

DIU Tutorial

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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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DAFFODIL INTERNATIONAL UNIVERSITY

DHAKA, BANGLADESH

APRIL 2019

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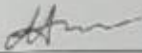
This Project/internship titled "Seeds Quality And It's Life Time Test" using machine learning, submitted by Md. Borhan Uddin, ID No: 152-15-5746 and Md. Rakibul Hasan Pathan, ID No: 152-15-5810 to the Department of Computer Science and Engineering, Daffodil International University has been accepted as satisfactory for the partial fulfillment of the requirements for the degree of B.Sc. in Computer Science and Engineering and approved as to its style and contents. The presentation has been held on 03/05/2019.

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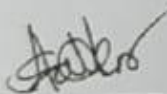
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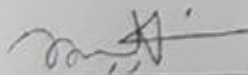
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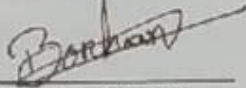
We hereby declare that, this research based project has been done by us under the supervision of **Dr. Sayed Akhter Hossain** Professor and Head Department of Computer Science and Engineering, Daffodil International University, Dhaka. We also declare that, neither this project nor any part of this project has been submitted elsewhere for award of any degree or diploma.

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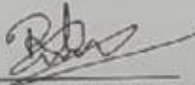


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Finally, we must acknowledge with due respect the constant support and patients of our parents.

ABSTRACT

The aim of DIU tutorial project is student can find easily their all solution of previous semester questions. And we also give some tutorial which questions has no any specific solution. There are log in option for both students and teachers. Where Teaches can access this site with their email and password. They can upload important tutorial and slide about their course and essential topics. If student want to find out this tutorial and slide they must need to log in. So it is the easy way to find the all previous semester questions and solve and course related tutorial in one place. As a result, they can save their time and use this saving time in their study.

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CHAPTER 1

INTRODUCTION

1.1 Introduction

Often to see that student spent their most valuable time to moving here and there for gathering their notes. As a result, they have not enough time to study and concentrate their text book. So this website is perfect for those student meet up their need. Where they can find the notes, questions and solutions in one place. Again they can contact with their honorable teacher for topic related slide and some critical problems. With this website student can meet different sections note and slide and experience.

1.2 Motivation

Through this project, the students will be very helpful. Students will get the question of the last semester through our project, very easily. They also get solution of this question. Prior of the examination, almost all students search last semester question here and there. Students will also get lecture slide from various sections as well as different teachers. Finally we can say this project is very useful for the student.

1.3 Objective

The “DIU TUTORIAL” is a web base project which will be questions of the past semester. And there will be answers to that question. There are different sections of the teacher’s slides and there are many more features.

1.4 Expected Outcome

Our project will be the question of several semesters. Communication will increase with the teachers of different sections. A new way to communicate with different students will be created. The most benefit will be those students who prepare for the exams 2/4 days ago. This project will save time in the wasteful time for searching questions here and there.

CHAPTER 2

BACKGROUND

2.1 Introduction

We work on a web development project. And this project was invented during 2017-2018. In this project has some simple feature like uploading previous semester questions. It has no any log in section and lack of security problem. There is no any complicated database system. There is no communication system between teacher and student. So, In our project we give notice on this basic need just like log in option, communication system and well security.

2.2 Related Work

What we are going to doing it's already done by diu question bank app and google classroom. But we try to do all together and give some extra feature like students no need code for access classroom and they easily get his/her favorite teachers lecture.

2.3 Scope of the problem

There are many scope to this application. We can find out some of this.

- There is no log in option. Anyone can access
- It is very simple app. There is no extra features.
- There have no communication system between teacher and student.

2.4 Challenges

To developing DIU Tutorial project is very challenging task to us. Here we find out most challenges task. They are:

- XAMPP port connection
- Multi authentication problem
- Sometimes facing front design problem.

CHAPTER 3

REQUIREMENTS SPECIFICATION

3.1 Business Process Modeling for Student and Teacher

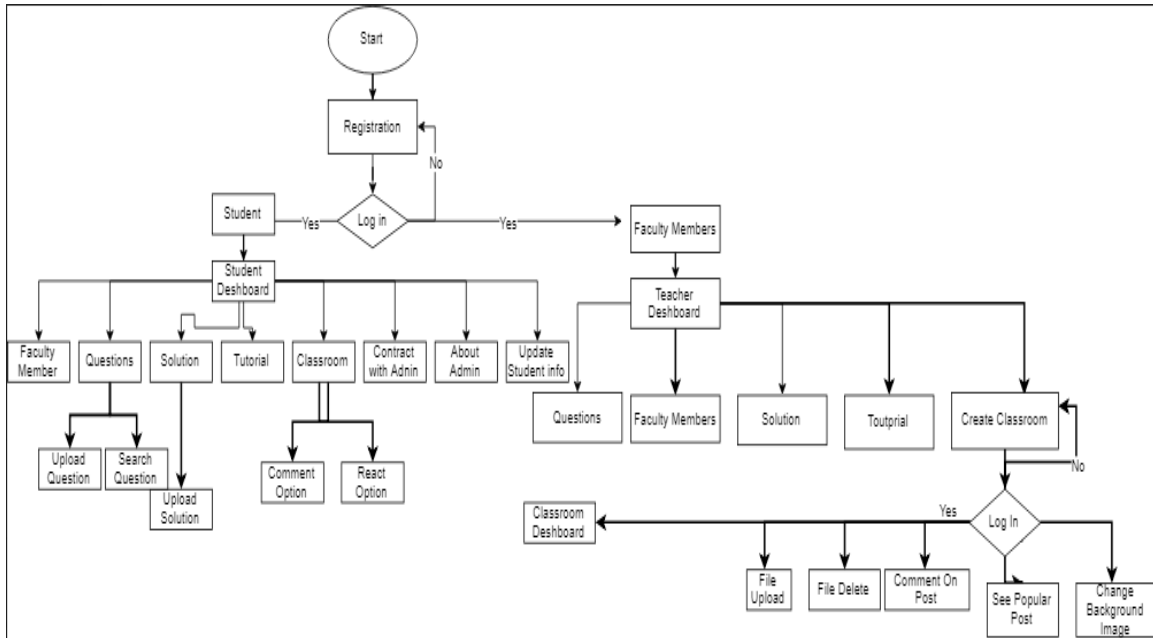


Fig 3.1: BPM for student and teacher

Business Process Modeling for Admin

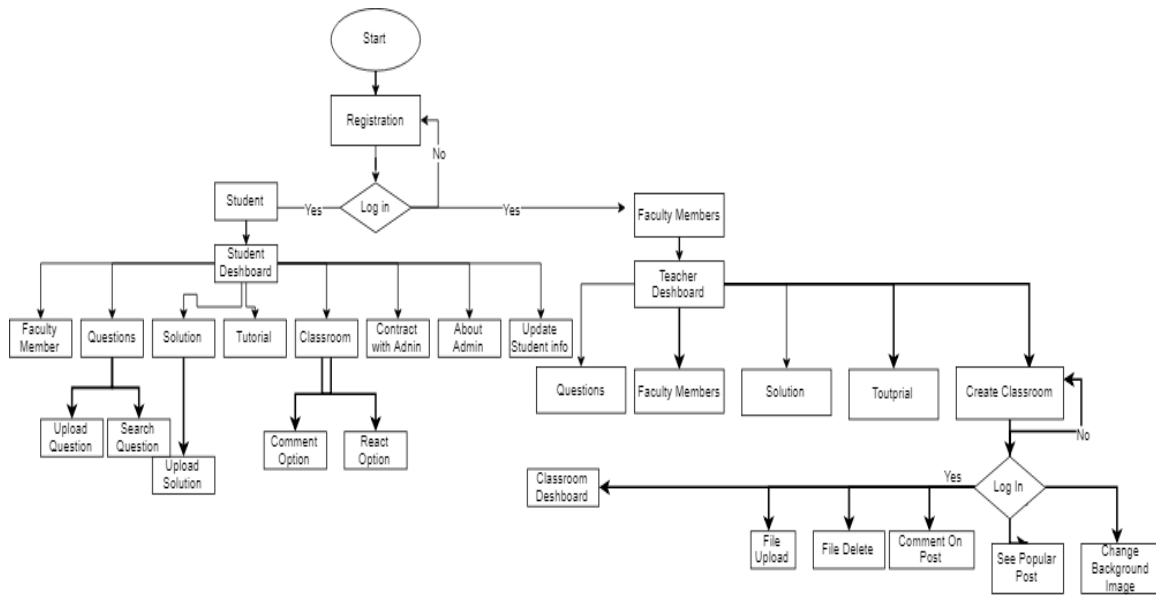


Fig 3.2: BPM for admin

3.2 Use Case Modeling and Description

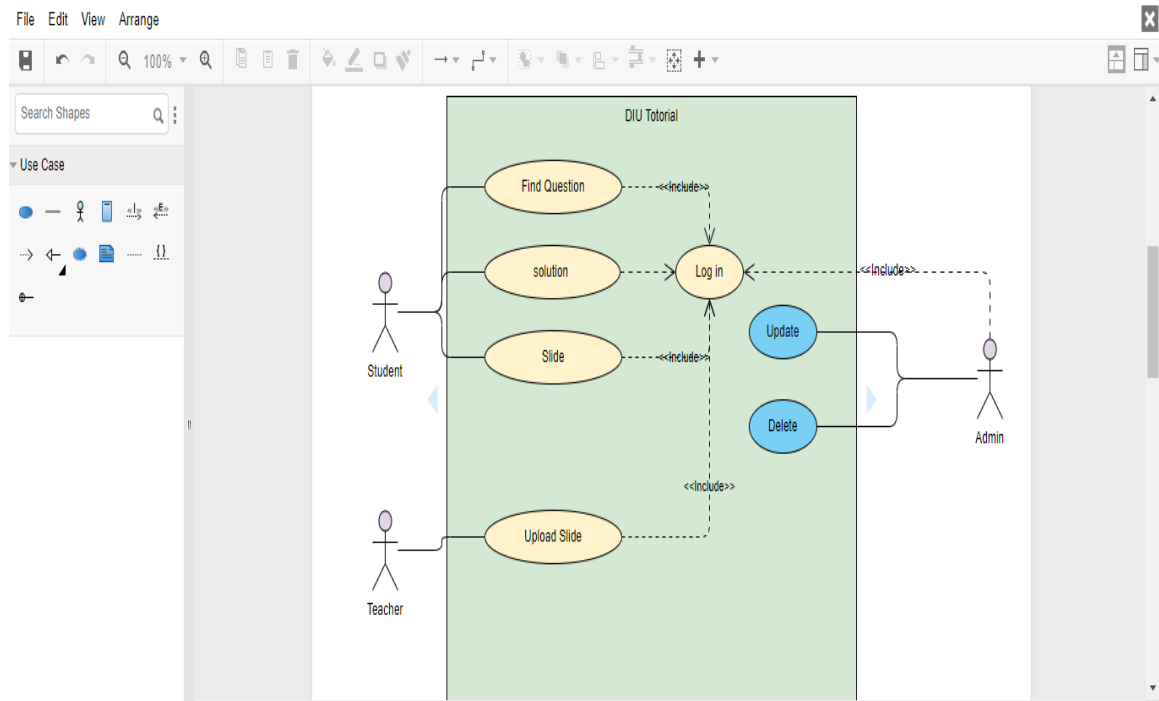


Fig 3.3: Use case Diagram

Main Success Scenario:

1. Students will be able to find the previous semester questions
2. Students will get solution too.
3. They can get useful slide of different sections.
4. Teachers can be upload the necessary slide.
5. Admin can delete or update anything.

<<Include>>

1. Everyone (Students, Teachers, Admin) has to be logged in.

3.3 Logical Data Model

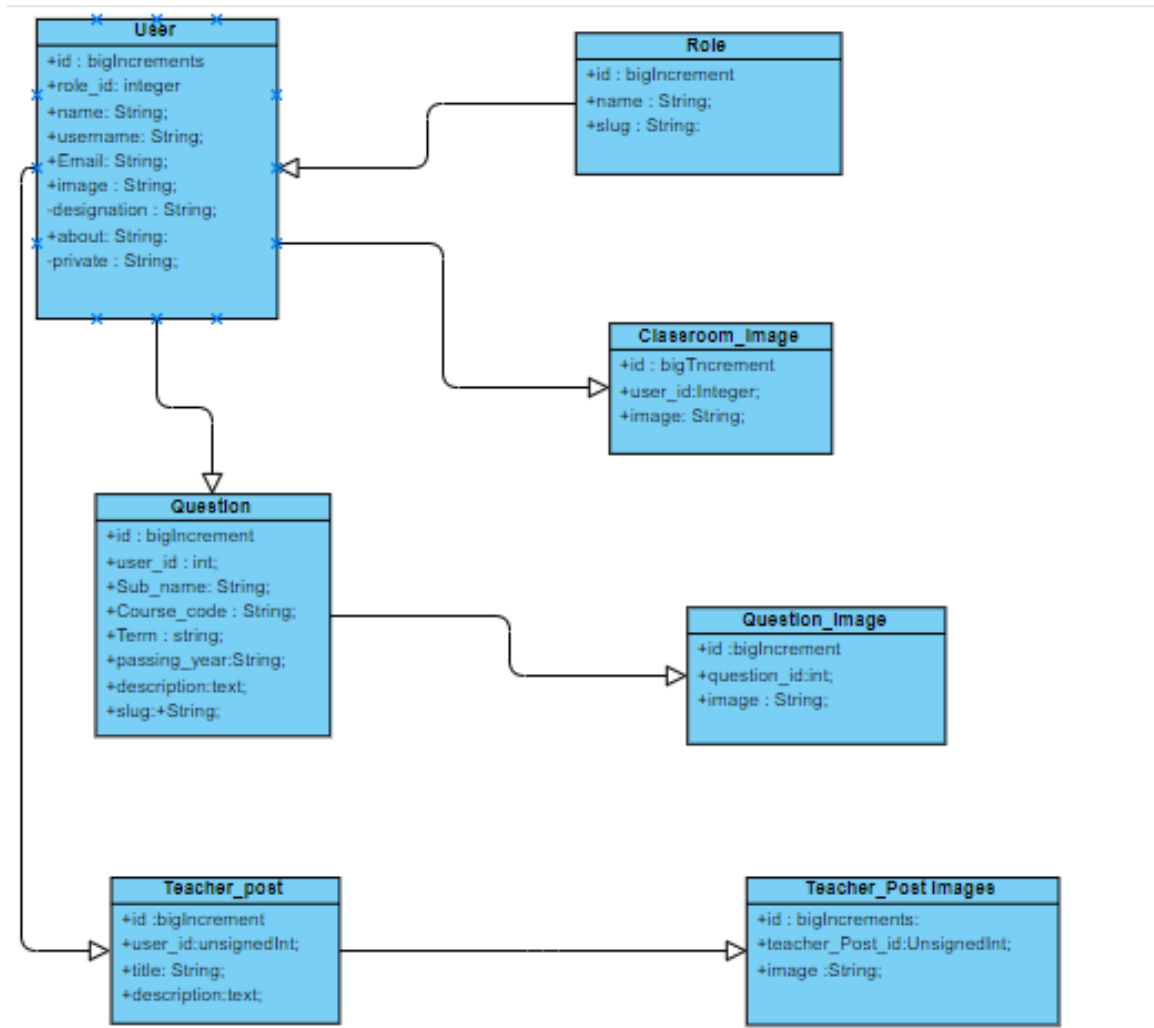


Fig 3.4: Logical Data Model

3.4 Design Requirement

To develop a project many requirements are needed. To study more and more to the DIU Tutorial our group members know our actual requirements of developing the project.

User requirements:

- User must have a valid email account.
- User must be a student or teacher.
- User must be registered.

Software requirements:

Server side :(Front-End)

- Operating system: windows.
- Tools: Netbeans

Server side: (Back-End)

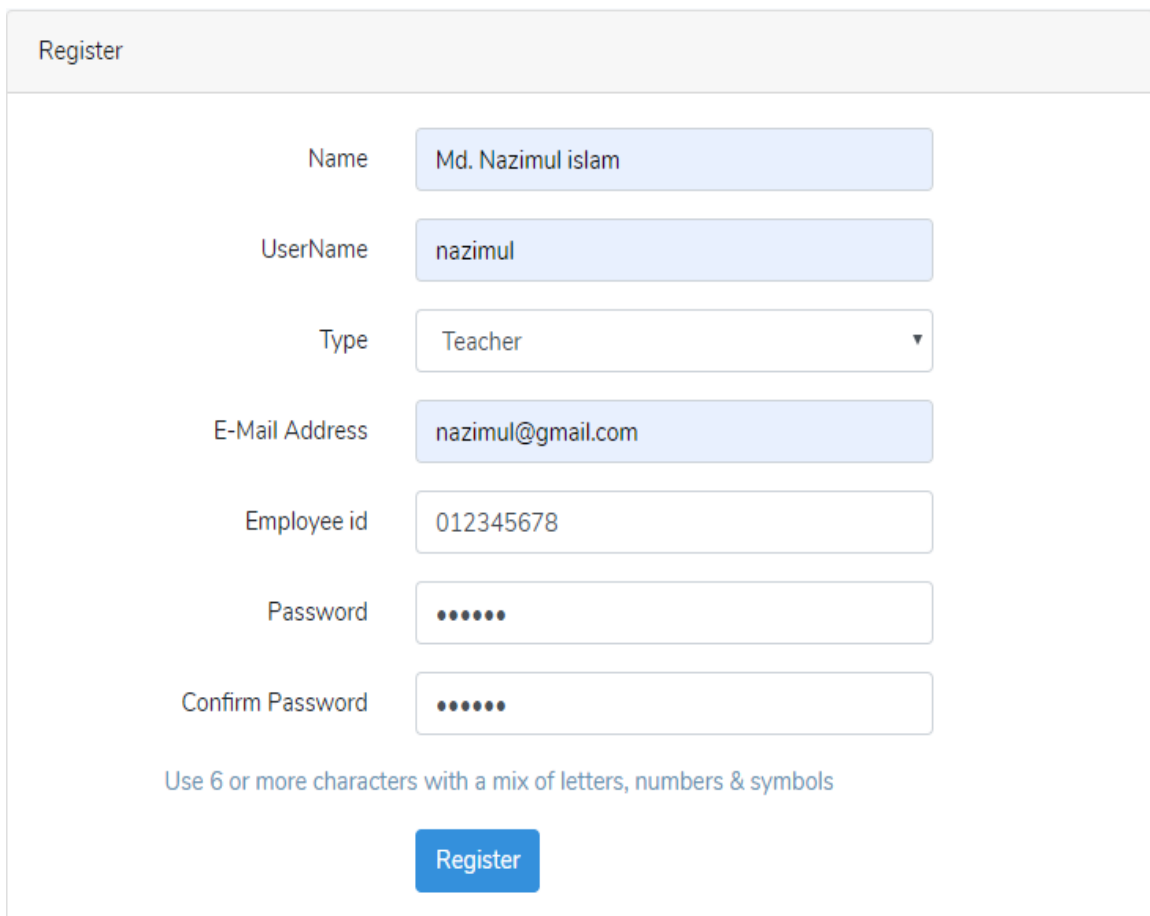
- Database: PHP, MYSQL

CHAPTER 4

DESIGN SPECIFICATION

4.1 Front-end design

This is front site here we are use bootstrap design for making a responsive web site. When we view this site any kind of device this site must be show responsive. We also use java script and JQuery for looking good this site. And here we also use font awesome for icon .



The image shows a registration form titled "Register". The form contains the following fields and values:

Field	Value
Name	Md. Nazimul islam
UserName	nazimul
Type	Teacher
E-Mail Address	nazimul@gmail.com
Employee id	012345678
Password	••••••
Confirm Password	••••••

Below the password fields, there is a note: "Use 6 or more characters with a mix of letters, numbers & symbols". At the bottom of the form is a blue "Register" button.

Fig 4.1: Registration

4.2 Back-end design

Major step to build in our DIU Tutorial is given below,

4.2.1 Netbeans IDE install

Netbeans IDE is an open source software that based on Windows, Linux. On the other hand XAMPP is an important software that it can handle multiple operating system without restart the computer such as Windows, Linux etc. It has easier software installation and infrastructure consolidation. To install Netbeans takes time to load the packages. There are some step to install Netbeans. They are,

- At first install the Netbeans and open it.
- After that allocate the folder.
- After that it can downloaded the required packages using internet, then start the virtual machine
- It will be take time to load the packages
- Finally it can be installed

4.2.2 XAMPP setup

XAMPP is a control panel . We are use the xampp for connect database in local server /phpmyadmin . how to setup xampp discuss bellow :

- Install the XAMPP control panel .
- Select component.
- Select location which folder we want to put this software.
- Then show the bitnami for xampp then we press next button
- Finally installed the xampp control panel.

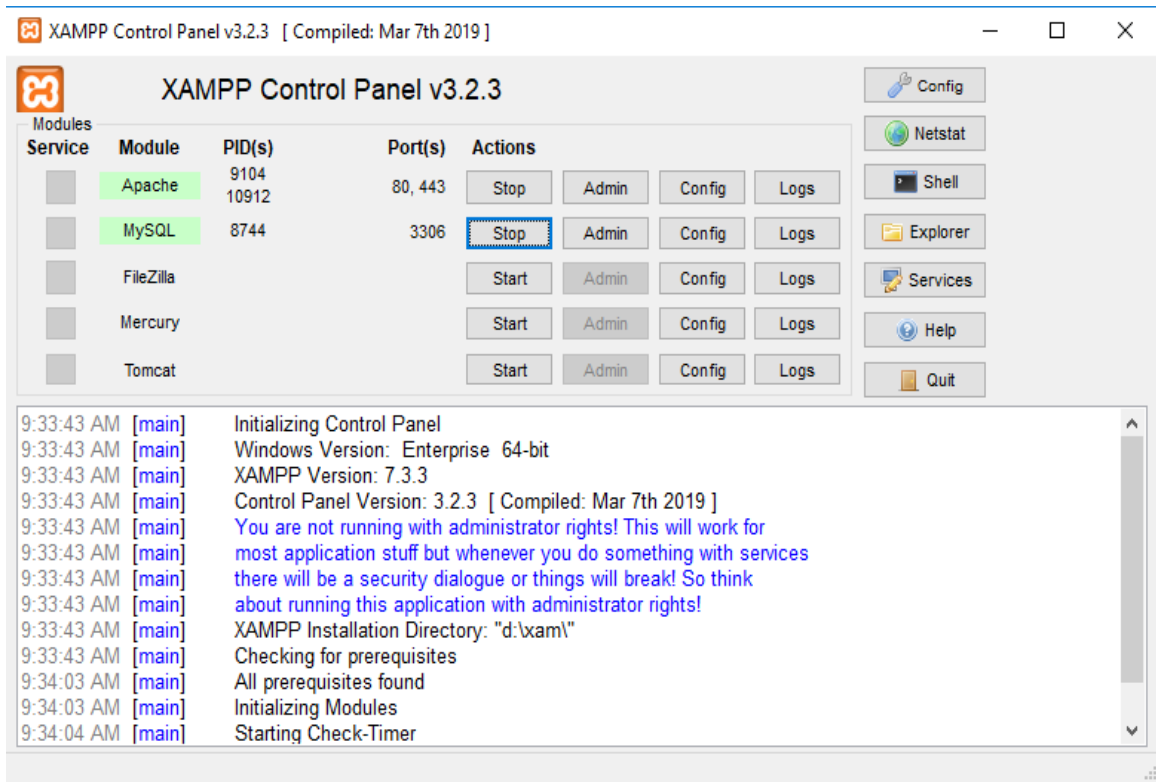


Fig 4.2: XAMPP setup

If the installation process well and everything is running smoothly, the control panel will open with black and blue text update at the bottom.

If the installation process not good and everything is running wrong then look at that red text! And there have some errors. If XAMPP control panel show error we checkout the apache and MySQL server and correction the port. Apache port is 80,433 and the MySQL server port is 3306. When all are good this server do work smoothly.

4.2.3 Database Setup

To work in the database we use MYSQL .We use phpMyAdmin instrument. MySQL is deals with a customer server display. The center of MySQL will be MySQL server, which handles the majority of the database order. MySQL server is accessible as an individual program for use in a customer server organized circumstances and as a library that can be connected into individual applications. MySQL works alongside various utility projects which bolster the organization of MySQL databases. Directions are sent to MySQL Server

through the MySQL customer, which is introduced on a PC. MySQL was initially created to deal with vast databases quick. In spite of the fact that MySQL is ordinarily introduced on just a single gadget, it can send the database to numerous areas, as clients can get to it by means of a few MySQL customer interfaces. These interfaces send SQL portrayals to the server and after that demonstrate the outcomes.

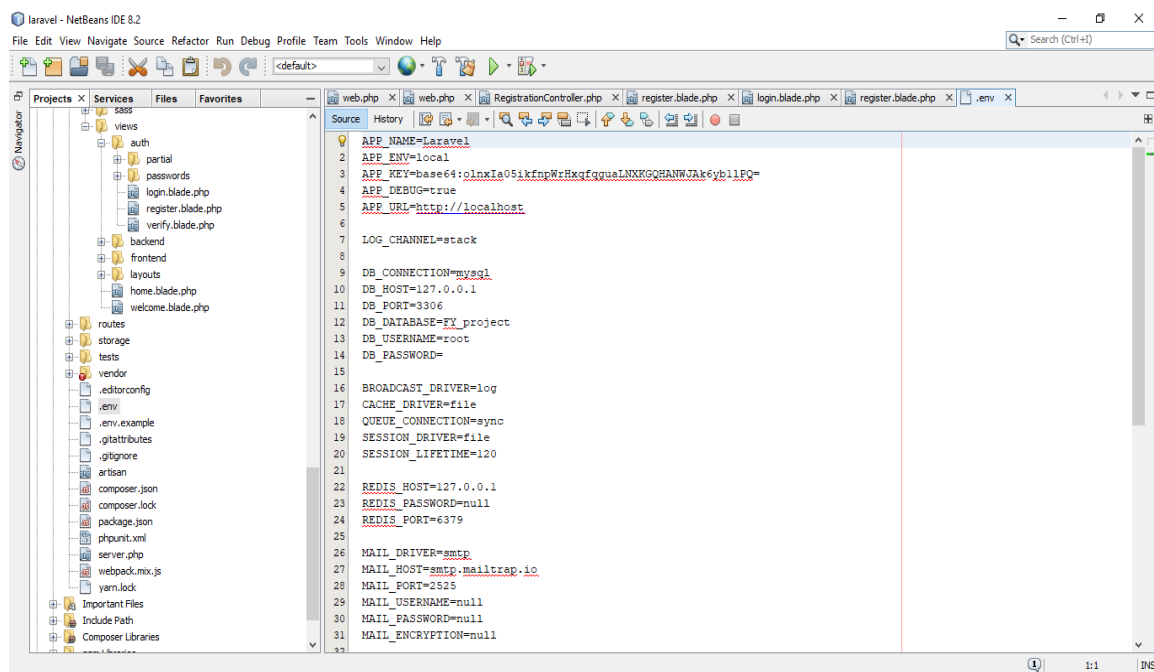


Fig 4.3: Database Connection

4.2.4 Laravel Setup

Laravel is a powerful framework. It's a more than powerful another framework because there use blade syntax it's do the more secure. When we do work in laravel framework must be need the composer. Composer is a tools for dependency management in php it allows to declare the libraries .It helps us installing updating various requirements for our projects such as laravel framework. If we create laravel project must be need composer power sell. We create project or create model and controller and also middleware must be

write command in composer power sell and when we often project in server site we use the php artisan command and 8000 is server site port in laravel framework.

4.3 Interaction Design and UX

In the first figure we show the student interaction in our project. And in the second figure we show the Teacher interaction of the project. And the last one we show admin interaction.

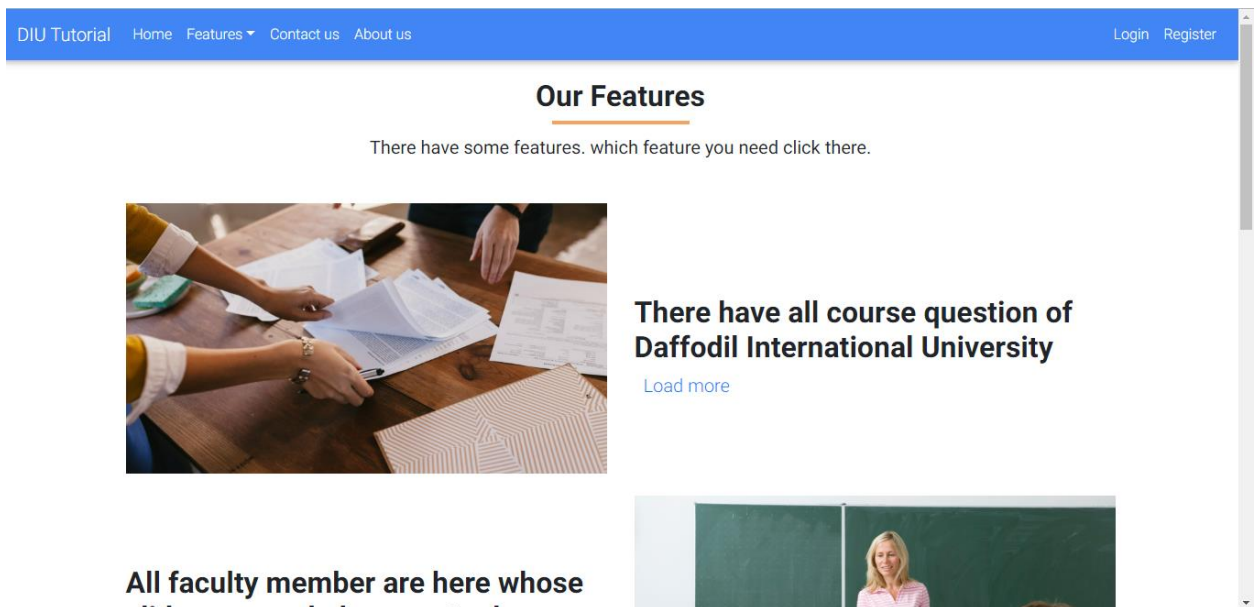


Fig 4.4: interaction with student

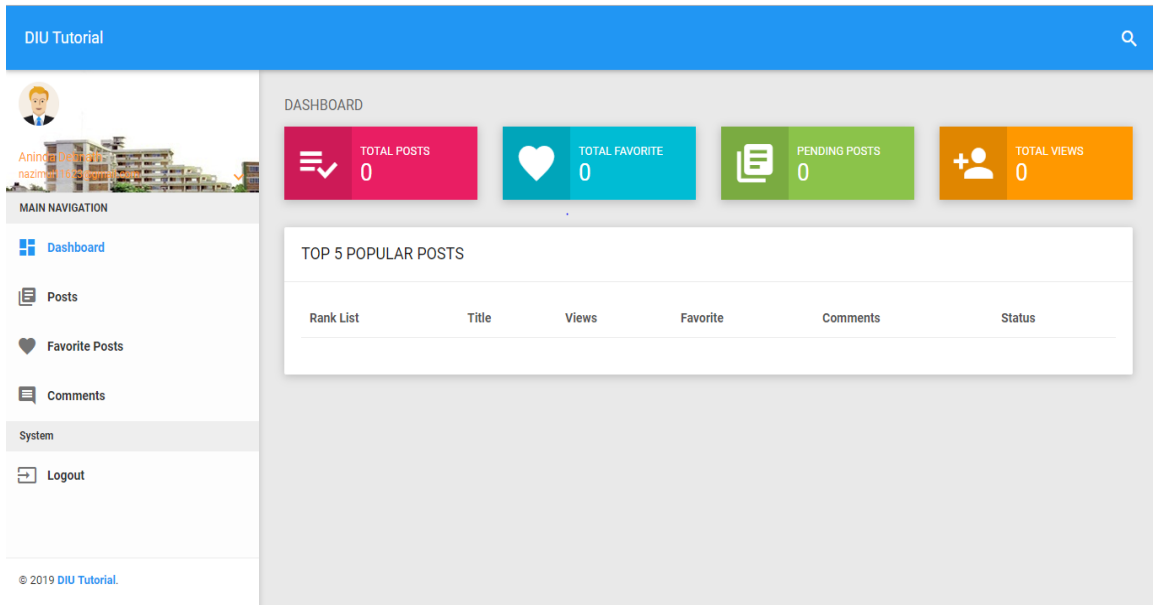


Fig 4.5: interaction with Teacher

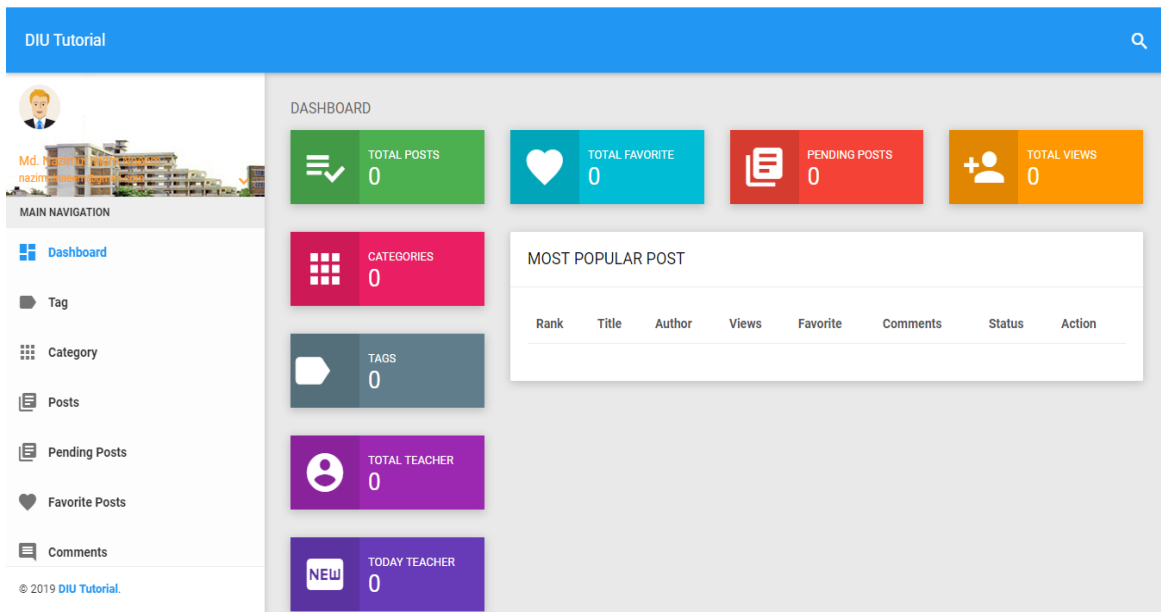


Fig 4.6: interaction with admin

4.4 Implementation Requirement

Basically our server configuration depend on xampp control panel .Now we showing the hardware and software requirement to develop this project.

Hardware Requirement:

Server side:

Processor: 4 GB

Hard disk: 50 GB

RAM : 2 GB

Software Requirement:

Server side:

Operating system: Windows

Tool: Netbeans

Back-End: Laravel, PHP, MYSQL

CHAPTER 5

IMPLEMENTATION AND TESTING

5.1 Implementation of database

We work MYSQL database. We use phpMyadmin tool. To connect our database in MySQL server we command

Php artisan make : model Models\user -mc

Php artisan migrate

After using this -mc command we see 2 php file Models folder in User.php and migration folder in create_user_table.php .

- create_user_table.php give input to the admin and then migrate in the database
- User.php can connect one to many and many to one connection on the user and admin .

To connect database and write localhost/phpmyadmin then through the MySQL server . admin can see the data .

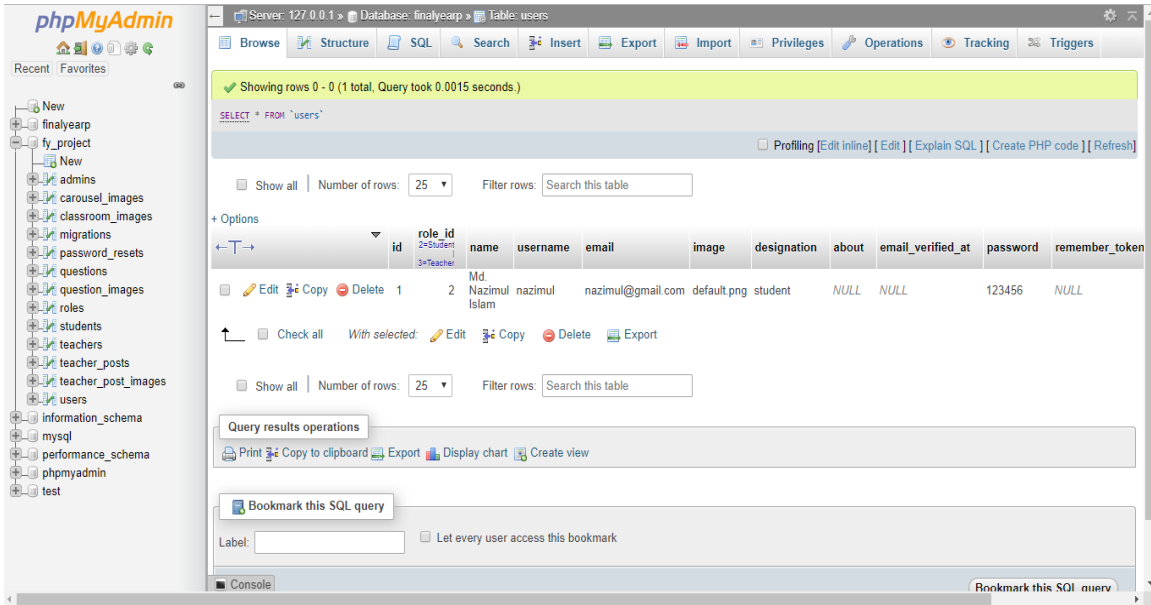


Fig 5.1: Database

Table-1: Student information table

Id	3
Role_id	2
Name	Md. Nazimul Islam
Username	nazimul777
Email	nazimul@gmail.com
Image	Default.png
Designation	Student
Password	% d&2j% f5\$dfi&jh\$kj% jh&1f% 7kd

Table 5.1: Student information table

In the following table we showing the student information that we save our user table in our database.

Table-2: Teacher information table

Id	2
Role_id	3
Name	Aninda Debnath
Username	aninda777
Email	aninda@gmail.com
Image	Default.png
designation	Teacher
Password	%d&2j%f5\$dfi&jh\$kj%jh&1f%7kd

Table 5.2: Teacher information table

In the following table we showing the teacher information that we save our user table in our database.

5.2 Implementation of front-end design

First we draw in a paper what we want to do in our project then we implement in our platform Netbeans. We use html css in our project and also we use bootstrap for responsive web site. And this site make attractive there we use java script and jquery. Bootstrap site have a lot of building card and layouts anyone can use this site and make project front end looking awesome.

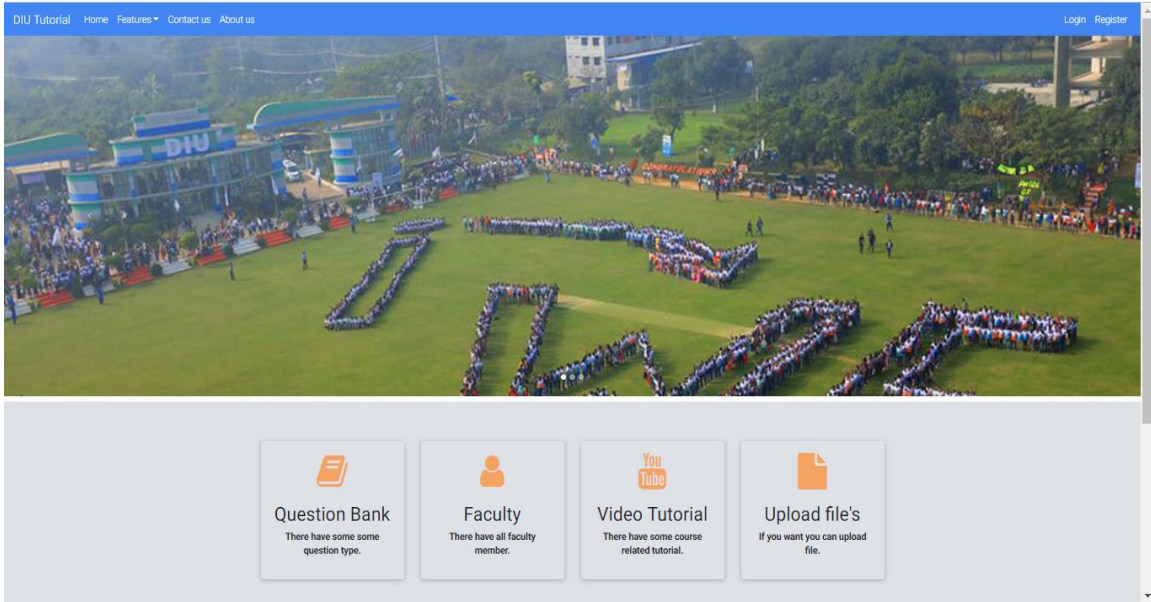


Fig 5.2: Features for users

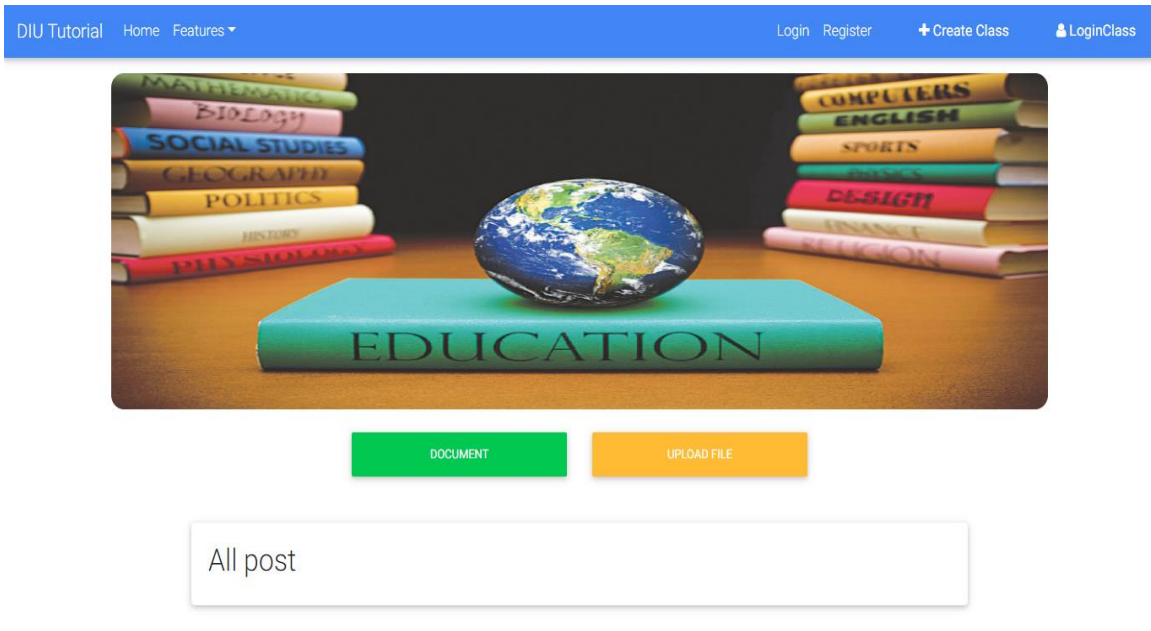


Fig 5.3: Features for Teacher

DIU Tutorial Home Features Contact us About us Login Register

Our Features

Register

Name	<input type="text" value="Md. Nazimul islam"/>
UserName	<input type="text" value="nazimul"/>
Type	<input type="text" value="Teacher"/>
E-Mail Address	<input type="text" value="nazimul@gmail.com"/>
Employee id	<input type="text" value="012345678"/>
Password	<input type="password" value="•••••"/>
Confirm Password	<input type="password" value="•••••"/>

Use 6 or more characters with a mix of letters, numbers & symbols

Fig 5.4: Students login/registration page

5.3 Implementation of interaction

In the following figure we showing how user interact our project. Student and teacher must be register this site. Otherwise they can't access .When student access this site student can able to see the faculty members and question paper , question solve and also classroom.

Register

Name

UserName

Type

E-Mail Address

Employee id

Password

Confirm Password

Use 6 or more characters with a mix of letters, numbers & symbols

Fig 5.5: Registration form

Login

E-Mail Address

Password

Remember Me

[Forgot Your Password?](#)

Fig 5.6: Login form

```

/**
 * Create a new user instance after a valid registration.
 *
 * @param array $data
 * @return \App\User
 */
protected function create(array $data)
{
    return User::create([
        'name' => $data['name'],
        'username' => $data['username'],
        'role_id' => $data['role_id'],
        'email' => $data['email'],
        'password' => Hash::make($data['password']),
    ]);
}
}

```

```

public function __construct() {
    if (Auth::check() && Auth::user()->role->id == 1) {
        $this->redirectTo = route('admin.dashboard');
    } elseif (Auth::check() && Auth::user()->role->id == 2) {
        $this->redirectTo = route('user.dashboard');
    } else {
        $this->redirectTo = route('teacher.dashboard');
    }

    $this->middleware('guest');
}
}

```

```

protected function validator(array $data)
{
    if($data['role_id'] == 3){
        return Validator::make($data, [
            'name' => ['required', 'string', 'max:50'],
            'username' => ['required', 'string', 'max:40'],
            'role_id' => ['required', 'boolean'],
            'email' => ['required', 'string', 'email', 'max:255', 'unique:users'],
            'employee_id' =>'required',
            'password' => ['required', 'string', 'min:6', 'confirmed'],
        ]);
    }else{
        return Validator::make($data, [
            'name' => ['required', 'string', 'max:50'],
            'username' => ['required', 'string', 'max:40'],
            'role_id' => ['required', 'boolean'],
            'email' => ['required', 'string', 'email', 'max:255', 'unique:users'],
            'employee_id' =>'nullable',
            'password' => ['required', 'string', 'min:6', 'confirmed'],
        ]);
    }
}
}

```

Here we showing registration and login code. There have a condition we give the role value admin for 1 student for 2 and teacher for 3. When student logged in automatically through the student dashboard and teachers through teachers dashboard and admin also show admin dashboard.

5.4 Testing implementation

Here we showing the testing implementation of registration process in our project. When teacher login through teacher's dashboard. Teacher can see faculty member, and teacher can create classroom, teacher can upload helpful file. When student log in through student dashboard. Student can access teacher's classroom, find questions and tutorial.

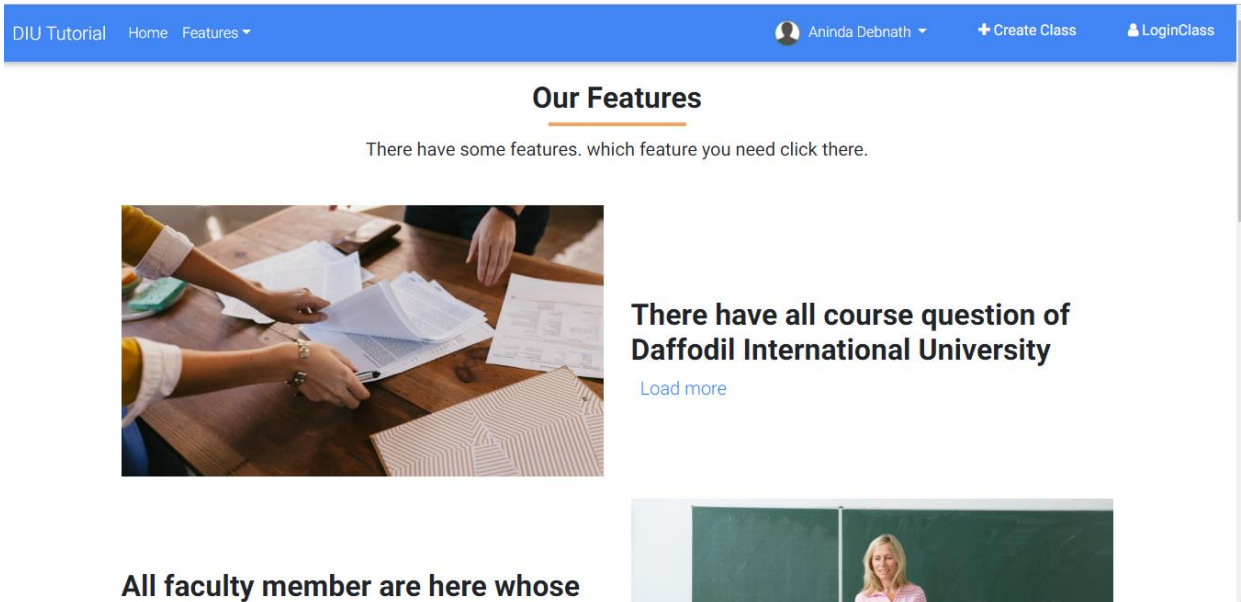


Fig 5.7: Features for faculty members

5.5 Test Result and Report

After developing our project we are able to run this project and test the exact outcome with different input. when we run our project we give different input to check this project. And we can say that we are successful to our project and it runs without any error and it gives us exact value which one we want before starting the project. Now our aim with this project is in future we will develop our project and will add some important feature to make this project very rich and effective. For this we will work on front end and also work in back end code. But now for this we are happy with our project and with the success which one we searching from last year to till now.

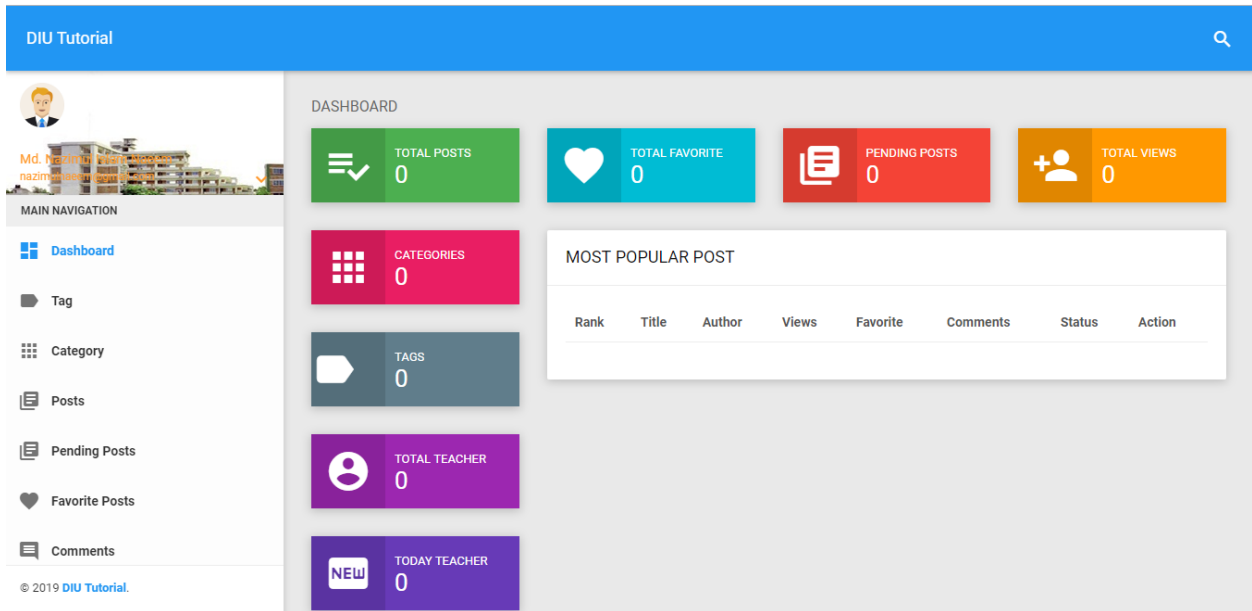


Fig 5.8: Dashboard

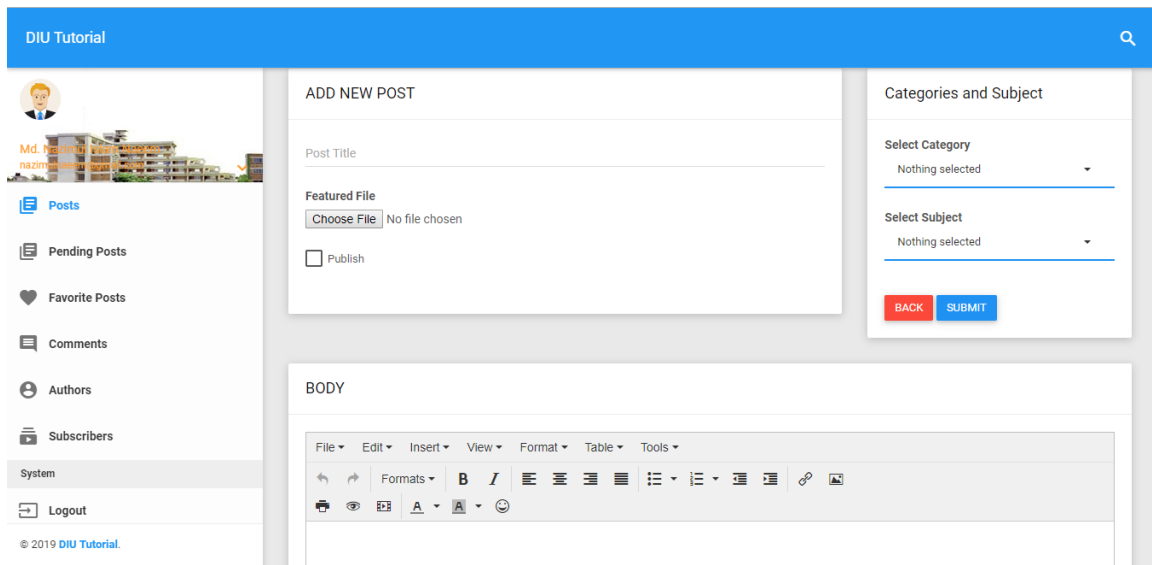



Fig 5.9: Update page

DIU Tutorial 🔍



Md. Nazimul Islam Naeem
nazimulislam

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2	Post Testi...	Aninda Debnath	0	Pending	Published	2019-04-14 00:00:00	👁 ✎ 🗑
ID	Title	Teacher		Is Approved	Status	Created At	Action

Showing 1 to 2 of 2 entries

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Fig 5.10: Remove/delete page

CHAPTER 6

CONCLUSION AND FUTURE SCOPE

6.1 Conclusion

In our project DIU Tutorial will be provides previous semester question, solution of that question and some helpful video tutorial and user get this without any difficulties. Most of all students searching question here and there before exam. In our site student can find easily every semester question.

6.2 Future Scope

- We want to add routine option.
- Also add Notification option when teacher create a post then go through a notification in student dashboard.
- Add chat board to communicate teacher and student directly.
- Student also can create post and this post checked in admin if admin want approved this post and then display it otherwise do not display this post.

REFERENCES

[1] <https://www.hostinger.com/tutorials/how-to-use-xampp-wordpress/>

[2] https://online.visual-paradigm.com/subscribe.jsp?r=demo_callback.jsp&edition=ex

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