FINAL YEAR PROJECT REPORT ON "WiseMonkey"- Website for education and preparation

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This report that is presented in this document, are the requirements for the degree of Bachelor in Science in Computer Science and Engineering.

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Approval

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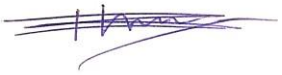

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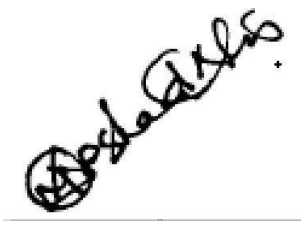

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We hereby declare that, this project has been completed by us under the supervision of Shah Md. Tanvir Siddiquee, Assistant Professor , Department of CSE, Daffodil International University. We also declare that neither this project nor any part of this project has been submitted elsewhere for awards of any degree or any research or diploma.

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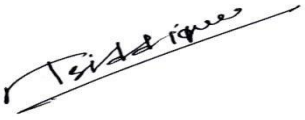

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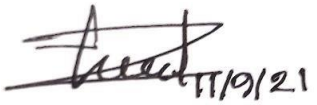

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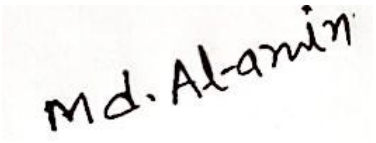

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We would like to give our respect and thankfulness to Professor Dr. Touhid Bhuiyan, Head of the Department of CSE, for his kindness and for helping us to complete our project and also to the other faculty members and the staff of the CSE department of the University.

We would like to thanks our friends in the university who also helped us in certain ways in completing the project.

Lastly, we deeply admire the constant support and patients of our parents.

Abstract

Our project named “WiseMonkey”- A site of education and preparation, is a web based project that we have created to cope up with the online study system. As we all know that my world has been sevearly effected by covid-19 and its not safe for us to leave my house and go out. But even in this state students are not falling behind as most of the schools colleges and universities have moved to online classes. The students are progressing further but it is not easy as they can not get any other tution as they used to get when everything was normal because they can not leave the house . So for this situation I have come up with this idea where the students can take preparation for their exam from this website for their exams. Students from different classes can attend exams provided in the website and prepare themselves for their upcoming exams.

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CHAPTER-01

INTRODUCTION

Introduction

The website or the project that we are working on is to help the students that needs preparation for their upcoming exam. Not Just school or college or board exams but this project/website will also include job exam preparations for many sectors. In this current COVID-19 situation we don't have any idea when the situation will be normal and all the coaching centers will reopen or the institutes that helps students prepare for certain exams will reopen. In this situation we found this idea of project very useful which can be a great way to help the students that needs help with exam preparations. we have given the website/webpage a name which is "WiseMonkey". There will be an user interface and an admin interface. In the admin interface we can control all the examination times, subjects and platforms. In the user interface the users which are the students will be able to find what they need or which exam they need to attend or which exam questions they need to practice for their preparation easily. And they will also be able to find what program they need to attend to finish their preparation for their upcoming exams.

Motivation

Many students that needs to prepare themselves for their upcoming board exams or job exams or admission exams can use this site as a platform to study and attend various exams that will help them to check their capabilities. As we all know that in this current situation of the world students are the most effected ones because they can not leave their house to go to any tution institute which will help them to prepare for the exams because they are closed due to this pandemic. But schools colleges and universities are moving themselves towards online classes so that the students progress are not hampered. But the students are not getting enough help as they used to get when everything was normal. So judging by this situation I have come up with this website that can help the students in this case.

Objective

The objective if this project is to help the students that need to prepare themselves for their upcoming exams.

The key objectives of this project is given below :

- Create a platform where students can attend to exams that will help them to understand how much they have progressed.
- To prepare students for board exams , admission exams or job exams online.

Expected Outcome

we expect this website to have an impact on the students and how they are preparing them for the online education system. Because of the pandemic don't know when this situation might become normal. But as long as it is like this the education system has shifted online and schools, colleges and universities are giving education online. In this situation students need a place to check how much prepared they are for their exams but since the tution centers are closed due to this pandemic they are not able to verify their capabilities. So in this website they can attend to various exams and see just how much prepared they are.

Report Layout

In chapter 1 we will discuss about the basic concept of the project "WiseMonkey".
In chapter 2 we will discuss about the back ground of the website.
In chapter 3 we discussed about the requirement specification of the website.
In chapter 4 we will discuss about the design specification of the website.
In chapter 5 we will discuss about the implementation and testing of the website.
In chapter 6 we will discuss about the impact on the society, environment and sustainability
In chapter 7 we will discuss about the conclusion and future scope of this project also the limitation and the improvement that we want to do.

CHAPTER-02

BACKGROUND

Preliminaries

Bangladesh is now slowly progressing towards a digital era. Bangladesh in rapidly advancing in technology with all the students now using smart phones and devices. As a result , a website like this can make an impact on the students in their daily life as they can use this website to prepare themselves for their exams as they used to do in many tution centers which now they can not because of this pandemic.

Related Works

There are very few websites like this. The most effective one that we have seen is an Indian website named “Unacademy”.

Unacademy

It is a website in India. Unacademy is an website that is used in India in this troublesome situation to help Indian students to progress easily in their academic exams in this online education system.

Advantages:

Unacademy has a lot of features such as online classes , exams, solves, and specific courses.

Disadvantages:

As this is a website not much can be done because this is a sort of online tution center. Students may not be able to take live classes but they are provided with the best content and courses to help them improve.

Comparative Studies

There are many type of website in the world that deal with courses and exams for the students. But we still don't have any major website like this in our country. That is why we have made this website to be the first in our country to perform all the tasks necessary. This website will help the students to take their preparation without leaving the house which is essential is this pandemic.

Scope of the Problem

We tried to make this as unique as possible. But this idea is not unique. But for this country it is something new. we did face some challenges in the long run. we tried to visit many tution centers but we could not because they were closed and we also tried to do a survey among the students of schools and colleges but there was no way of doing that because they are closed too because of this pandemic. So gathered the little information we could and used it to develop the website

Challenges

we faced many challenges while making this website. we were not able to gather information as all the institutions were closed due to the pandemic. we also could not do any survey for students information because all the classes had already shifted online and there was no need for the students to leave their house and come to tution centers. we was unable to gather much information so we had to work with the little information we had.

CHAPTER-03

REQUEREMENT SPECIFICATION

Requirement Collection and Analysis

Gathering information is very important. we talked with few of the tution centers an gathered information of what needs to be added to the website and what not. Because of the pandemic we could only gather limited information that we as able to use to develop this website.

Resource Used to Develop the website

It is critical to understand the all the requirements to improve the project and to build the basics of this website. Some planning advances are the essential needs. A few stages need very careful handeling. It will be expected for the website to live up to the expectation of the students. The requirements are all up to the expectations of the user.

Resources Used to Develop the Website

The development process of this website has to be done step by step. After working on a portion, we have to improve another portion of the website. That is how the development stage of this website goes on. Doing all the development and implementation of all the resources are the most critical part.
For creating this website, the resources we needed are given below -

1. VScode
2. HTML
3. CSS
4. php
5. XAMPP
6. PHPmyadmin
7. A computer

Use Case Modeling and Description

Use case diagram for this website is very important. Use case model is a string of actions that a user performs step by step. The use case is usually a mis of various separate systems to achieve a certain goal. This website has one user that is the students. So, the website must be optimized at its fullest at all times.

Let's discuss about our users. If you are a student then you have to login or sign up first. Then after logging in you can attend moc-tests directly or choose a exam course stream that satisfy you.

The use case model of this project is shown below:

User

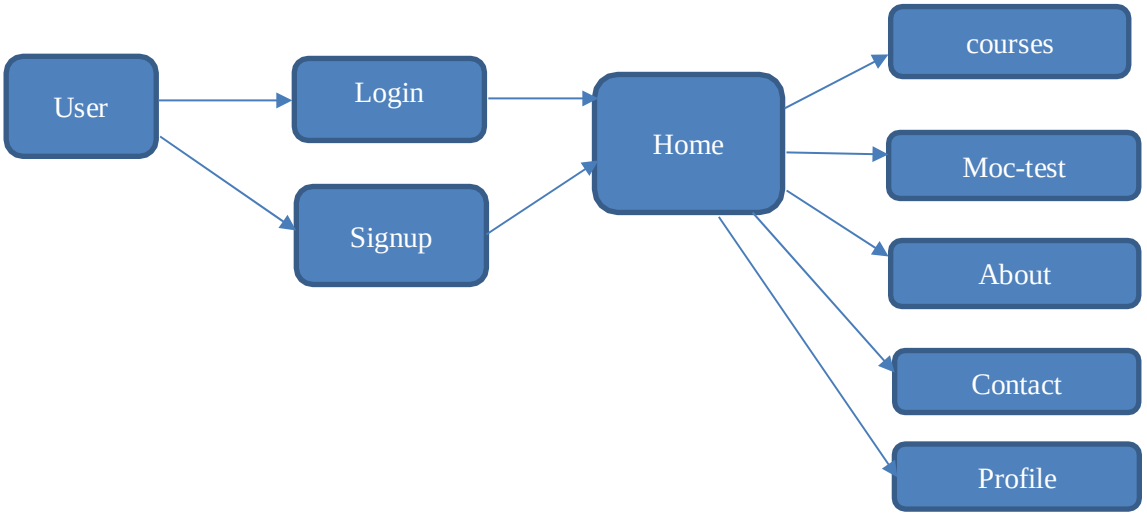

Fig-3.3- use case diagram

Data Flow Diagram / Logical Data Model

In this diagram user uses the website that has some user friendly features. In this website all information are stored in database.

Fig 3.4- Data Flow Diagram

ER-Diagram

ER diagram shows the interactions between the user and the website functionalities. It is a data model that shows how a user will utilize the website functions. Doing all the connecting elements between the user and the website. The following diagram show all the interactions in my website that the user will have.

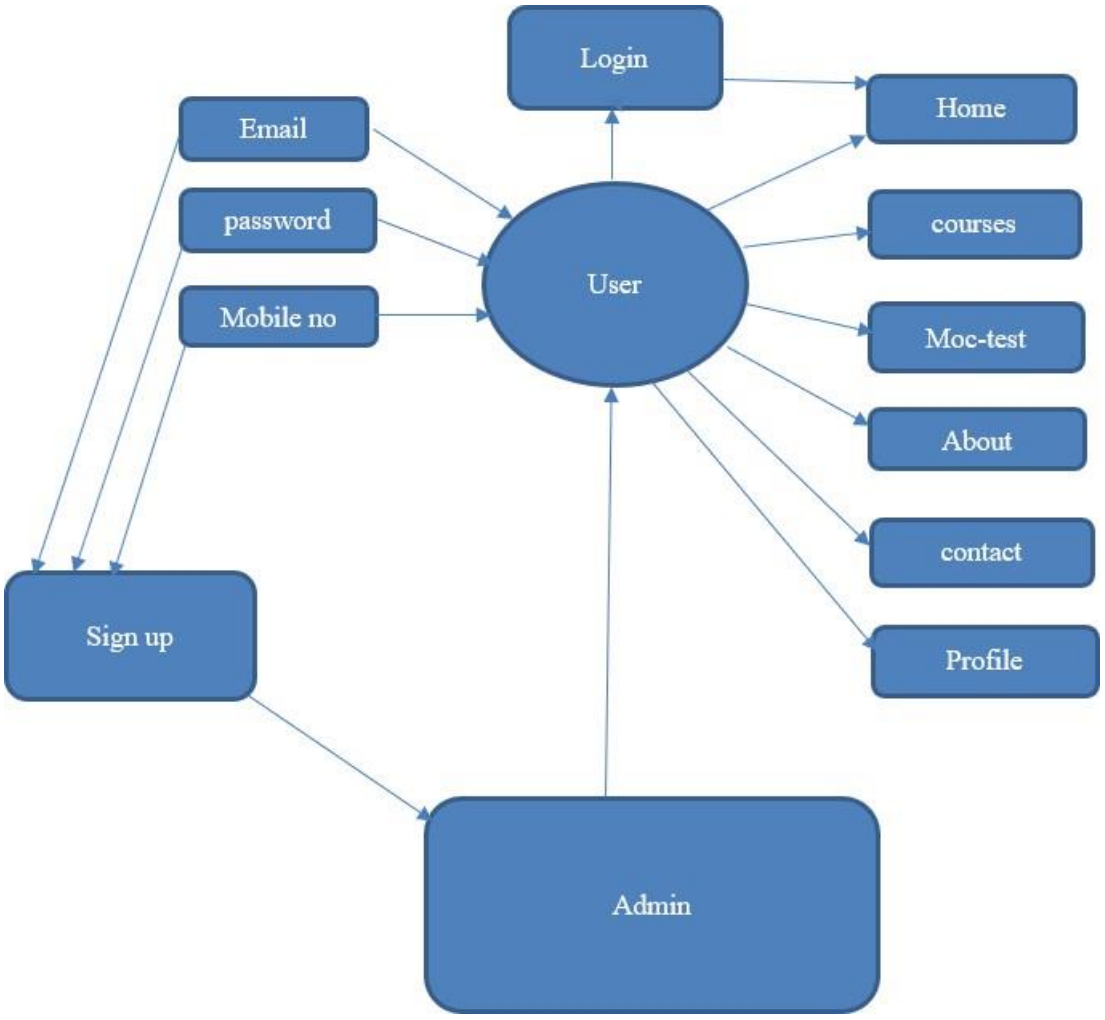

Fig 3.5- ER diagram

Design requirements:

Design requirements for the user :

1. User panel
2. User Registration panel
3. User login panel
4. Moc-test panel
5. Courses panel
6. Website Management

CHAPTER-04

DESIGN SPECIFICATION

In this website we will discuss about the front end and the back end development of the website.to create this entire website, we used CSS for front-end design and HTML, PHP and Bootstrap for back-end design.

Front-End Design

Front end design of this website is very important because this is what the users will see eventually. This website has to be very compact and very simple at the same time as it needs to be very beautiful and interactive and simple to use at the same time.

Front-End Design for Developer

The developer will be able to control total management system for the website and create user (from database), set up courses and notify the users. There is no admin panel as the admin can access the database as the owner and make changes by inserting or removing data and by programming in the back-end can control everything.

Front End Design For User

The user will be able to create an account and manage their account. After creating they can login to their accounts and choose what intrests them.

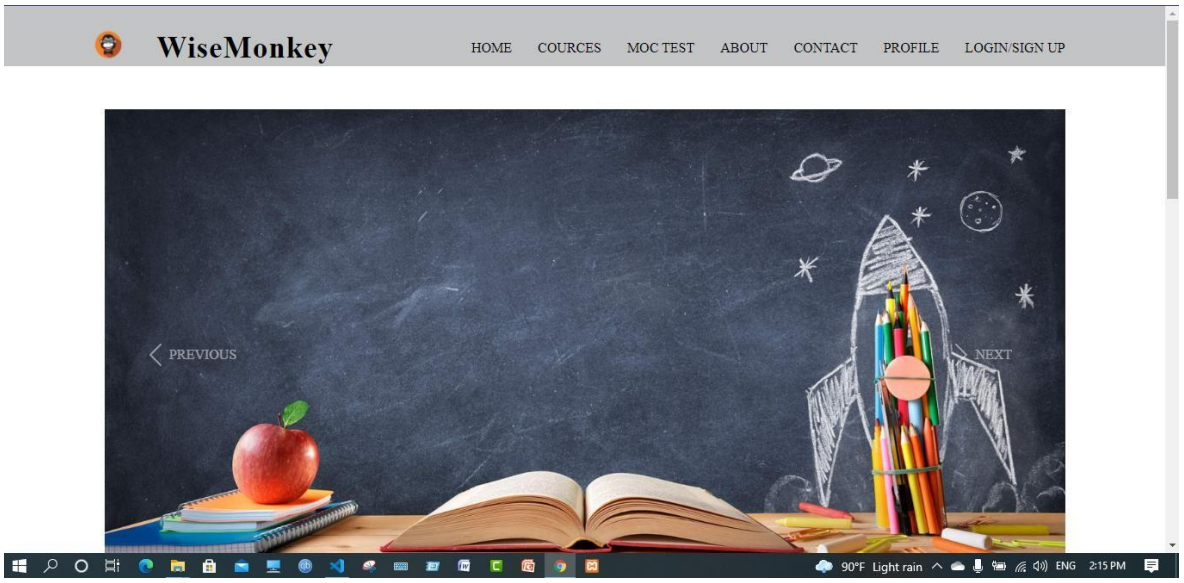

Fig 4.1- front end design

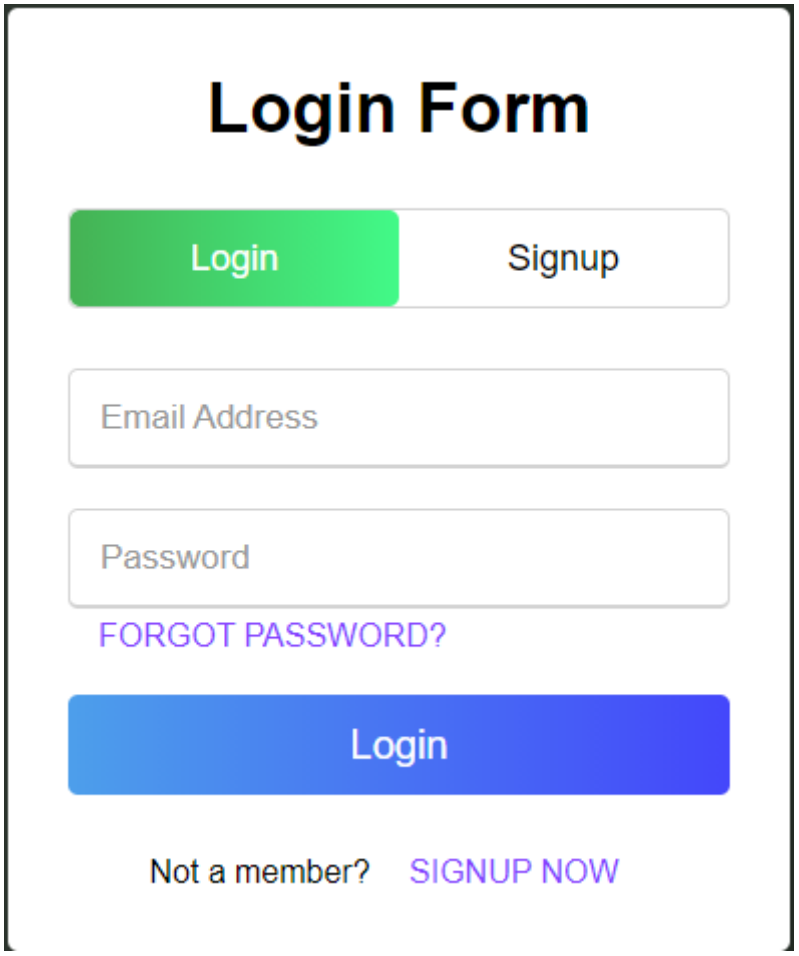

Fig 4.2- login page

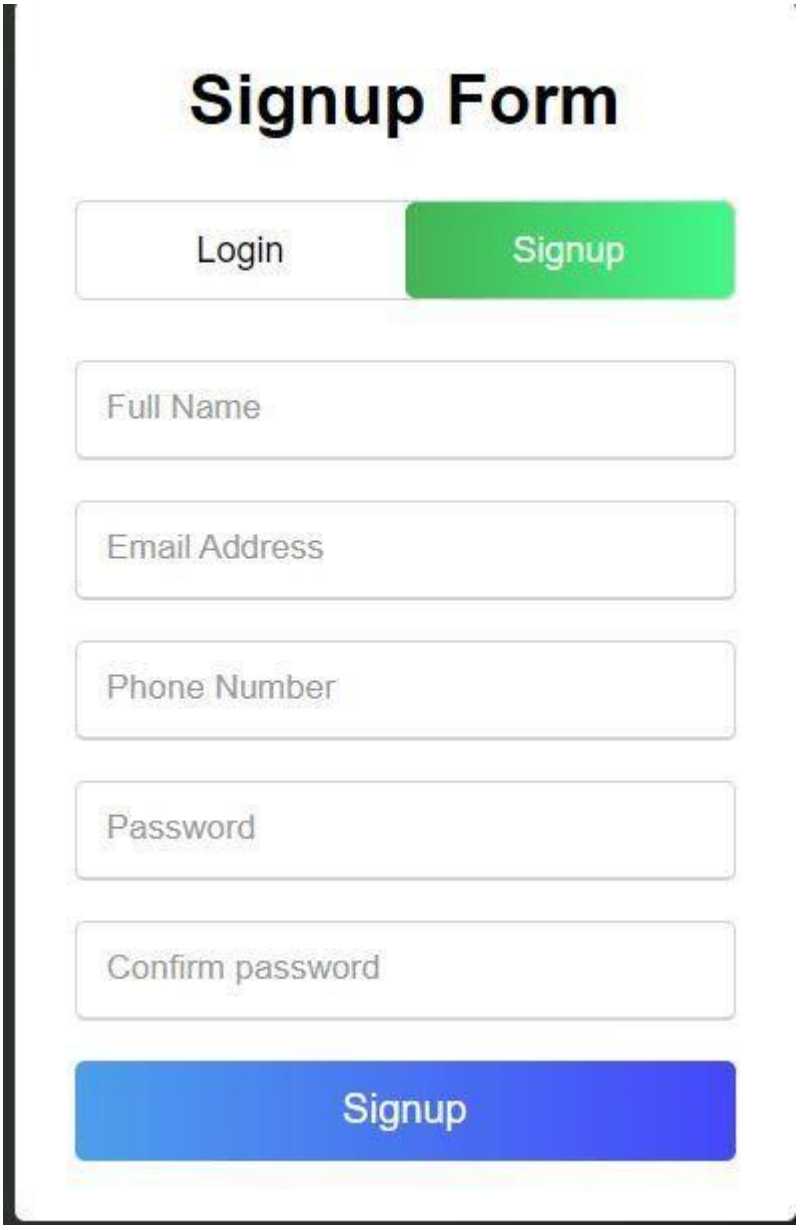

Fig 4.3- Sign up page

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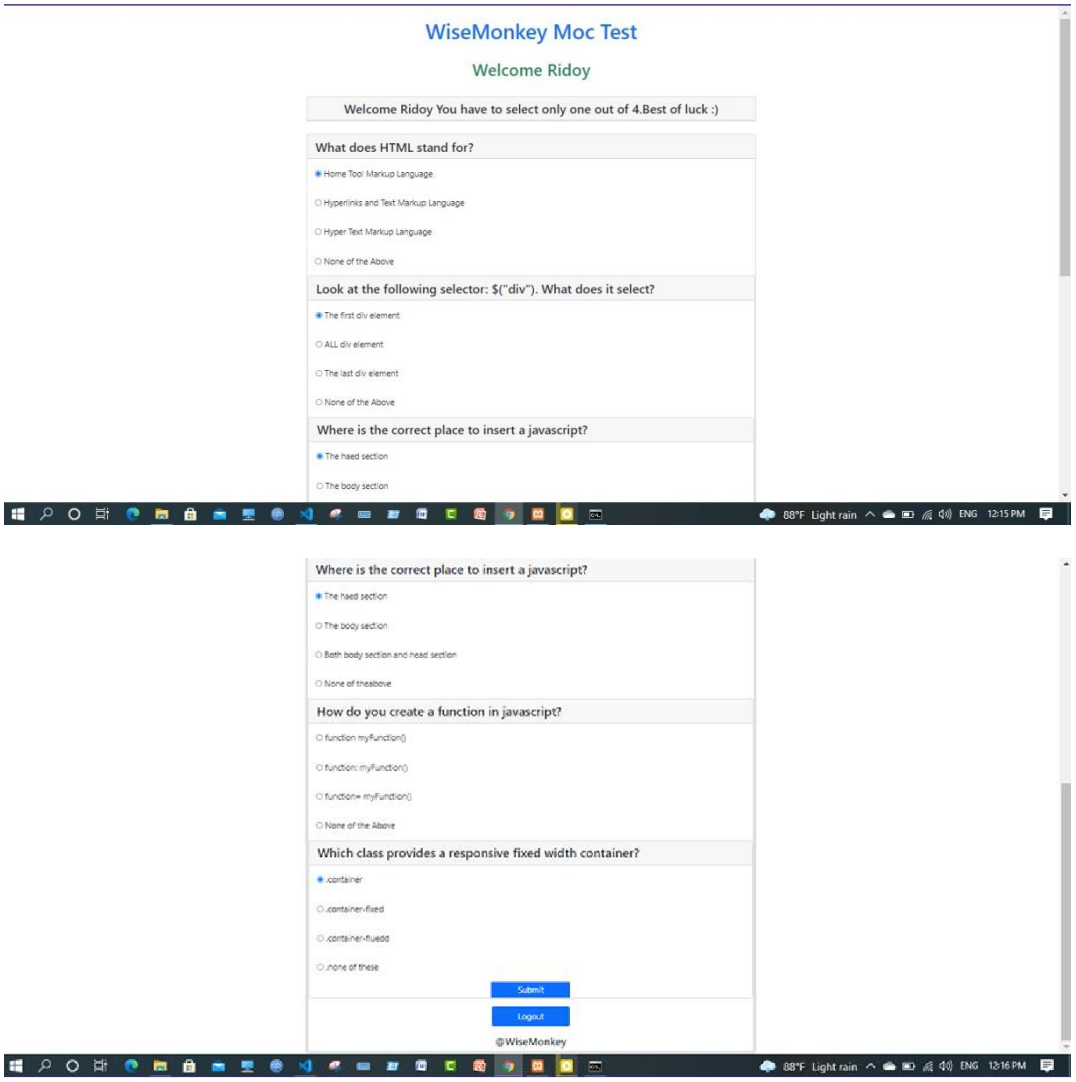

WISEMONKEY QUIZ WORLD

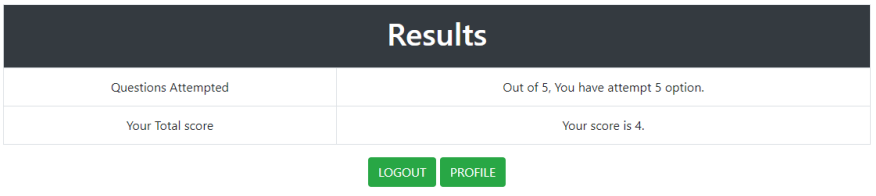

Fig 4.4- moc-test area

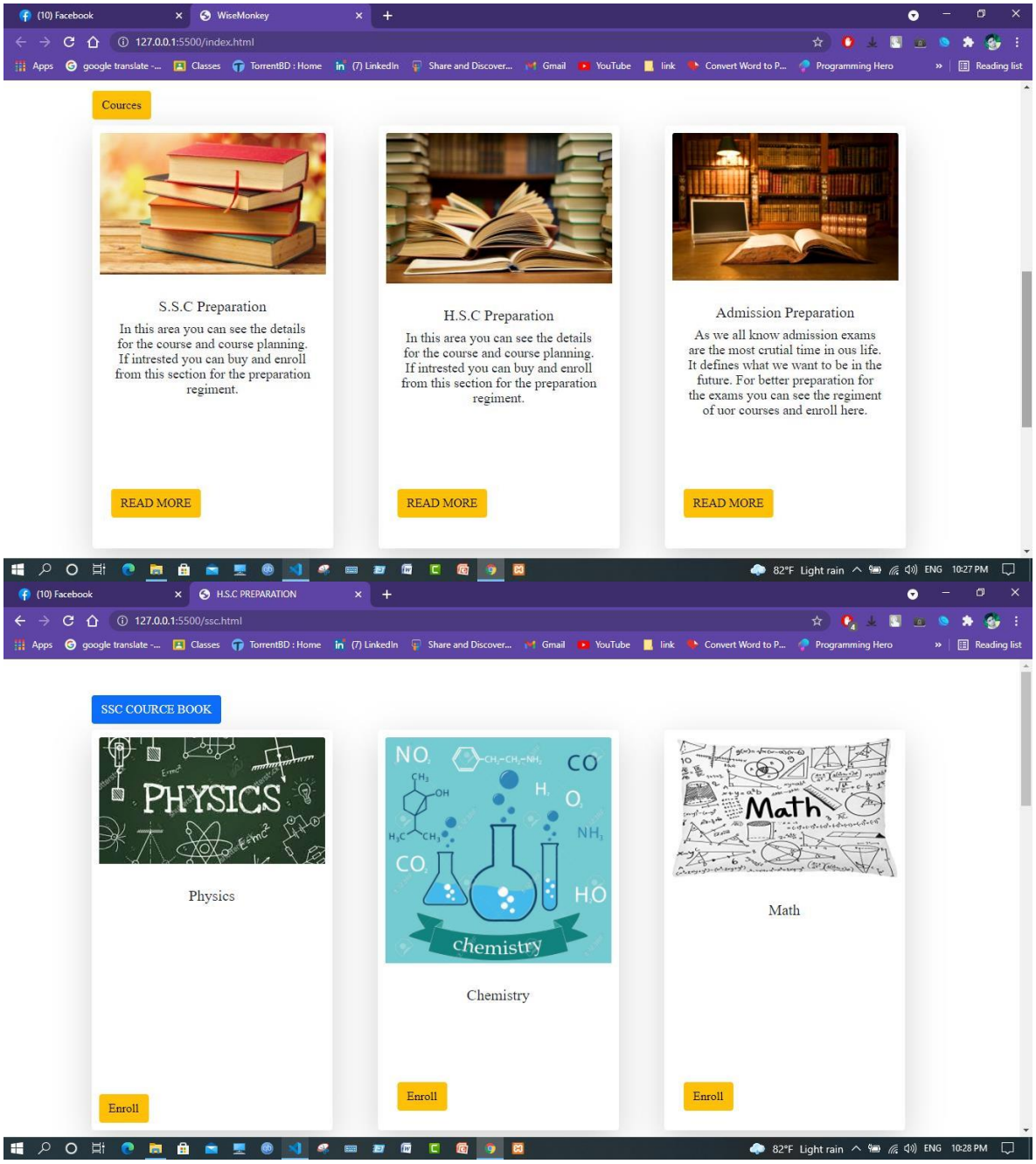

Fig 4.5- courses are

Back End Design

The back end deign is absolutely not accessible for the users. Only the developer can interact with the back end. When the user inputs the data it is processed in the back end. This is why the back end is considered as the structure of any website. In my website, the back-end is accessible only by the developer. We implemented the back-end by using HTML, PHP and Bootstrap.

Interaction Design and UX

Interaction design is a control that observes the interaction between the user and the user interface. It is an expressive relation between the user and the website.it is simply a structure that connects with the user and give them a pleasant experience through the website.

UX (user experience) means how much user friendly a website is. It also defines what improvement it needs. Based on it the developers can understand how to improve and maintain their website. For my website it is also the same and we have tried to give the user as friendly interactions with the website as we could.

Implementation Requirements

First, we developed the back end and the front end for the website. We need a compiler and a programming language that is HTML, CSS, PHP for all the developments that is needed.

And lastly we need a database. Which we created using the XAMPP software and PHPmyadmin.

It is a reactive website so it can be used in mobiles and computers.

CHAPTER-05

IMPLEMENTATION AND TESTING

Implementation of the Database

Here we will discuss about the database implementation for the website and also show the data sheet that we gathered through testing.

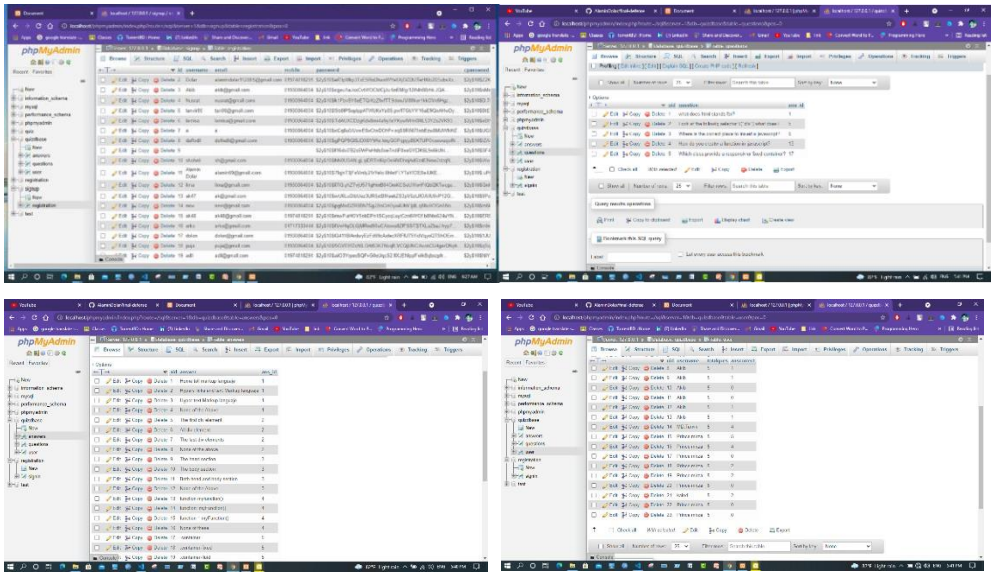

Fig : 5.1- database

Implementation and Interaction

In this section we have showed the implementation of the front page that the users will see after they enter the website. This is where the user can login or signup for the website. This is a sample of the front end design done on VScode using CSS.

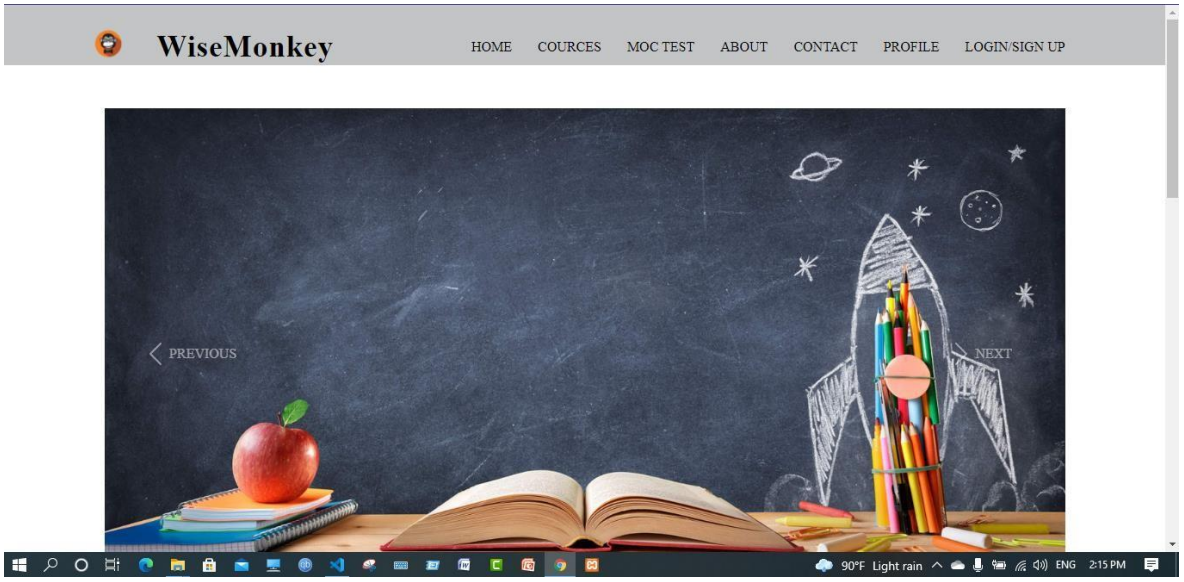

Fig 5.2- front page

Implementation Testing

In this section we will test our website as an user and as an admin to verify the data.

Testing Data as the User

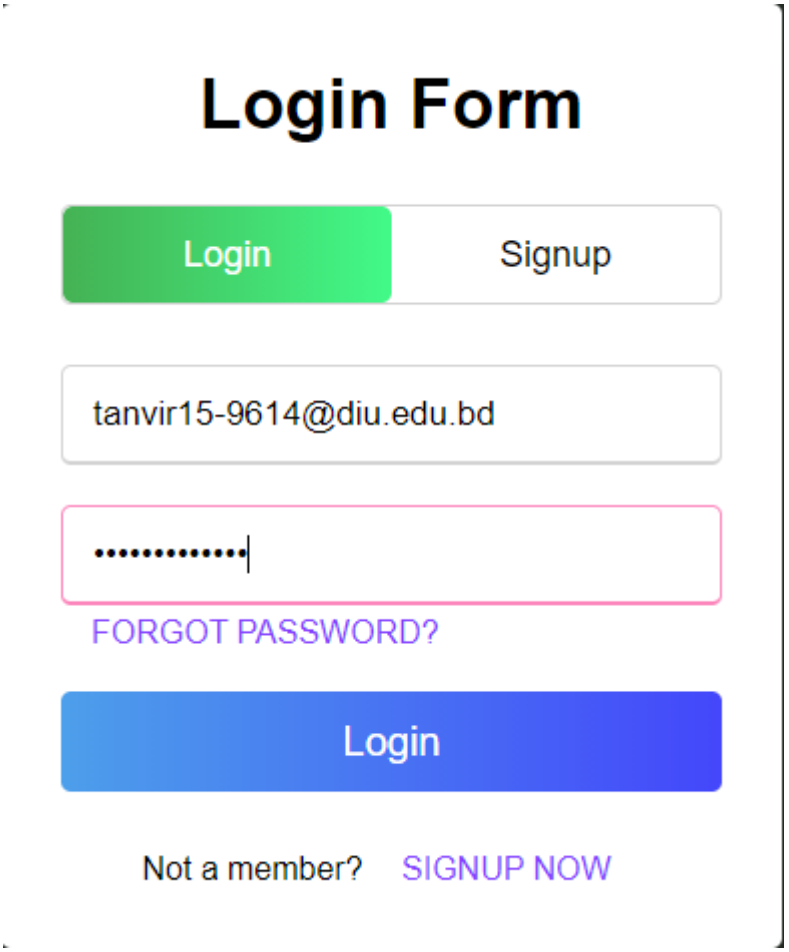

Fig 5.3- login input

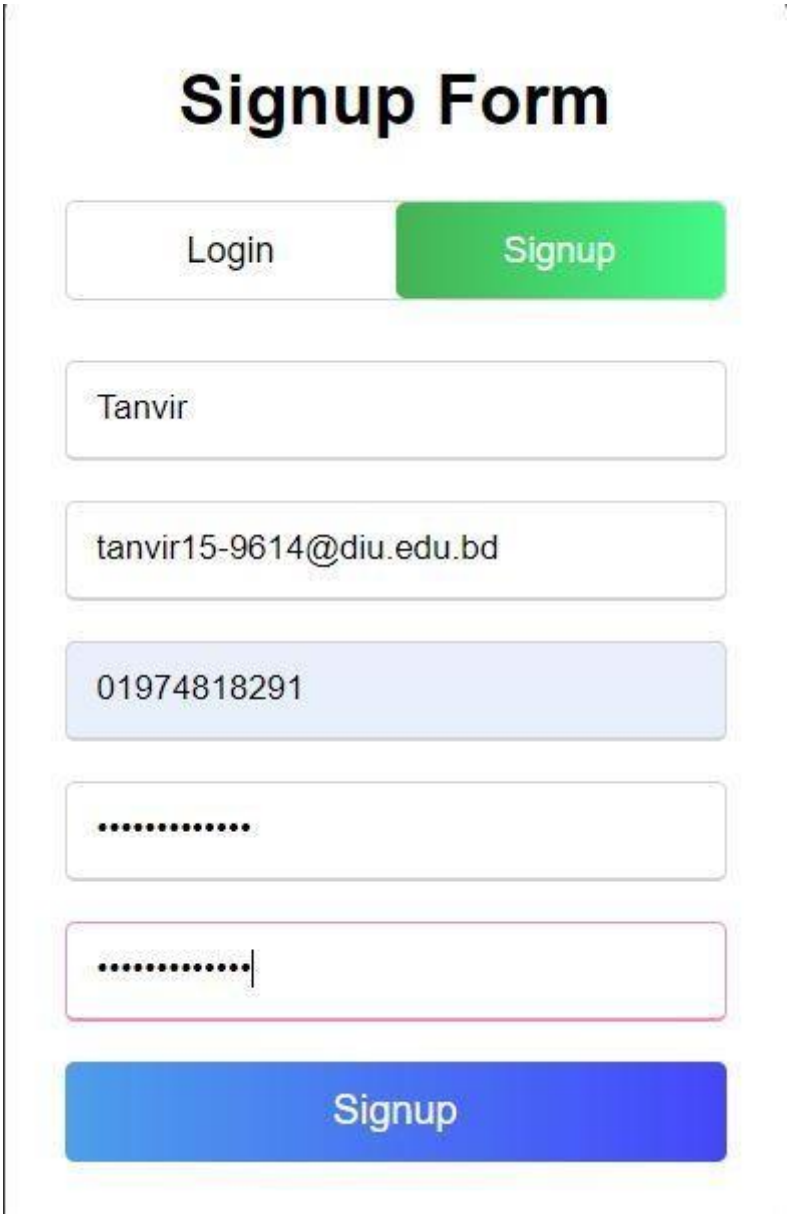

Fig 5.4 - sign up input

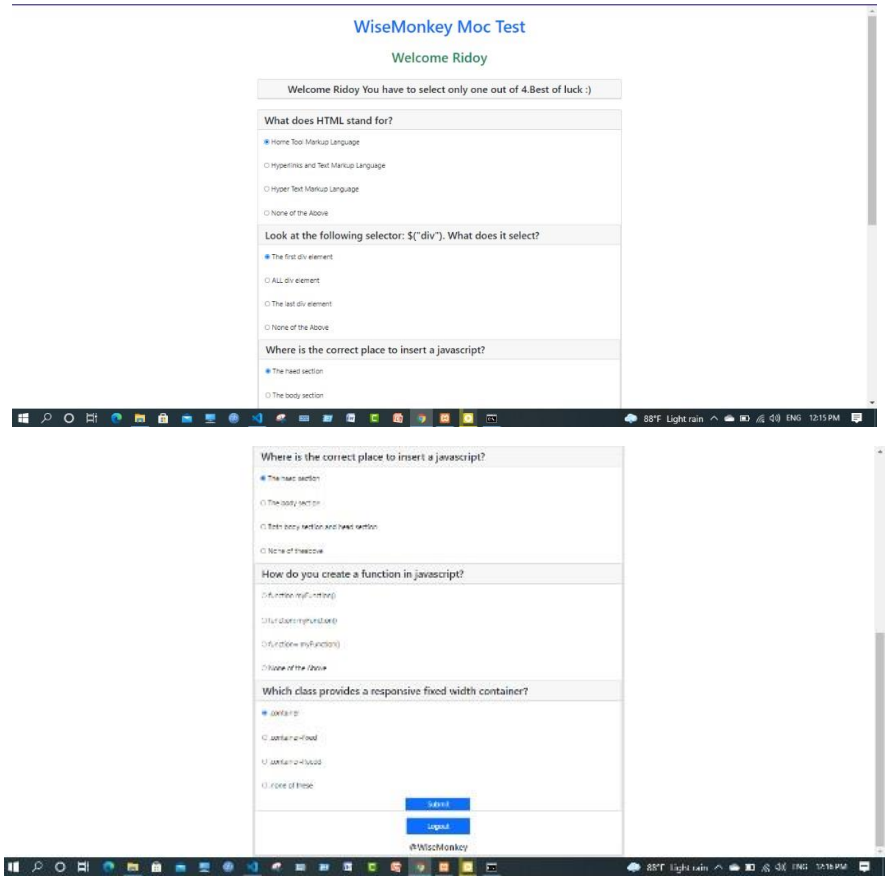

Fig 5.5 data input

Test Result and Reports

In this section we will see the results of testing the data. Once the user inputs all the information in the front-end as shown above the admin will receive the information of the user in the database and insert them to keep record and add or modify the information in the database.

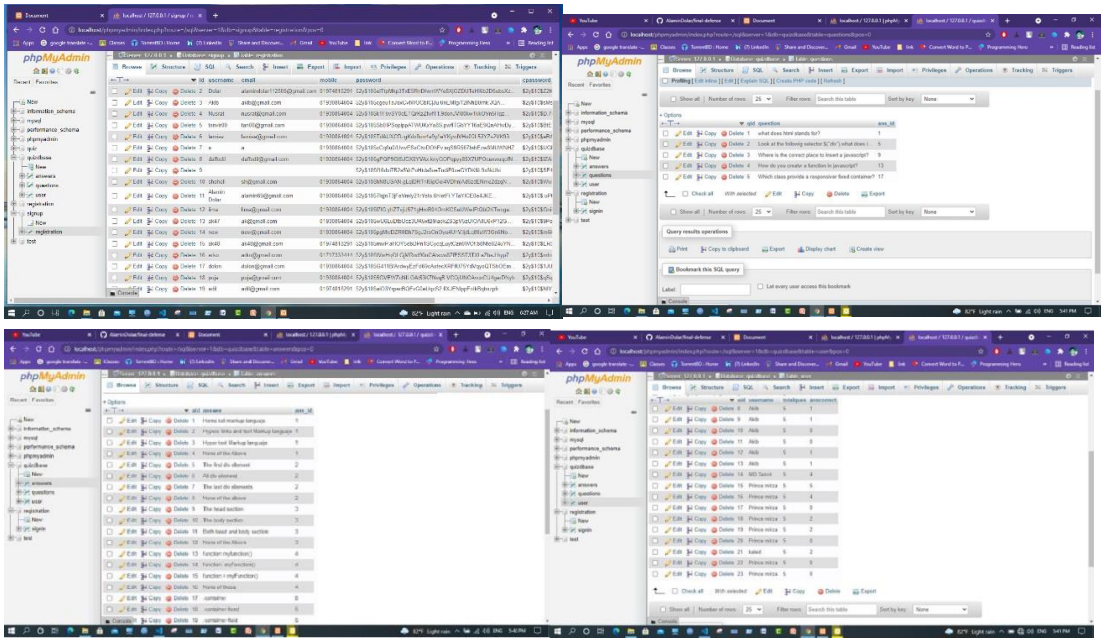

Fig 5.6 – Data Testing

CHAPTER-6

Impact on the Society, Ethical Aspects, Sustainability

Impact on the Society

The impact on our society through this website will be noticeable because it will help the students the most. They can take their preparation very easily and also very less costly than the tution centers that offer pre board exams preparation.

Ethical Aspects

The ethical aspect of my website is that it will be very easy for the students to understand what they need to do or what to attend in order to complete their preparation. They can easily attend only exams or choose a full course exam stream if they like. It will be completely up to the students to decide what they want to attend on this website.

Sustainability Plans

This website is fairly easy to maintain. It is not that complex and not a lot of staff is needed to maintain or manage the whole system. It is possible to handle the system alone if there is not much load at a time.

CHAPTER-7

Conclusions and Future Scope

Conclusion and Discussion

We have put a a lot of time and effort to build this website. Starting from the design and all the features that we have done in this website required a lot of time and attention. It is still under development and this is definitely not the finished product but for the time being this is the final outcome as we were not able to collect enough data to build proper material for courses option that we wish to include in the future.

Scope for Further improvement

In the future we wish to make it more efficient than it already is. In the near future once this pandemic goes down a bit we will collect more data to form a strong and more effective course system for my website. Which will definitely be a great addition for my website beside the exam system that we have already implemented. And we also intend to bring this website into an app so that students can get by it easily as now-a-days smartphones are very easily available for everyone.

CHAPTER-8

Appendix

Appendix : Project Reflection

From the start of fall 2021 we started to build this website as a final year project but more of a personal intrest. The idea came to me once the pandemic started and also after seeing an Indian website. we wanted to make something similar in light of Bangladesh education system as there is none as per my knowledge. This is a product of my effort to do something and my dedication towards the future of education for Bangladesh.

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