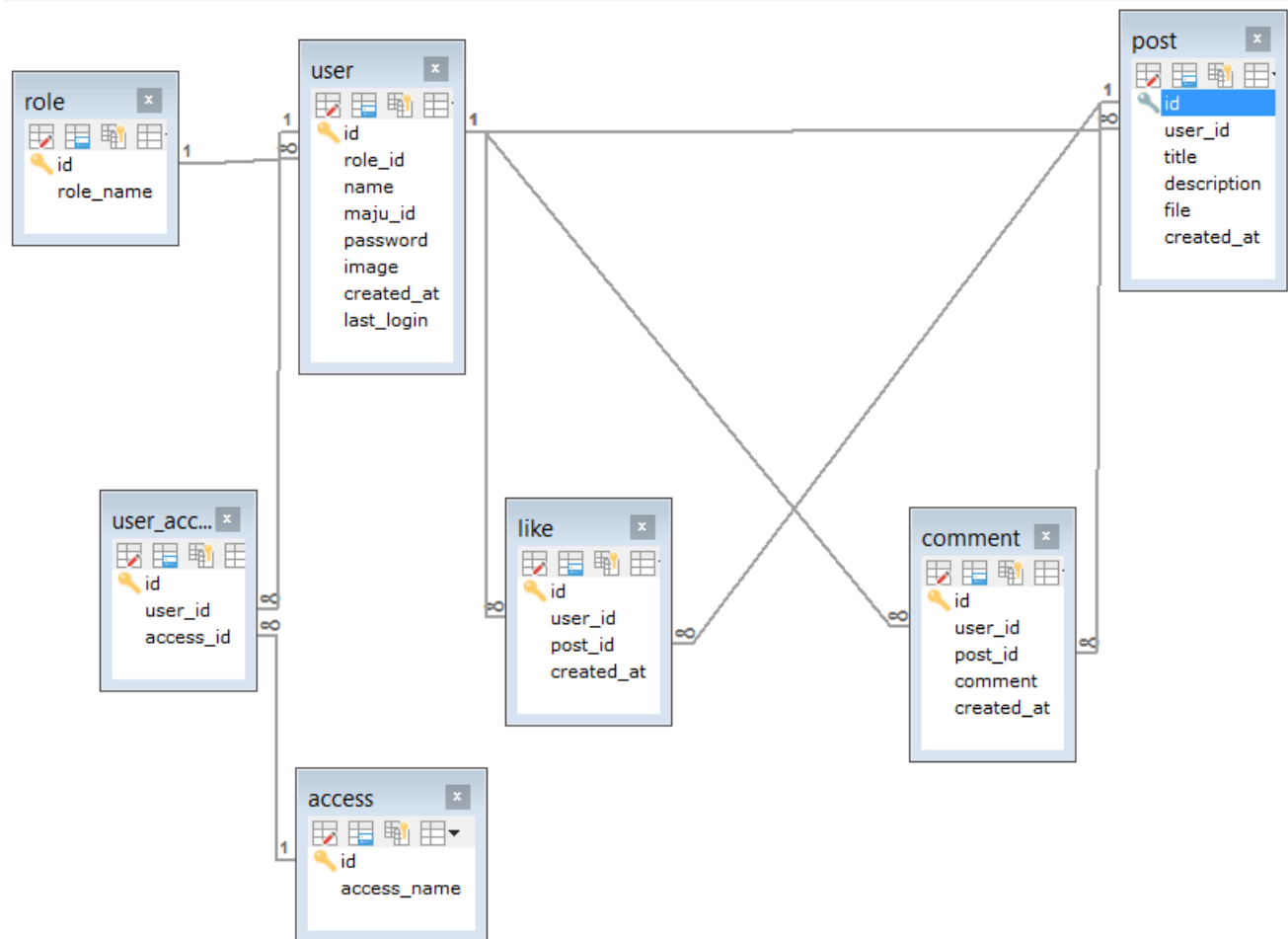


Figure 1.1 (Data Flow Diagram)

CHAPTER 4: SYSTEM IMPLEMENTATION

4.1. System Setup

4.1.1. Setup Tools

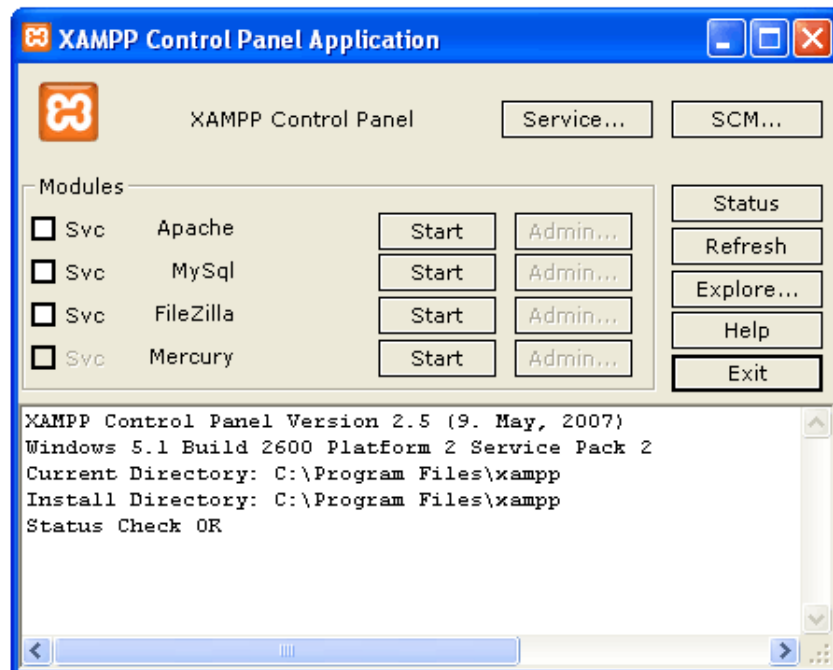
Tools Required to Setup ‘Student Projects Stuff’ Web app are:

- 1) Xampp Or Wamp Server
- 2) Python with pip installation
- 3) mySql database
- 4) Web Browser

4.1.2. Setup Requirements

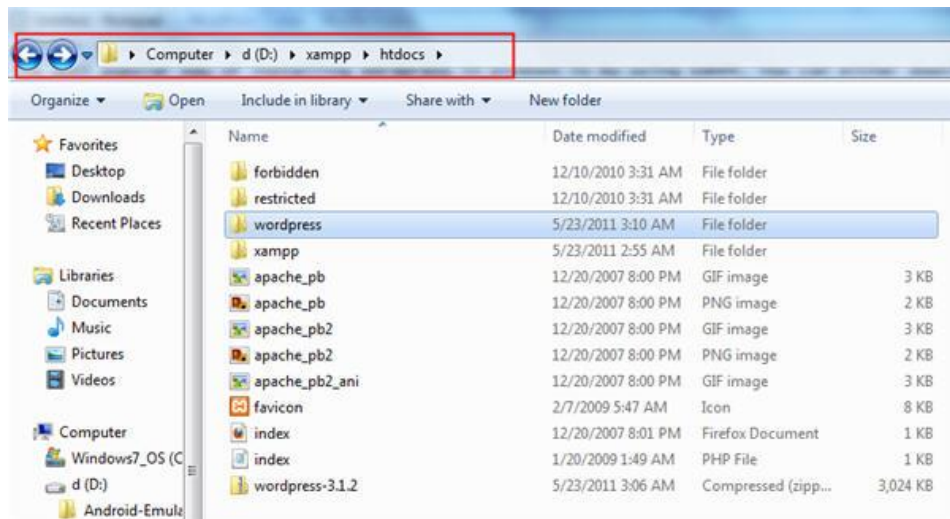
1. Starting Apache and MySQL

Go to the location where you installed XAMPP (usually **C:\Program Files\xampp**) and double click on XAMPP Control Panel (**xampp-control.exe**). This will bring you following screen. Click on **Start** buttons next to Apache and MySQL for starting them.

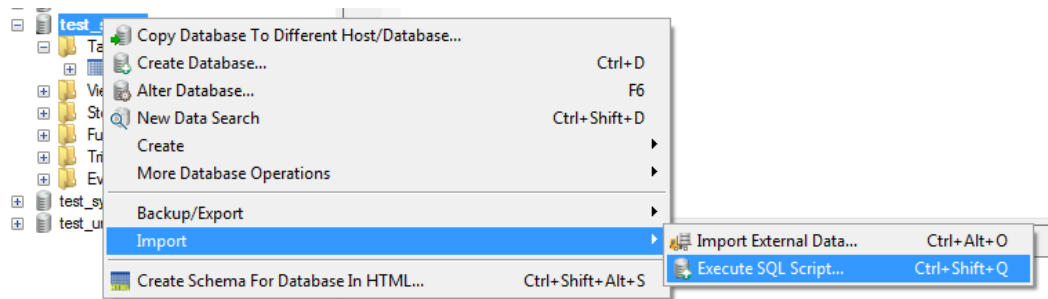


2. Locations of Configuration Files

Extract the MAJU zip archive to “htdocs” folder.

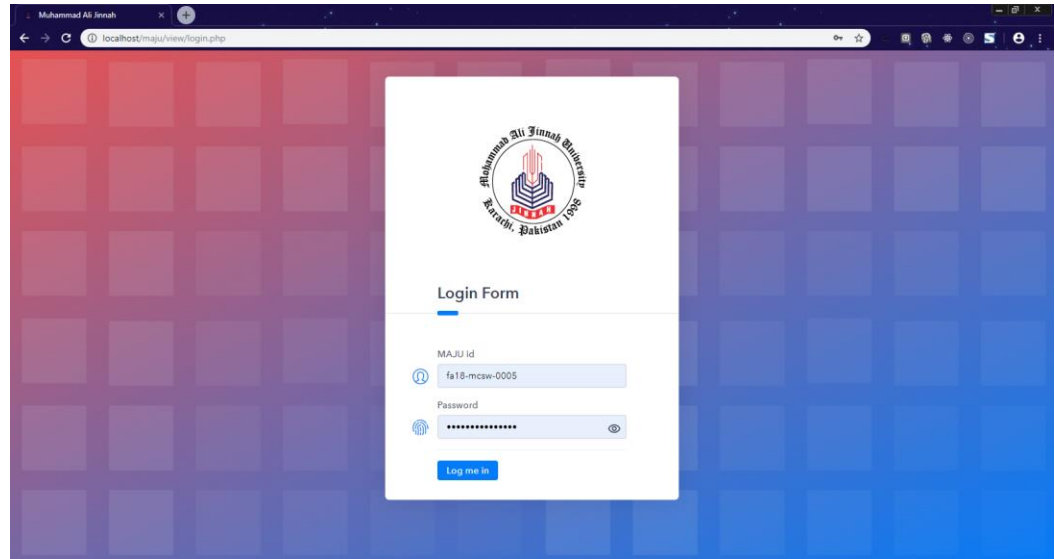


3. Import .Sql file on database server



4. Run MAJU SPS on web browser.

Run on browser url at path:
localhost/maju/view/login.php



4.2. Module Description

This system has three modules which are given below:

1. Admin module.
2. Teacher module.
3. Student module.

1. Admin Module

The following module contains access of like post, comment on post, and create student and teacher account. View Statistics about post, likes, comments and signups. And all others.

2. Teacher Module

The following module contains access of giving student marks. And comment on post and like post of students.

3. Student Module

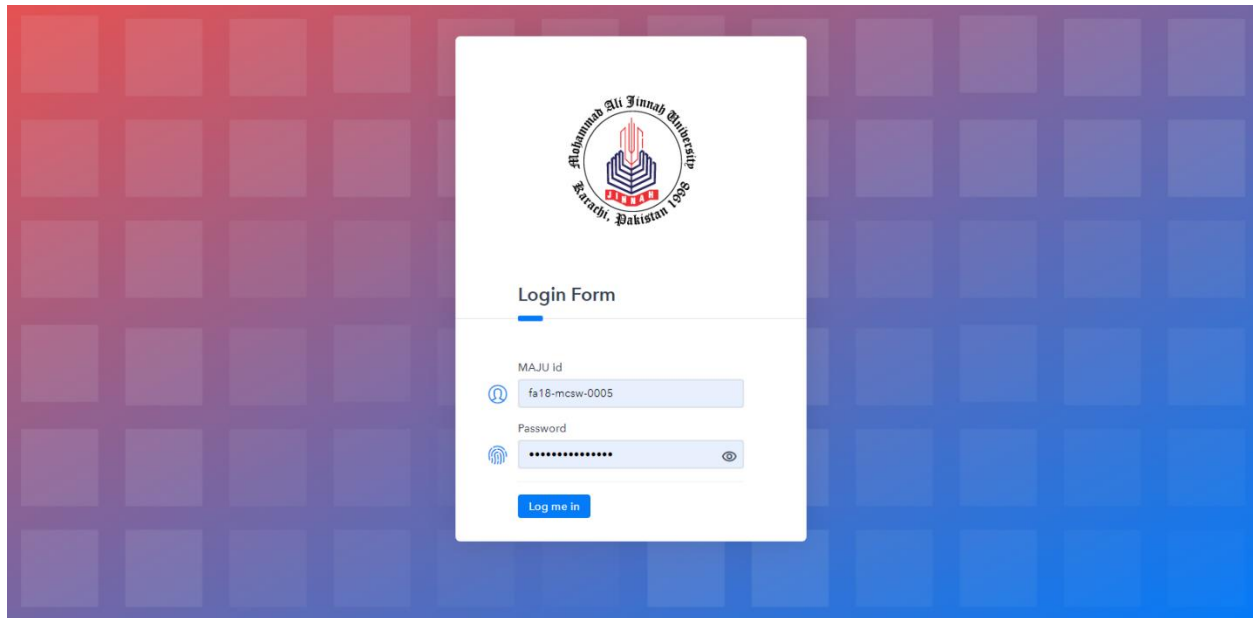
The following module contains accesses of creating and search post. And getting feedback on them.

4.3 Boundaries

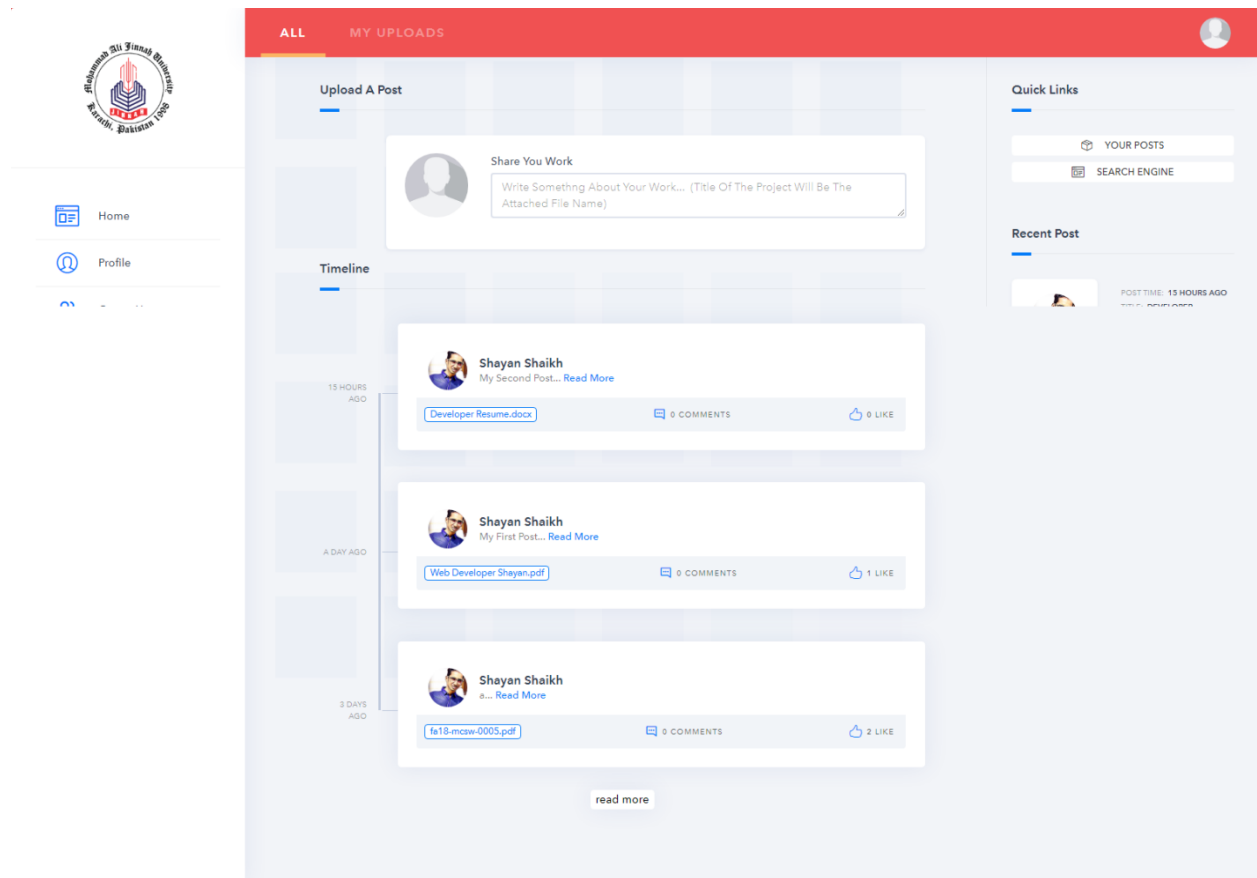
Before the user use the system, they must be registered through Admin account. If not they are not allowed to use the system.

4.4. Screen Shots

1. Login Page



2. Main page



3. Search post page



- Home
- Profile
- Create User
- Search

ALLMY UPLOADS

Search Post

Shayan Shaikh

My Second Post...

Read More

0 COMMENTS

0 LIKES

Shayan Shaikh

My First Post...

Read More

1 COMMENTS

1 LIKES

Shayan Shaikh

...

Read More

0 COMMENTS

2 LIKES

Shayan Shaikh

...

Read More

4 COMMENTS

2 LIKES

Shayan Shaikh

Here is my post ...

Read More

3 COMMENTS

1 LIKES

MAJU User

NOTE: You can skip 'Heading-3: External Interface requirements' because in these it asks Diagrams/interfaces of the system to develop. So that should be the part of SDS document later on. You can write under these headings N/A. ...

Read More

0 COMMENTS

4 LIKES

Shayan Shaikh

if anyone know any tutorial regarding how to build custom API in java then please share the tutorial or coding ...

Read More

0 COMMENTS

1 LIKES

Shayan Shaikh

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor i...

Read More

2 COMMENTS

2 LIKES

MAJU User

I hope you are doing well, The project Proposal Evaluations for MCS has been rescheduled on Saturday 16th March 2019 from 12 pm to 2 pm. ...

Read More

11 COMMENTS

2 LIKES

Shayan Shaikh

ACM Chapter in Collaboration with the focal person of Neo4j graph organization Mr. Siraj Munir are going to held an event on 15th April. Those who want to learn new easy techniques of graph generation can participate. ...

Read More

9 COMMENTS

1 LIKES

MAJU User

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed do eiusmod tempor incididunt ut labore et dolore magna aliqua. Ut enim ad minim veniam, quis nostrud exercitation ullamco laboris nisi ut aliquip ex ea commodo consequat. Duis aute irure dolor i...

Read More

0 COMMENTS

2 LIKES

AT DATE

Post Date Range

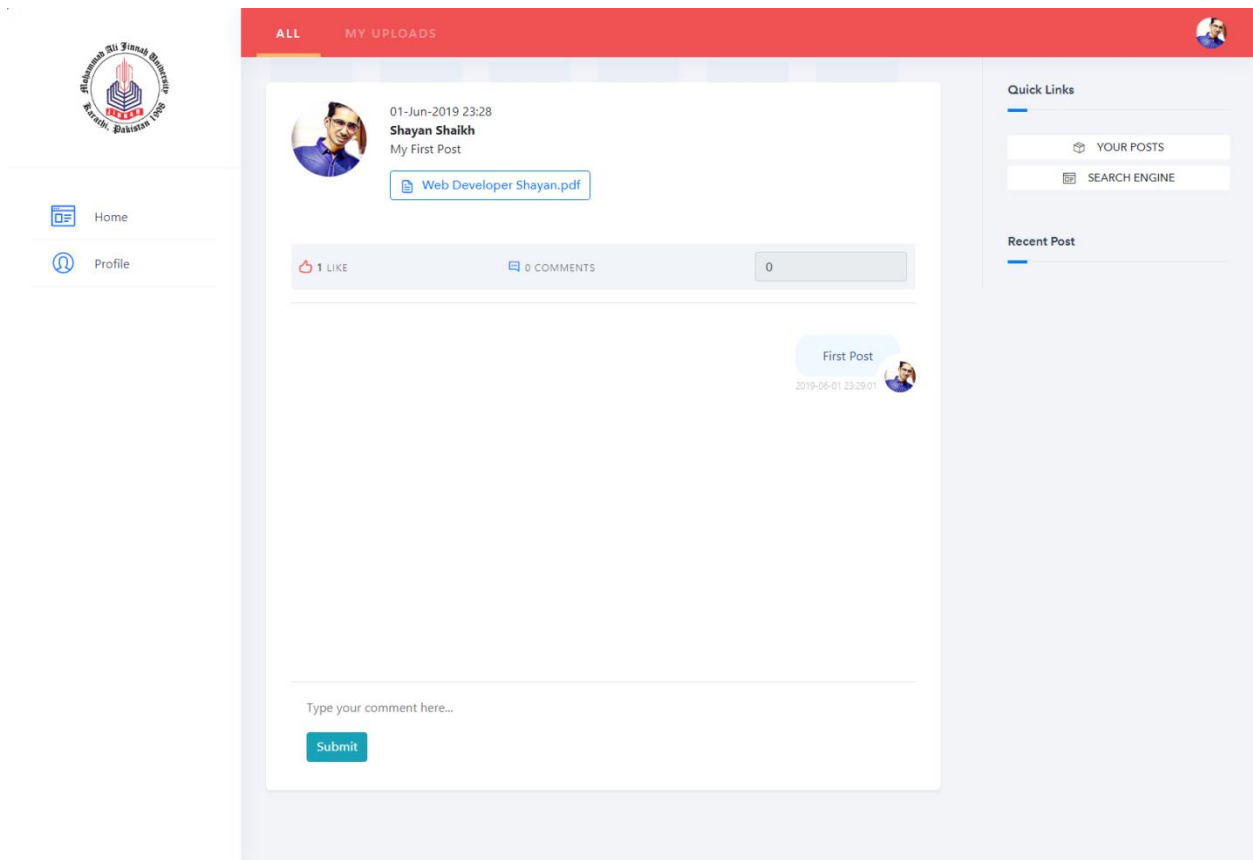
Jan 25, 2018 - Jun 3, 2019

LIKES

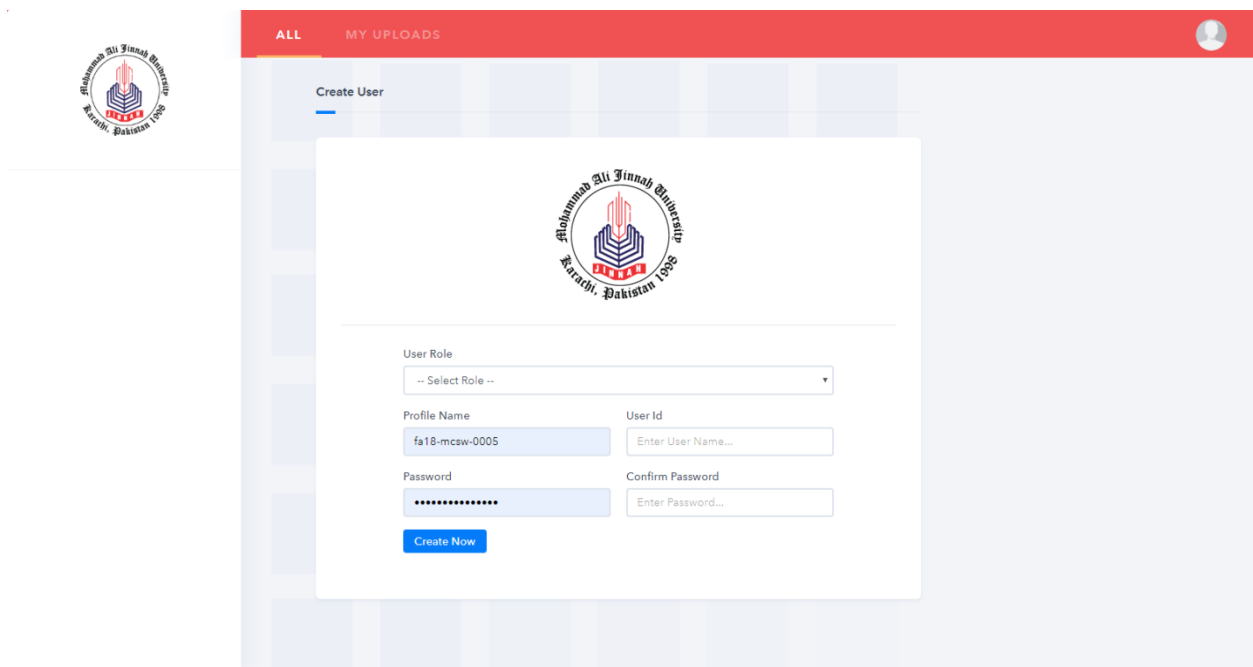
Like 0Like 4

4. Comment Page

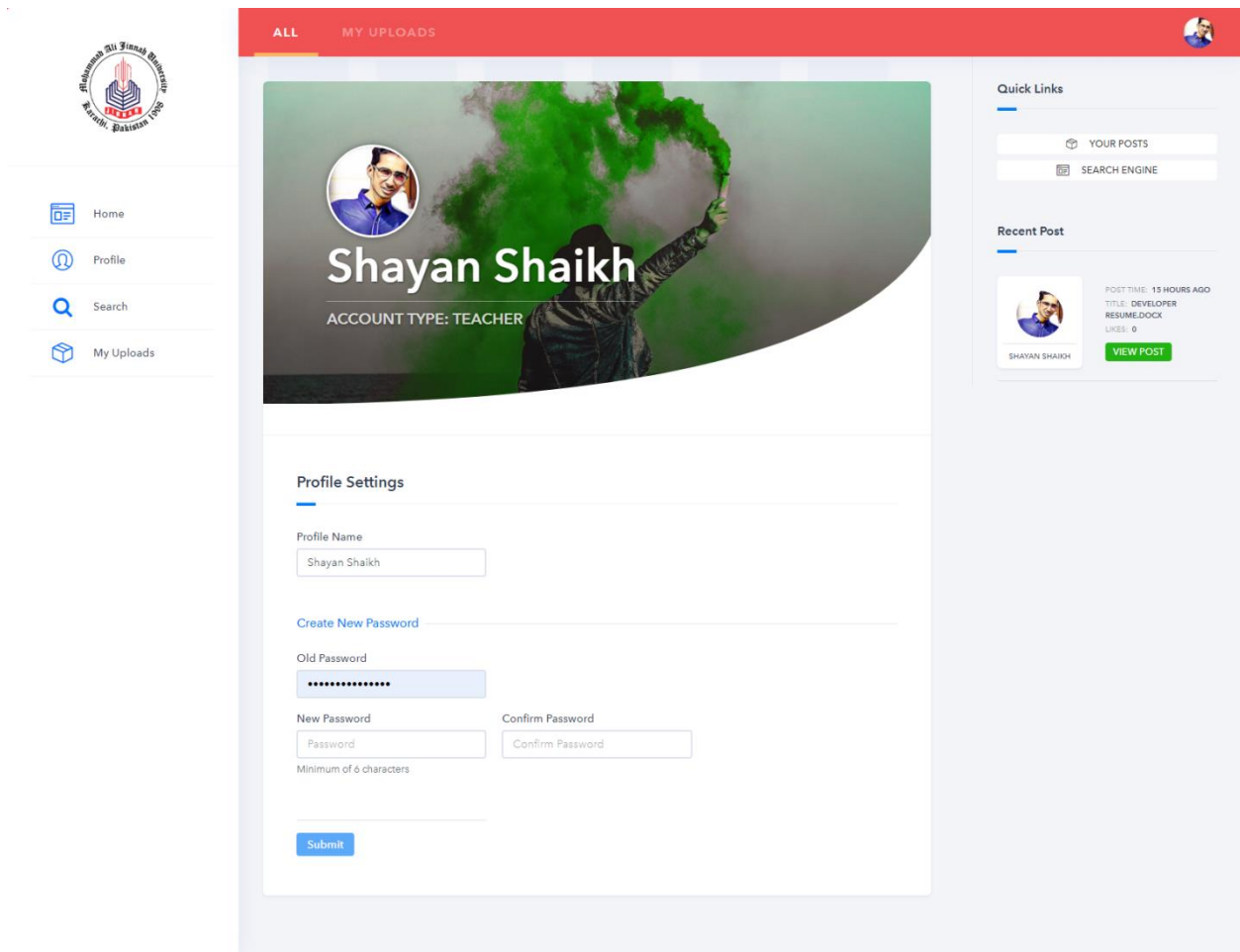
22



5. Create User Page



5. Profile Page



6. Statistics Page



- Home
- Profile

ALL MY UPLOADS

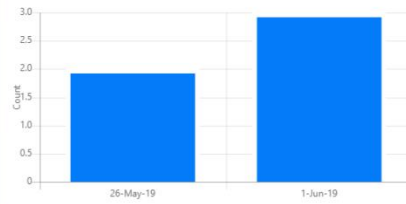


Statistics

SIGNUPS

Last 10 Days:

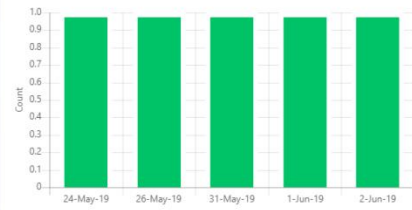
Update



POSTS

Last 10 Days:

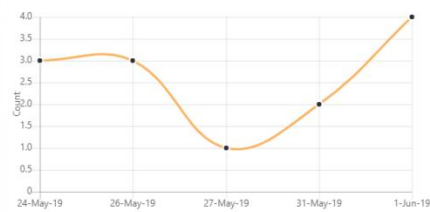
Update



LIKES

Last 10 Days:

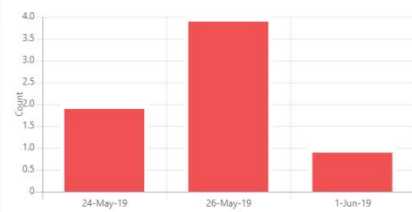
Update



COMMENTS

Last 10 Days:

Update



CHAPTER 5: SYSTEM TESTING

The aim of the system testing method was to see all defects in our project. The program was subjected to a set of check inputs and various observations were made and based on these observations it will be decided whether the program behaves as expected or not.

5.1 CRUD Testing

CRUD (Create, Read, Update and Delete) is a black box testing to see whether you can create and read, Where you can read or access, When the data is saved after creating whether you can delete the data along with there relationship

5.1.1. Create Testing

S/No	Test Case	Expected Result	Test Result
1.	Create User Data	At First Admin Have to login, and fill form at “create user” page, then click on submit button. The MAJU ID must be unique otherwise it does not create user.	Successful
2.	Add Teacher data	At “create user” page, form contains a drop down to select type of user. The Teacher User will create with access of given marks at post where they have permission given by student user at their MAJU id	Successful
3.	Add Student data	At “create user” page, form contains a drop down to select type of user. The Student User will create with access of adding post on timeline.	Successful
4.	Add Post Using Student Account	Student can upload post at main page. File must be PDF or word. Image files are not allowed.	Successful
5.	Add Post Marks Using Teacher Account	Teacher can given marks at post where they have permission given by student user at their MAJU id	Successful
6.	Add Like On Any Post	Any User can like just one click on like button	Successful
7.	Add Comment On Any Post	User can comment at page “detail post” page will occur on click at read more button	Successful
8.	Reply On Comment	User Can reply on comment by clicking button on right side of	Successful

		comment which they want to reply.	
--	--	-----------------------------------	--

5.1.2. Read Testing

S/No	Test Case	Expected Result	Test Result
1.	Read Post	Any User Can Read Post. At home page.	Successful
2.	Search Post	Any User Can Search Post. With Setting filter of most like post, Setting time range, to see last month or last hour post and can customize the time. Also they can search post title.	Successful
3.	Read Profile	Every user can read or modify their profile	Successful
4.	Read Self Uploaded Post	Student can see and delete their self-uploaded post separately.	Successful
5.	Read Recently Coming Post	Every User Can sees recent coming post on sidebar.	Successful
6.	Read Comments	Every User Can read comment on post at detail page of post.	Successful
7.	Read All Likes On Any Post	Clicking on number of likes the popup will comes which show the details about the like. By what and when the like is come.	Successful
8.	Download File Of Post	On click of post attached file the file will start downloading	Successful
9.	Read Statistics	Admin Can read stats about likes, post, comments and signup. With date range filter.	Successful
10.	Download Stats Table in CSV format	Admin Can downloads the stats data in csv format on clicking top green “download CSV button at stats page”.	Successful

5.1.3. Update Testing

<u>S/No</u>	<u>Test Case</u>	<u>Expected Result</u>	<u>Test Result</u>
1.	Change User ID OR Password	User Can Change User ID OR Password At Profile setting page.	Successful
2.	Update User Profile Picture	User Can Change There At Profile setting page.	Successful
3.	Update Submitted Marks On Post	Teacher Can reassign marks on detail post page by resubmitting the input form.	Successful

5.1.4. Delete Testing

<u>S/No</u>	<u>Test Case</u>	<u>Expected Result</u>	<u>Test Result</u>
1.	Delete Post	Post Can be delete at “uploads” page, where user can see and delete there old and new post on just clicking trash red button	Successful
2.	Delete Like (Unlike)	The post like will deleted on clicking like button again	Successful

CHAPTER 6: CONCLUSION

6.1 Conclusions and Inferences

This web app provides a computerized platform for student projects and reports stuff. Which will benefit the students as well as the teacher.

It makes entire process online where student can search reports, staff can generate comment and give marks. It also has a facility for student login where student can login and can see Status of post and get some suggestions. Also student give suggestion to another student and help it out.

The aim of the project is to utilize this project in universities in order to get rid of the difficulties that are faced today by students and organization and to prevent loss of files.

6.2 Future Recommendations

There is a future scope of this project that many more features such as online lectures video Tutorials can be added by teachers as well as online assignments submission facility, a feature Of group chat where students can discuss various issues of engineering can be added to this Project thus making it more interactive more user friendly and project which fulfills each users Need in the best way possible.

7. REFERENCES

YouTube: [<https://www.youtube.com/>]

W3school: [<https://www.w3schools.com/>]

Stack overflow: [<https://stackoverflow.com>]

Other Tutorials: [Udemy, Solo learn]

Glossary

- **SPS:** Student's Project Stuff
- **PHP:** Is a type of server side language stands for “ Hypertext Preprocessor“.
- **MySQL:** Is a freely available open source Relational Database Management System (RDBMS) that uses Structured Query Language (SQL).
- **CSS:** Cascading style sheet.
- **HTML:** Hyper text markup language.



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WEB DEVELOPER

PROFILE

Extremely motivated to constantly develop my skills and grow professionally. I am confident in my ability to come up with interesting ideas.

EXPERIENCE

WEB DEVELOPER

TEZ Financial Services (April 2018 - Present)

- Designed and developed the Internal MIS reporting portal & its linked databases (Using jQuery, PHP and Python).
- Developed fraud detection Map using more than 500 engineered features.
- Created customized querying portal to assist the Department of Marketing.
- Automated reports to up-to-date with recent activities.
- Automated the reconciliation of financial transactions with bank statements.
- Created TEZ financial services website (with React.js)
- Ensure the technical feasibility of UI/UX designs.

SOFT SKILLS

Client-Side

HTML, CSS & JavaScript

Server-Side

PHP, MySQL, Python, NODE.js & MongoDB

Frameworks & Libraries

Express, React.js, Slim, Ajax, jQuery, Bootstrap & Material-UI

Other Programming Languages

C, C++ & JAVA

EDUCATION

MASTERS

Computer Science(2018-2019)

MCS Current CGPA "2.8" out of "4.0" from Muhammad Ali Jinnah University
2018 - 2019 (June Expected)

BACHELOR

Computer Science(2015 - 2017)

BCS with CGPA "3.053" Out Of "4.0" From University of Karachi.

INTERMEDIATE

Pre-Engineering(2013 - 2014)

In Pre-Engineering with "B" Grade Karachi Board.

MATRICULATION

Science (2010-2012)

In Science Group with "A" Grade from Karachi Board.

HOBBIES

Sketching, Painting, Coding, Reading & Writing

INFO LINKS

Github

github.com/shayan6/

Linkdin

linkedin.com/in/shayan-shaikh/