

**ICCHE SCHOOL: DESIGN AND DEVELOPMENT OF A WEB BASED  
HOMESCHOOLING APPLICATION**

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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  
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## APPROVAL

This Project titled “**Icche School: Design and Development of a Web Based Homeschooling Application**”, submitted by **Md. Joynal Abedin** and **Warda Dewan** 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 4 January 2022.

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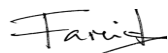
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## DECLARATION

We hereby declare that, this project has been done by us under the supervision of **Ms. Afsara Tasneem Misha, Lecturer Department of CSE** Daffodil International University. We also declare that neither this project nor any part of this project has been submitted elsewhere for award of any degree or diploma.

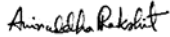
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## **ABSTRACT**

This is a web-based homeschooling application named “ICCHE SCHOOL”. It is a platform made not only for the students but also for their parents and teachers. This will help students, parents and teachers to experience a new way of education. We added different type of features and services to help our users. Here, students can find all the materials to improve their study level. Parents can look after their child's education. Teachers can improve their ability in this profession. This website is designed in such way so that anyone can easily understand the features and use it. Students can have all the features here they could possibly need at a school. Parents will be able to monitor the progress of their children's education. Teachers can change and improve their way of teaching. This website will introduce our country to a new way of studying. In addition to reading, this website has many extra features for students to increase their entertainment and knowledge. It is a platform that is open to everyone, regardless of their background. Most of the websites require paid service, but our website ensures users free services. It's not just a website, it's is a system which can ensure a quality education for all.

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# CHAPTER 1

## INTRODUCTION

### 1.1 Introduction

“ICCHE SCHOOL” Web Application, by this name we can understand that it is an online based schooling platform. This is an application which can provide school level education to a student even if they are not attending any school. That doesn't mean that this project is discouraging students to join school. By the project we are trying to make study interesting to the students.

This application will provide a good level education to every child came from any background in Bangladesh. The design of the application is easy to understand. There are three different interfaces designed. Typically for students, second for parents to have a look, what their children are learning and last for teachers. This platform is not only for students but also for them who wants to be a teacher. If anyone wants to measure their ability on teaching or want to gain experience in this background they can join as a teacher. On the other hand, parents can always check up on their Childs progress and can take necessary step for the betterment of their child.

This application also has an admin panel and a super-admin panel. Admin manages the works relate to teachers, students and parents. Super-admin controls the website. There are lots of new features so that students can find every lecture easy and interesting. On the other hand, there are also some features added so that students can do some extra activities.

### 1.2 Motivation

As a university student, we don't get much time and opportunities to think or work with different things. But during Covid-19 pandemic situation we got a lot of time to work with different things other than studies. The whole world got stuck in their homes for the lockdown situation. Studies were hampered most for this. After observing the matter, many academies are offering their students online education.

My university was one of those academies, which started to provide online classes from the very beginning of the pandemic. During these online classes we use a platform called

DIU BLC. It's also an online based educational platform, but only for Daffodil International University's students. So, we wanted to make a platform for school level students all over the country.

We also saw many students leaving study or lose interest on studies during this long pandemic situation. Schools and colleges remain close for more than a year. After the re-opening of the educational institutes, some students quit schools because their parents lost their jobs so they couldn't spend money on education. Some students re-joined the schools but lose interest, because they couldn't find any interesting way or sources to continue their studies while stay at home. By seeing this entire situation, we got the idea to make such application that can help and provide a good level education to all. In this digital world, most of the developed countries are encouraging to take education from home other than going in an institute. This is an advance education system. Where students can think freely and don't have to follow any systematic rules.

In our country, education feels like a competition. Everyone has to rush from one place to another for having standard level education. Students have to take multiple coaching's and tuitions. Our country is a densely populated country, so traffic jam is a common fact in here. Students have to spend most of their time outside their houses because of this traffic problem.

This website will help them have a good quality education at home. Our main purpose behind making this application was to bring education to the doorsteps of Bangladesh.

### **1.3 Objectives**

The objectives of this project are very clear. First, for the students the application is designed the way that they can find their lessons easily, they can ask anything to a teacher if they face problem, can make their own timetable, can read text book or any other book from the book library, and can play educational games too. There is another feature called "Future Goal", where students can find the career options they can choose in future.

Second, parents can also use this application as a monitoring platform for their children. They can see the progress of their child, can contact with a teacher if need and many more.

Lastly, make opportunities for those who want to be a teacher. They can provide a good level education. They can contact with a student or their parents directly if need, can take online exam, can provide video lecture for any lesson etc.

#### **1.4 Expected Outcome**

The Expected outcomes we are wanting:

- To create an application for make education system better.
- To make lessons interesting for a student.
- For an advanced level education.
- To make students more punctual.
- To less the risk of dropping education of a child.
- To remove the stress of Conventional education system.
- For parents to get a closer look of their children's education.
- So that teachers can improve the education system.
- To improving teaching skills.
- To introduce homeschooling method to our country.

#### **1.5 Report Arrangement**

Report arrangement is basically the summarization of a project report format.

In Chapter 1, we introduce our project. Wrote about our motivations, about our wants and goals etc. it is basically the introductory part of a report.

In Chapter 2, we discuss about the background, relative work, comparative studies and challenges we faces during building this project.

In Chapter 3, we wrote about the requirement specification of this project. Here we showed some models and diagrams.

In Chapter 4, we gave information about the design of our website.

In Chapter 5, we shared about the implementations and testing information.

Last, Chapter 6 is all about the discussion and conclusion of our website.

## **CHAPTER 2**

### **BACKGROUND**

#### **2.1 Introduction**

Home school is a popular education system in foreign countries. They make every effort to improve the quality of education in those countries. If a student is not able to attend school or college, they can receive good level education at home through this education system. By creating this application, we want to introduce Bangladesh to this education system. Students can get advanced education through this application without joining any educational institution. This application is designed in such a way that students can easily use it. This is a web-based application. For this, one doesn't need any personal phone to use the application. Students don't require any fees for using this application. This application is beneficial for students, parents and teachers.

#### **2.2 Related Works**

- 10 Minute School
- ShikkhokBatayon
- Shikkhok.com
- Amar Pathshala
- Mukto Path
- MCQStudybd

#### **2.3 Comparative Studies**

If we to compare, there are very few educational based applications in Bangladesh. Some of them are web application and the others are mobile application. Most of the web applications are providing some specific courses. Someone can hardly find any application which is fully run as a school. Hardly anyone can find such an application which is perfectly managed as a school. Most of the websites has bugs on them. On the other hand, they don't have much user-friendly features. Users can't find much option on those applications.

Ours is a complete educational application which works as a web based online school platform. From children to adult, anyone can use it very easily. This application will provide most facilities to all users.

## **2.4 Challenges**

There were a lot of challenges we faced while implementing the project. The challenges are mentioned below:

- i. First challenge was to think about the idea an accurate that what we are actually going to implement as an educational web application.
- ii. Then, we had to think about a name which can relate to our work and at the same time easy to search.
- iii. Soon after that, we started to working on the features and facilities we are going to use in this application. We had to think vastly that what unique ideas and functions we could use to make this work done and user friendly.
- iv. After that, we had to think about which programming language and libraries we could use. To choose a perfect language was also a big challenge.
- v. As our website is a platform for student from all classes, their parents and also for teachers, we had to choose a theme which is suitable for all. It was truly a big challenge.
- vi. After finishing 80% of our work we realize, there are no specific way for teachers to provide lessons to their students. Then we added an additional feature to solve this problem.

# CHAPTER 3

## REQUIREMENT INSTRUCTION

### 3.1 Business Process Modeling

BPM is a diagram that allows any system an easy way to understand and enhance progress. The model is given below:

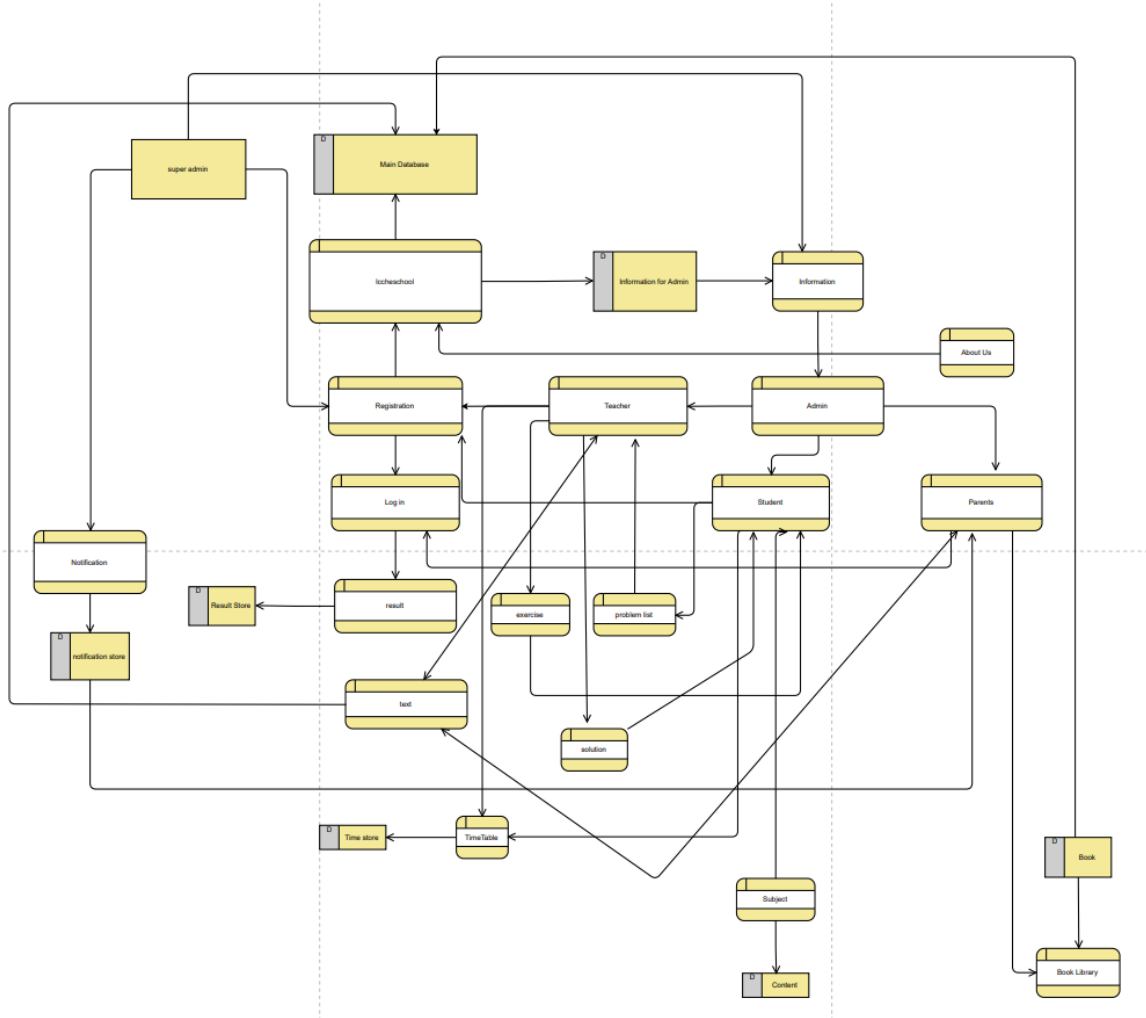


Figure 3.1: Data Flow Diagram

## **3.2 Requirement Collection and Analysis**

Requirement collection and requirement analysis are the primary stage of development. Functional Requirement and Non-functional Requirement are two basic kinds of requirements.

### **3.2.1 Functional Requirement**

The functional requirements for our project are:

- Login
- Download books
- Register
- Upload profile picture
- Progress Bar

### **3.2.2 Non-functional Requirement**

The non-functional requirements for our project are:

- Book Library
- Future Goal
- Games

## **3.3 Use Case Modeling and Description**

All the users can see home page and menu bars. They can register and login. After login, all the users can see their dashboard; can see profile, change password and logout.

Admin can see student, parent and teacher list. They can assign teacher, sent notice, add author, add book, add book category, add district, set medium, set class, set subject, can send or get notification. Super-admin can go through all the features of admin along with settings.

Students can set timetable, see subjects and books, give exam, see grads, set a problem to any teacher, do extra works, see their teachers, sent messages, get notifications.

Teachers can manage subject, send or get notification, see problem list sent by any student, set exam, set timetable.



Parents can see student and teacher profile with limited information, message any teacher, and get notification.

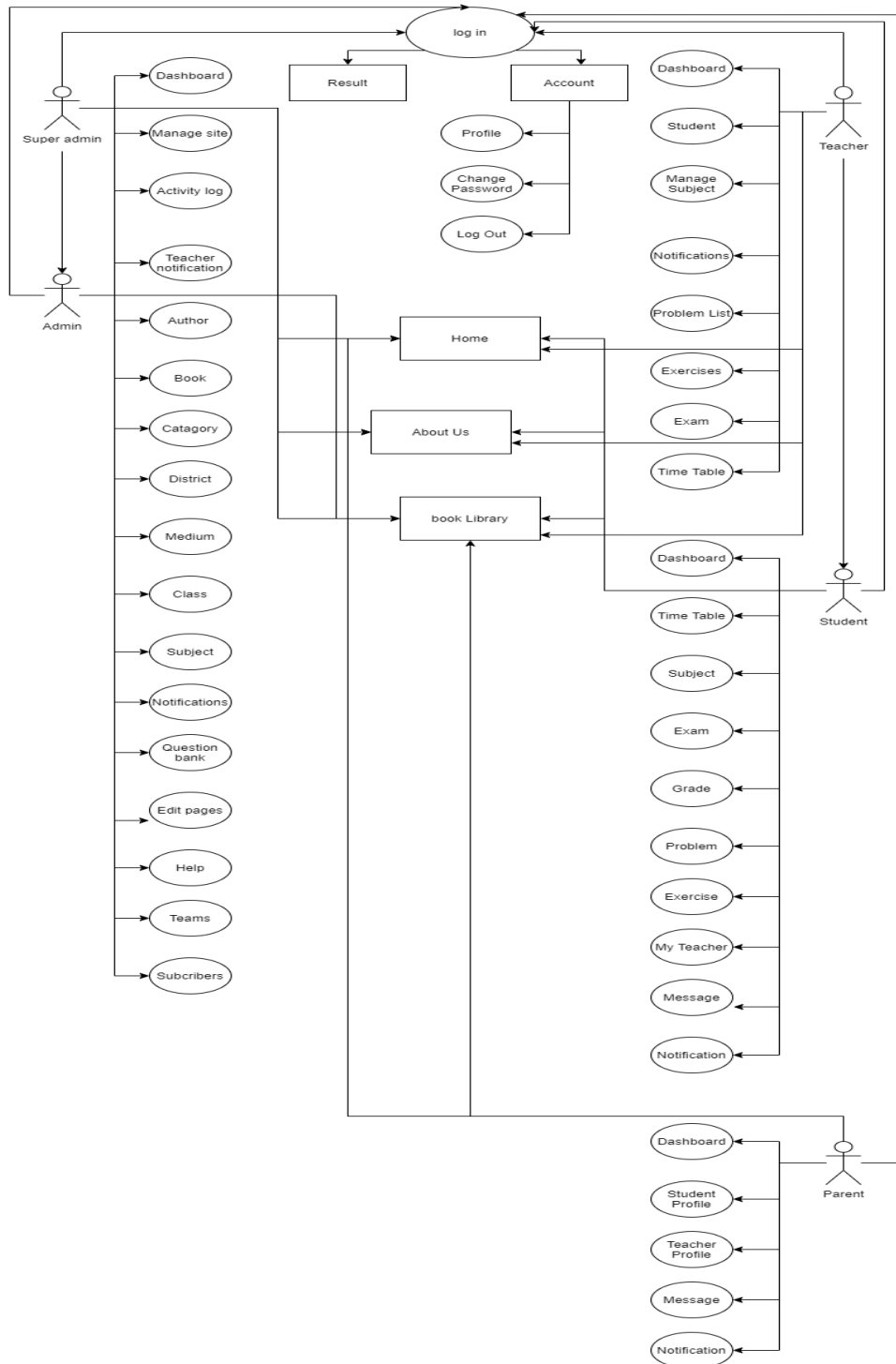


Figure 3.3: Use Case Model Diagram

### 3.4 Design Requirements

Design Requirements are an important part to design a system fluently. The design requirements we needed for our system are:

**Efficient:** We tried to design our system very light.

**User-Friendly:** Our system is a user-friendly website. We design it in a way so that our users can access it easily.

### **3.5 Required Tools**

- Visual Studio Code
- Xampp
- Internet Browser (Chrome)
- MySQL &
- Postman.

## **CHAPTER 4**

### **DESIGN SPECIFICATION**

#### **4.1 Front-End Design**

In general language we can say that, front-end is the "user side" of an App. What an exploiter can see while using an application is front-end. It mainly focused on creation part and features of a website. We used HTML, CSS and JAVASCRIPT to design our website's front-end.

##### **4.1.1 Home page**

Homepage is generally the first page of a website. Anyone is able to visit this page whether they are using the website or not. We can find a lot of features on the homepage. Although, not anyone can have the opportunities to use all the features unless they are registered. At the top off the page, we can find menu bar. At the very bottom of every page, we can find some more features, like- "Contact" where user can contact with us, can see our location etc. "Terms and Conditions" where use can learn about our website's terms and conditions. "Privacy Policy" where users can find more about our website's policies. "Question Bank" where users can contribute by uploading any question. "Games" where users can find educational games to make learning easier. "Future Goal" where students can have a look at what kind of career options is open for them in our country. "Notice" where user can find any notice given by the website. "Help" where users can directly ask any query to the website authorities.

There is also a Subscribe option to subscribe our website so more people can know about it.

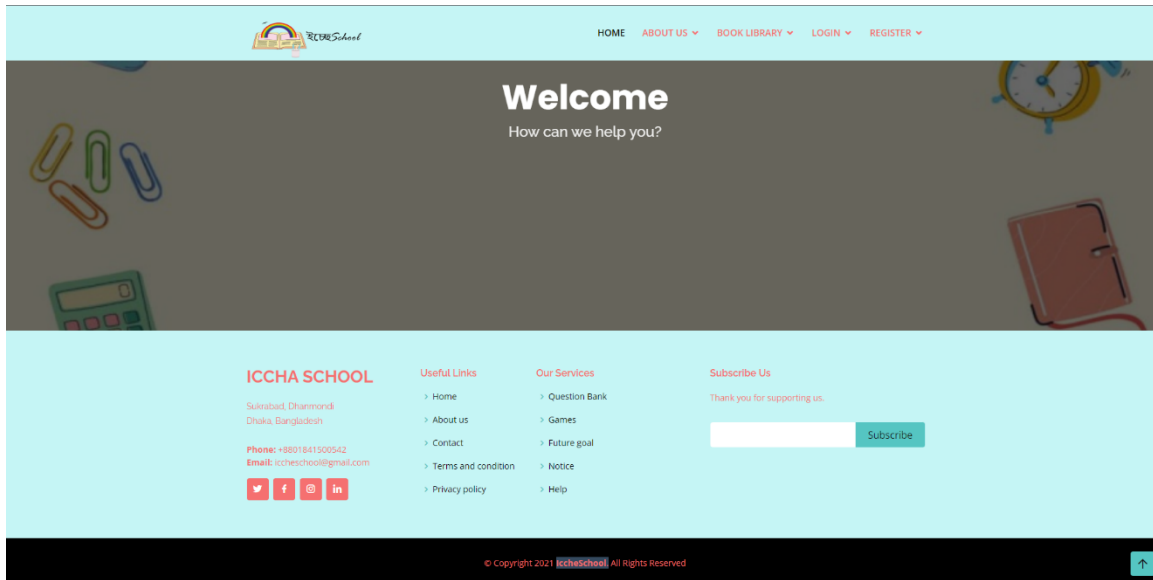


Figure 4.1.1: Home Page

## 4.1.2 About us

After the home page we can find the about us feature in menu button. There are two sections in this feature. One is "Our Team" and second is "Teacher Information". Any guest user can visit these pages but cannot see all the details without registering.

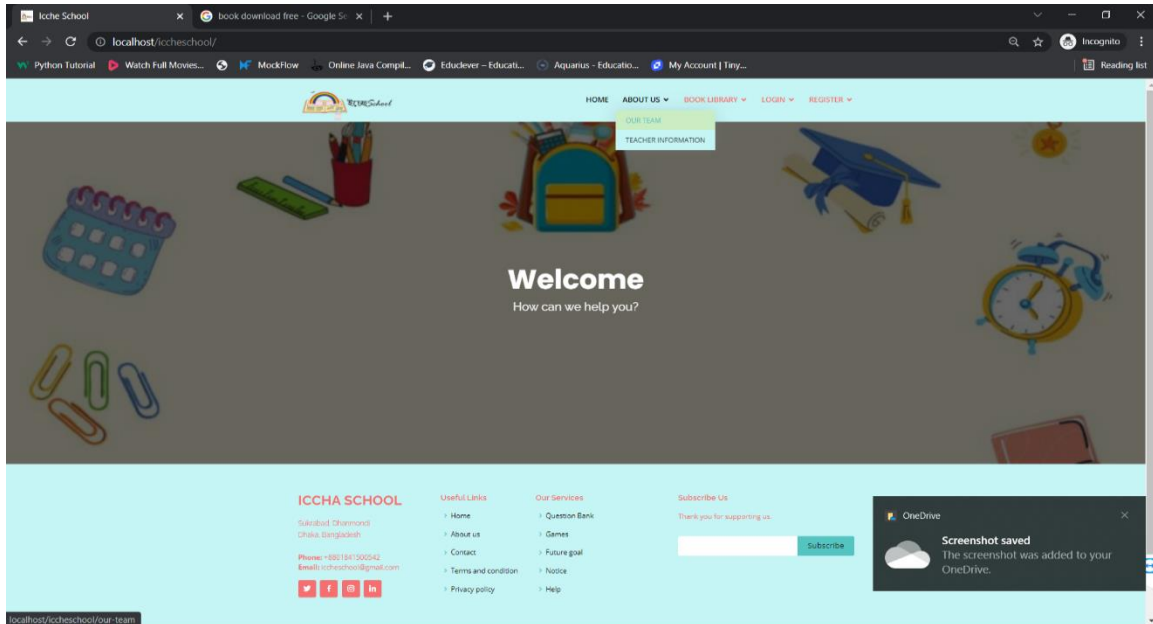


Figure 4.1.2: About Us

### 4.1.3 Book Library

Then we can find book library. This also has two parts. One is "Text book", second is "Extra book". In text book, we can get any text book for any class or medium. On the other hand, from extra book part we can also read much kind of books without text book for our refreshment. Anyone can read books from these pages.

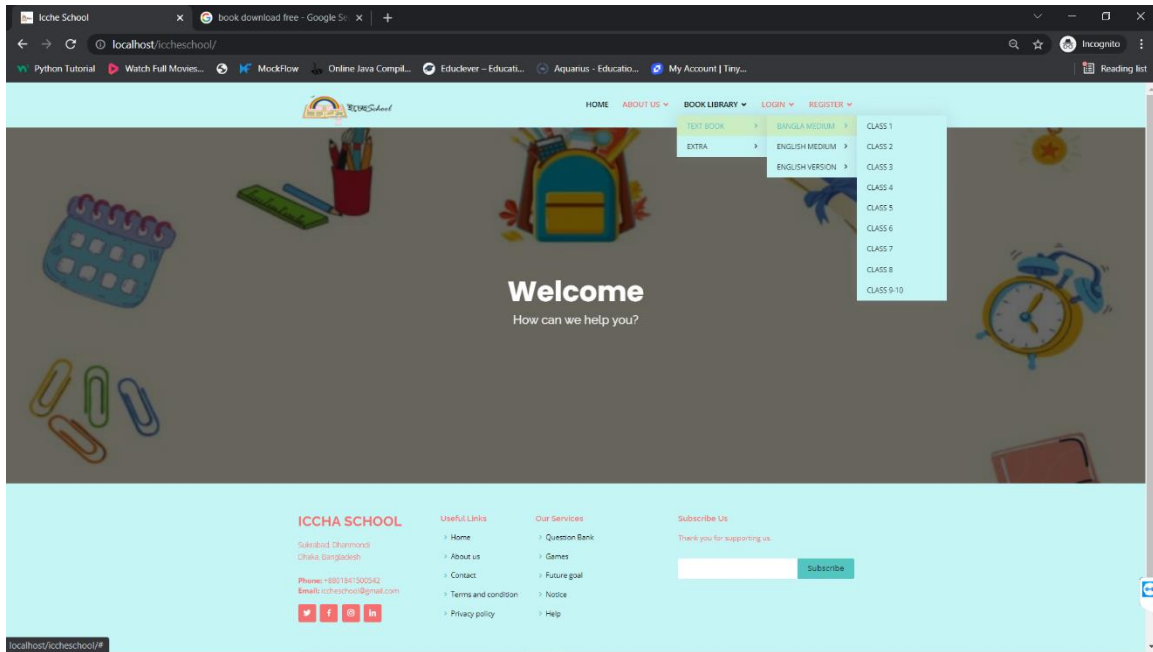


Figure 4.1.3: Book Library

### 4.1.4 Login

In this feature, users can login to use the website after registering. There are 3 login options. Students and their parent's login option are same. There are different options for teachers and administration.

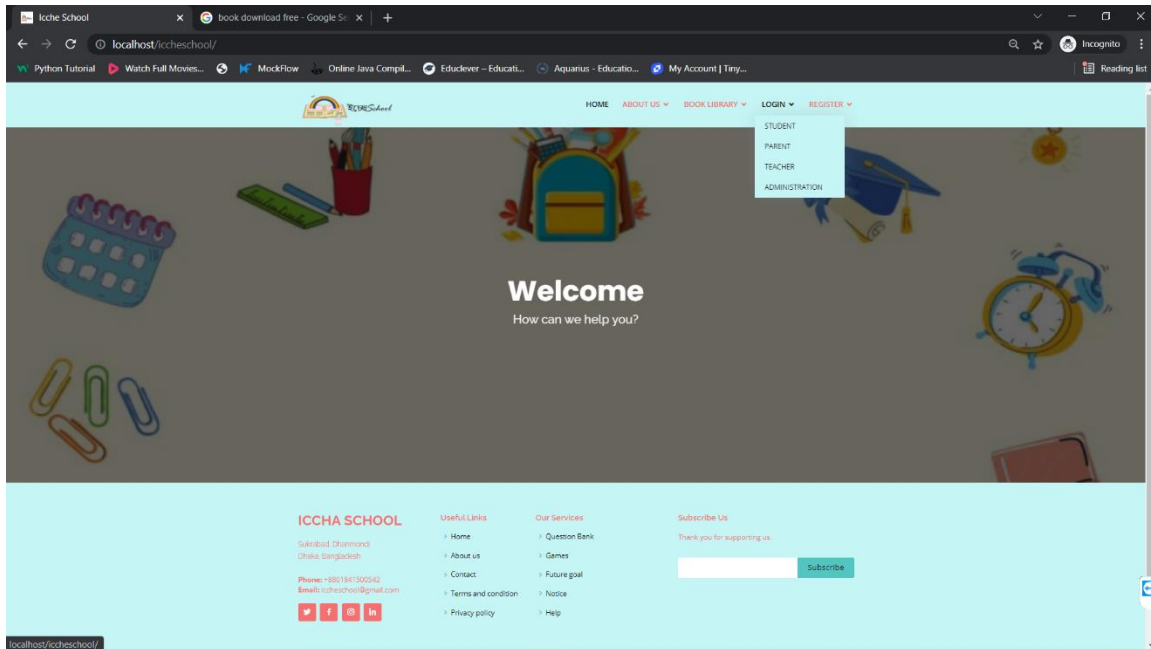


Figure 4.1.4: Log In

#### 4.1.4.1 Login as Student

After logged in as a student, they can see a dashboard. There we added some information about the student and also a progress bar. On the top menu bar, we can see a feature called account. There students can find their profile, change password and logout options.

There are also side menu bars. Here students can find different features for their studies, like- "Timetable" where they can set a routine for daily life, "Subject" where they can see their own subjects, "Exam" where they can give testes to see their progress in study, "Grade" where they can see their own results, "Problem" where they can add their subject wise problem lists, "Exercise" where they can have extra lessons, "My Teacher" where they can find which teacher is assigned for them, "Message" where they can see the chats with their teachers and "Notification" where they can see any notice came from the website or from their teachers.

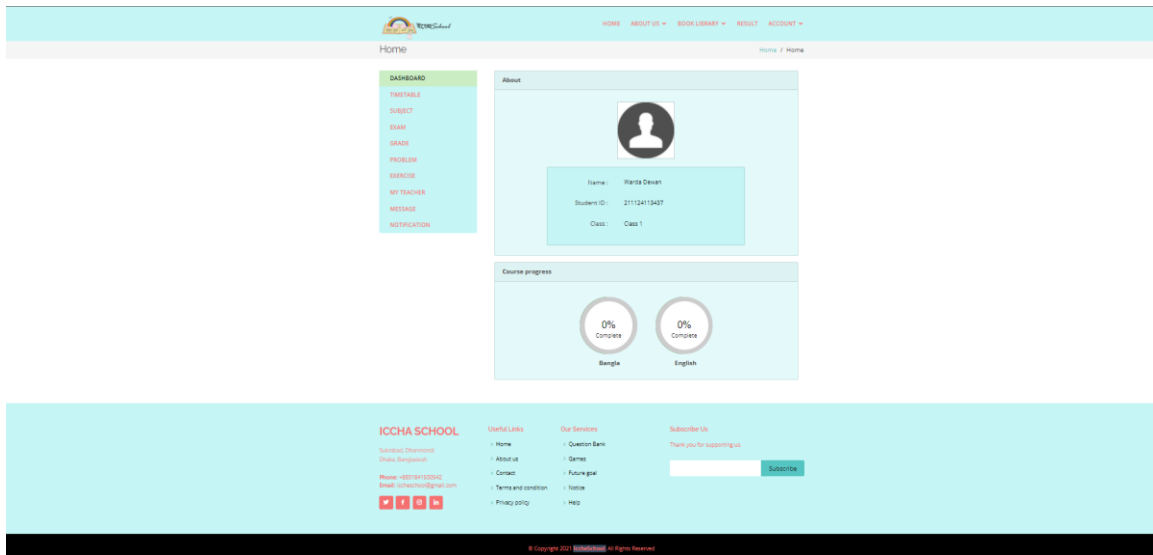


Figure 4.1.4.1: Login as Student

#### 4.1.4.2 Login as Parents

After logged in as a parent, they can see a dashboard. There we added some information about them and about their child, also their child's progress bar. On the top menu bar, we can see a feature called account. There, parents can find their profile, change password and logout options.

There are also side menu bars. Here they can find different features for their child, like- "Student Profile" where they can see their child's profile, "Teacher profile" where they can find which teacher is assigned for their child, "Message" where they can see the chats with any teachers and "Notification" where they can see any notice came from the website or from any teachers.



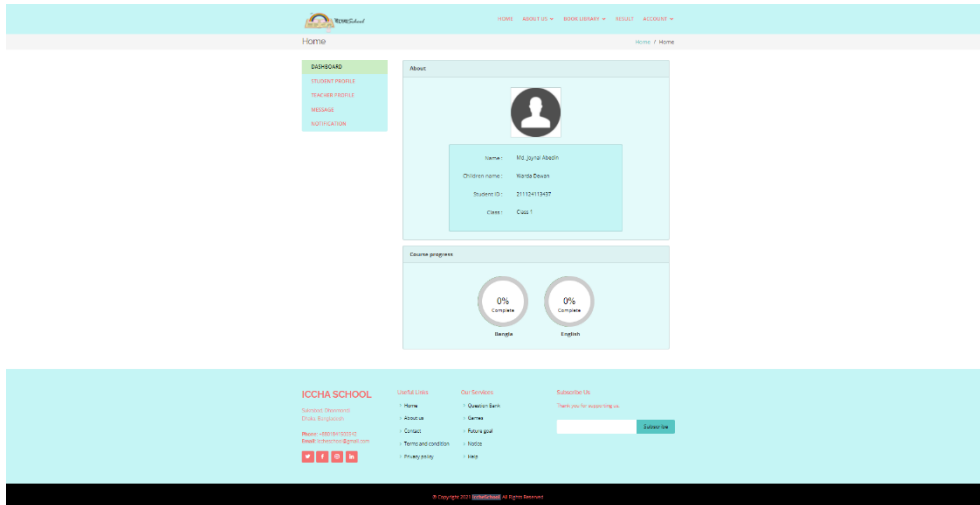


Figure 4.1.4.2: Login as Parents

### 4.1.4.3 Login as Teacher

After logged in as a teacher, they can see a dashboard. There we added some information about them. On the top menu bar, we can see a feature called account. There, teachers can find their profile, change password and logout options. There is a bell icon and message icon. By clicking the bell icon, they can see if there is any notification for them. By clicking the message icon, they can see their chats with others.

There are also side menu bars. Here they can find different features for their students and for themselves, like-"Student" where they can see the details of any student under them. "Manage Subject" where they can see the subject they are assigned for and edit content. "Notification" where they can see the notice given by the website. "Problem List" where they can see the list of problem students asked. "Exercise" where they can add extra works for the students. "Exam" where they can post tests for the students. "Timetable" where they can set up their own routine.

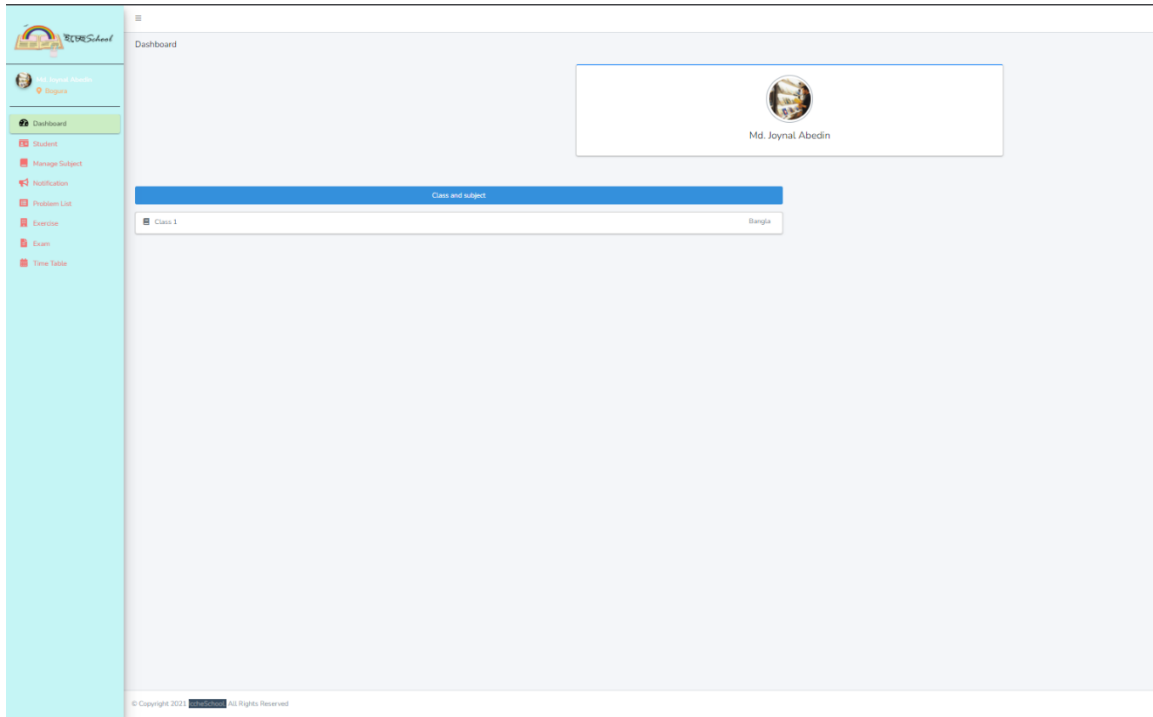


Figure 4.1.4.3: Login as Teacher

#### 4.1.4.4 Login as Admin

After logged in as an admin, they can see a dashboard. There we added some information. On the top menu bar, we can see a feature called account. There, admins can find their profile, basic information, change password and logout options. There is a bell icon and message icon. By clicking the bell icon, they can see if there is any notification for them. By clicking the message icon, they can see their chats with others.

There are also side menu bars. Here they can find different features as an admin, like- There are three options called “Teacher”, “Student”, and “Parent” where they can see the lists of users, also can add or remove anyone. “Teacher Assign” where they can assign any teacher. “Teacher Notification” where they can create any notification for only the teachers. Features like- “Author”, “Book” and “Category” where can edit book library. “District” where can add any district. “Medium”, “Class” and “Subject” are also to add options to these features. “Notice” for any announcements. “Question Bank” to approve any contributions. “Edit Pages” for editing purpose. “Help Page” to answer user’s questions.

“Team” where members information’s are available. “Subscriber” where can find to subscriber list.

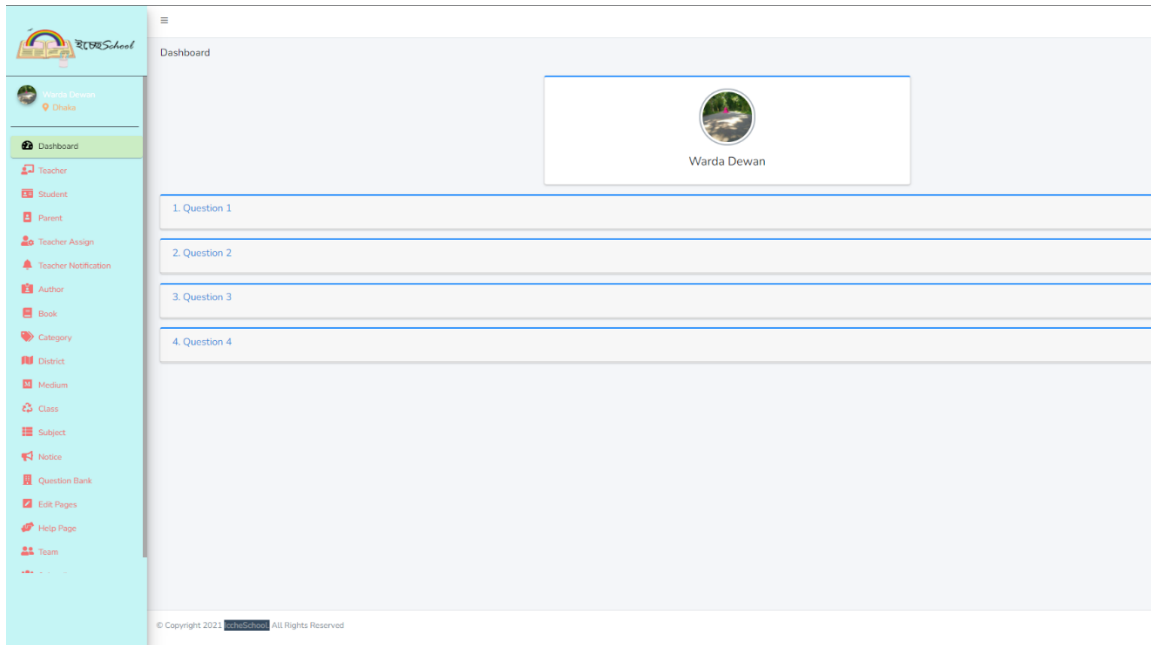


Figure 4.1.4.4: Login as Admin

#### 4.1.4.5 Login as Super-admin

After logged in as a Super-admin, they can see a dashboard. There we added some information. On the top menu bar, we can see a feature called account. There, they can find their profile, basic information, change password and logout options. There is a bell icon and message icon. By clicking the bell icon, they can see if there is any notification for them. By clicking the message icon, they can see their chats with others.

There are also side menu bars. Here they can find different features as an admin, like- There are three options called “Teacher”, “Student”, and “Parent” where they can see the lists of users, also can add or remove anyone. “Teacher Assign” where they can assign any teacher. “Teacher Notification” where they can create any notification for only the teachers. Features like- “Author”, “Book” and “Category” where can edit book library. “District” where can add any district. “Medium”, “Class” and “Subject” are also to add options to these features. “Notice” for any announcements. “Question Bank” to approve any contributions. “Edit Pages” for editing purpose. “Help Page” to answer user’s questions.

“Team” where members information’s are available. “Subscriber” where can find to subscriber list. Super-admin can change the theme of the website by using “Manage Site” feature. He or she can also manage the activity log report.

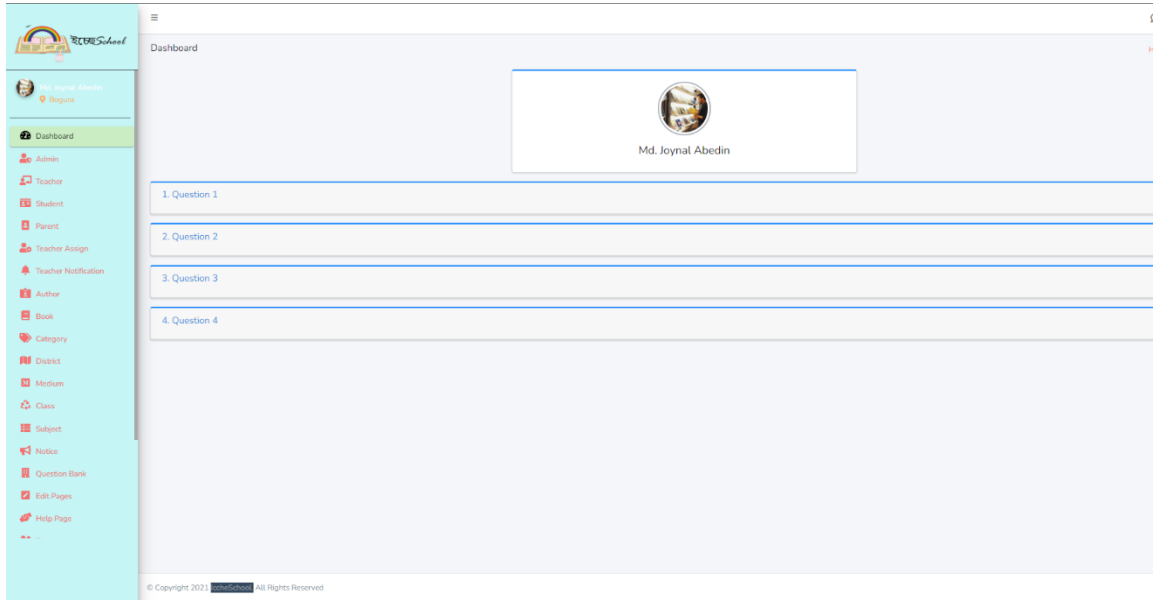


Figure 4.1.4.5: Login as Super Admin

#### 4.1.5 Register

This feature is for registration as a user to the website. There are 2 options for this, Student and Teacher. Parent doesn't need to register separately because when a student registers their account, parent account creates automatically. Administration panel don't need any registration.

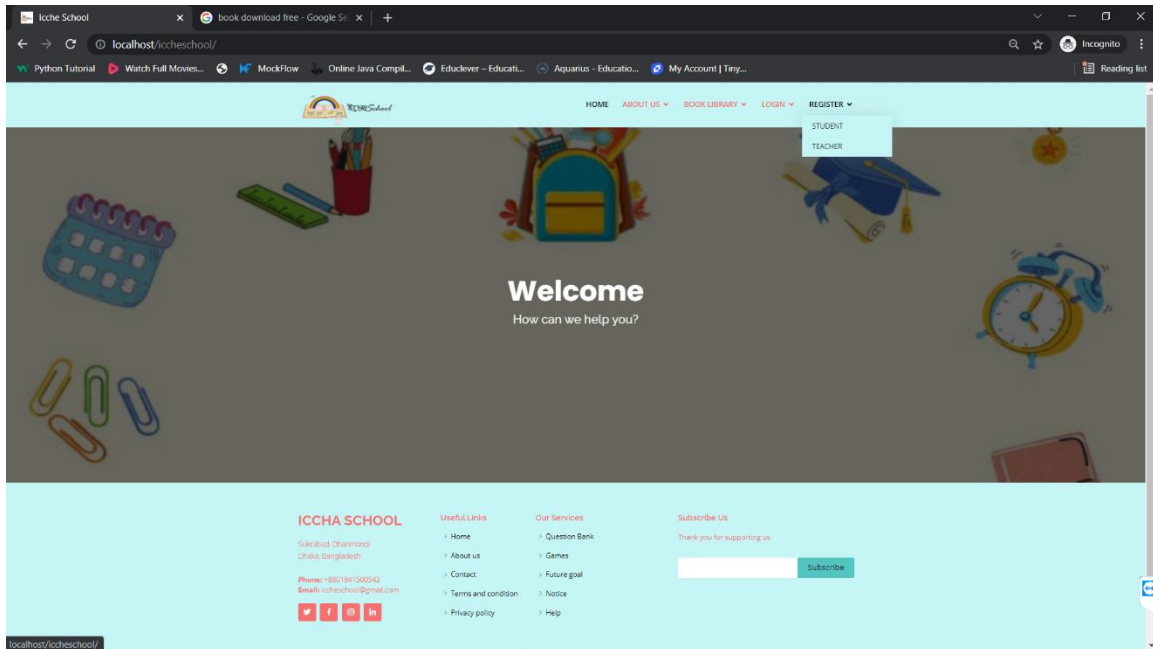


Figure 4.1.5: Register

## 4.2 Back-End Design

Back-end is a part of the website that users cannot visit. On back-end, most works are related to server and creating database.

### 4.2.1 Code

As back-end code, we used a framework of PHP called Laravel. We designed the back-end part of our website using this. We implemented the code in Visual Studio Code.

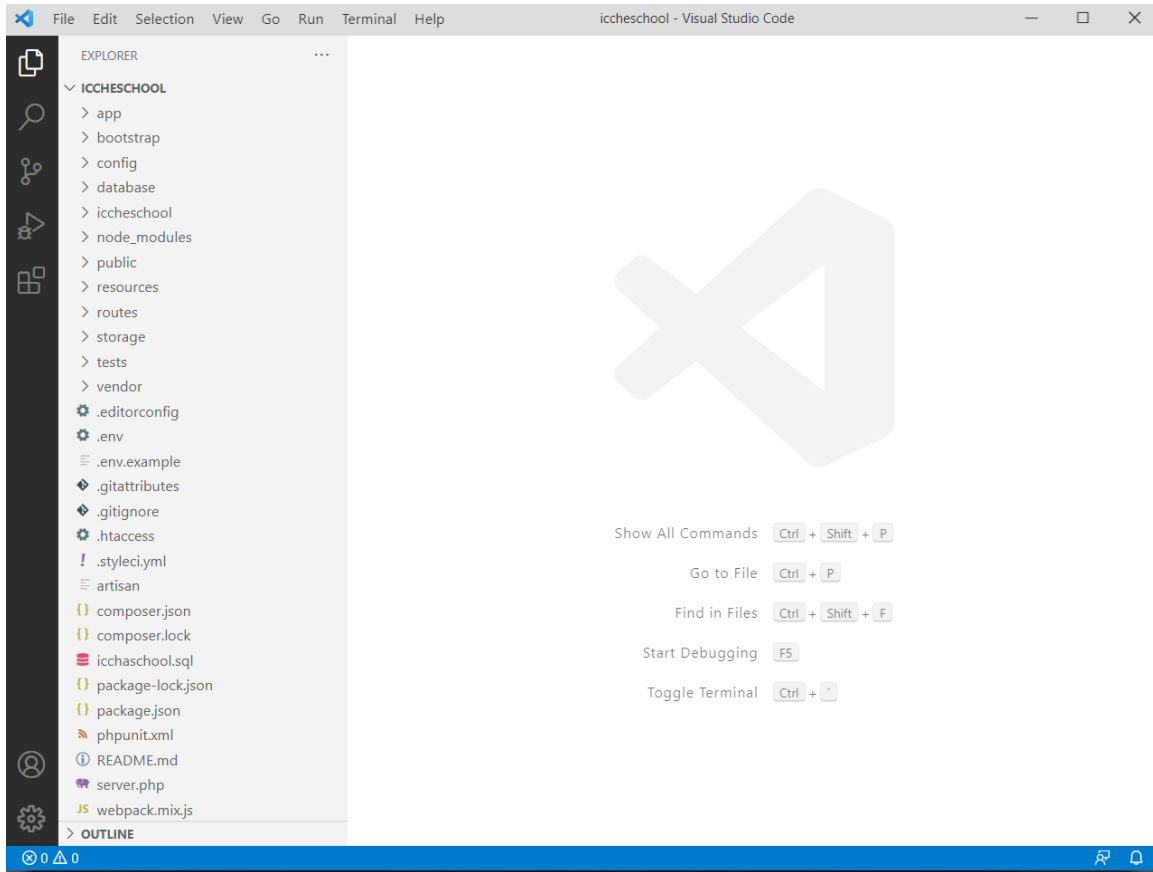


Figure 4.2.1: Visual Studio Code

## 4.2.2 Database Loading

To load the data, we used phpMyAdmin.

The screenshot displays the phpMyAdmin interface for a database named 'icchaschool'. The left sidebar shows a tree view of the database structure, including tables like 'activity\_log', 'admins', 'admin\_notifications', 'authors', 'books', 'book\_languages', 'categories', 'districts', 'exams', 'exam\_answers', 'exercises', 'exercise\_answers', 'failed\_jobs', 'filemanager', 'help\_pages', 'marks', 'media', 'messages', 'migrations', 'notifications', 'pages', 'password\_resets', 'problem\_lists', 'question\_banks', 'remarks', 'results', 'settings', 'student\_classes', 'subjects', 'subject\_contents', 'subscribers', 'table\_days', 'table\_times', 'table\_works', 'teachers', 'teacher\_assigns', 'teams', 'users', 'information\_schema', 'mysql', 'performance\_schema', 'phpmyadmin', and 'test'.

The main area shows a table structure overview for the 'icchaschool' database. The table is titled 'Table' and has columns for 'Action', 'Rows', 'Type', 'Collation', 'Size', and 'Overhead'. The table structure is as follows:

Table	Action	Rows	Type	Collation	Size	Overhead
activity_log	Browse Structure Search Insert Empty Drop	190	InnoDB	utf8mb4_unicode_ci	168.0 K1B	-
admins	Browse Structure Search Insert Empty Drop	4	InnoDB	utf8mb4_unicode_ci	32.0 K1B	-
admin_notifications	Browse Structure Search Insert Empty Drop	3	InnoDB	utf8mb4_unicode_ci	16.0 K1B	-
authors	Browse Structure Search Insert Empty Drop	1	InnoDB	utf8mb4_unicode_ci	16.0 K1B	-
books	Browse Structure Search Insert Empty Drop	2	InnoDB	utf8mb4_unicode_ci	96.0 K1B	-
book_languages	Browse Structure Search Insert Empty Drop	2	InnoDB	utf8mb4_unicode_ci	16.0 K1B	-
categories	Browse Structure Search Insert Empty Drop	3	InnoDB	utf8mb4_unicode_ci	32.0 K1B	-
districts	Browse Structure Search Insert Empty Drop	2	InnoDB	utf8mb4_unicode_ci	16.0 K1B	-
exams	Browse Structure Search Insert Empty Drop	1	InnoDB	utf8mb4_unicode_ci	64.0 K1B	-
exam_answers	Browse Structure Search Insert Empty Drop	0	InnoDB	utf8mb4_unicode_ci	32.0 K1B	-
exercises	Browse Structure Search Insert Empty Drop	0	InnoDB	utf8mb4_unicode_ci	64.0 K1B	-
exercise_answers	Browse Structure Search Insert Empty Drop	0	InnoDB	utf8mb4_unicode_ci	32.0 K1B	-
failed_jobs	Browse Structure Search Insert Empty Drop	0	InnoDB	utf8mb4_unicode_ci	32.0 K1B	-
filemanager	Browse Structure Search Insert Empty Drop	1	InnoDB	utf8mb4_unicode_ci	16.0 K1B	-
help_pages	Browse Structure Search Insert Empty Drop	4	InnoDB	utf8mb4_unicode_ci	16.0 K1B	-
marks	Browse Structure Search Insert Empty Drop	0	InnoDB	utf8mb4_unicode_ci	48.0 K1B	-
media	Browse Structure Search Insert Empty Drop	3	InnoDB	utf8mb4_unicode_ci	16.0 K1B	-
messages	Browse Structure Search Insert Empty Drop	1	InnoDB	utf8mb4_unicode_ci	16.0 K1B	-
migrations	Browse Structure Search Insert Empty Drop	38	InnoDB	utf8mb4_unicode_ci	16.0 K1B	-
notifications	Browse Structure Search Insert Empty Drop	0	InnoDB	utf8mb4_unicode_ci	16.0 K1B	-
notifications	Browse Structure Search Insert Empty Drop	1	InnoDB	utf8mb4_unicode_ci	32.0 K1B	-
pages	Browse Structure Search Insert Empty Drop	4	InnoDB	utf8mb4_unicode_ci	64.0 K1B	-
password_resets	Browse Structure Search Insert Empty Drop	0	InnoDB	utf8mb4_unicode_ci	32.0 K1B	-
problem_lists	Browse Structure Search Insert Empty Drop	2	InnoDB	utf8mb4_unicode_ci	80.0 K1B	-
question_banks	Browse Structure Search Insert Empty Drop	4	InnoDB	utf8mb4_unicode_ci	48.0 K1B	-
remarks	Browse Structure Search Insert Empty Drop	0	InnoDB	utf8mb4_unicode_ci	32.0 K1B	-
results	Browse Structure Search Insert Empty Drop	0	InnoDB	utf8mb4_unicode_ci	64.0 K1B	-
settings	Browse Structure Search Insert Empty Drop	1	InnoDB	utf8mb4_unicode_ci	16.0 K1B	-
student_classes	Browse Structure Search Insert Empty Drop	9	InnoDB	utf8mb4_unicode_ci	16.0 K1B	-
subjects	Browse Structure Search Insert Empty Drop	5	InnoDB	utf8mb4_unicode_ci	32.0 K1B	-
subject_contents	Browse Structure Search Insert Empty Drop	0	InnoDB	utf8mb4_unicode_ci	32.0 K1B	-
subscribers	Browse Structure Search Insert Empty Drop	0	InnoDB	utf8mb4_unicode_ci	32.0 K1B	-
table_days	Browse Structure Search Insert Empty Drop	7	InnoDB	utf8mb4_unicode_ci	16.0 K1B	-
table_times	Browse Structure Search Insert Empty Drop	5	InnoDB	utf8mb4_unicode_ci	16.0 K1B	-
table_works	Browse Structure Search Insert Empty Drop	35	InnoDB	utf8mb4_unicode_ci	32.0 K1B	-
teachers	Browse Structure Search Insert Empty Drop	3	InnoDB	utf8mb4_unicode_ci	32.0 K1B	-
teacher_assigns	Browse Structure Search Insert Empty Drop	1	InnoDB	utf8mb4_unicode_ci	64.0 K1B	-
teams	Browse Structure Search Insert Empty Drop	2	InnoDB	utf8mb4_unicode_ci	16.0 K1B	-
users	Browse Structure Search Insert Empty Drop	2	InnoDB	utf8mb4_unicode_ci	32.0 K1B	-
<b>35 tables</b>	<b>Sum</b>	<b>336</b>	<b>InnoDB</b>	<b>utf8mb4_general_ci</b>	<b>1.4 M1B</b>	<b>0 B</b>

At the bottom of the interface, there is a 'Create table' button and a 'Console' area showing the number of columns as 4.

Figure 4.2.3: PhpMyadmin

### 4.2.3 Server

We used Apache server with XAMPP.

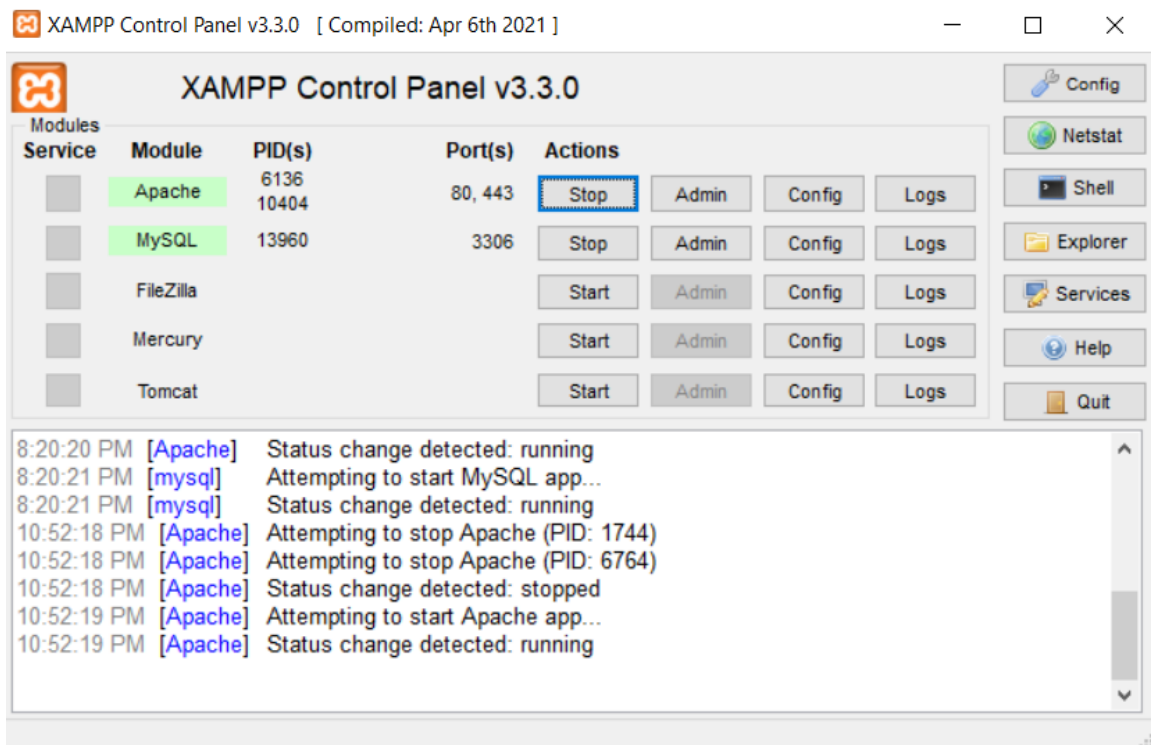


Figure 4.2.4: Xampp



#### 4.2.4 Live

We used localhost to live the application.

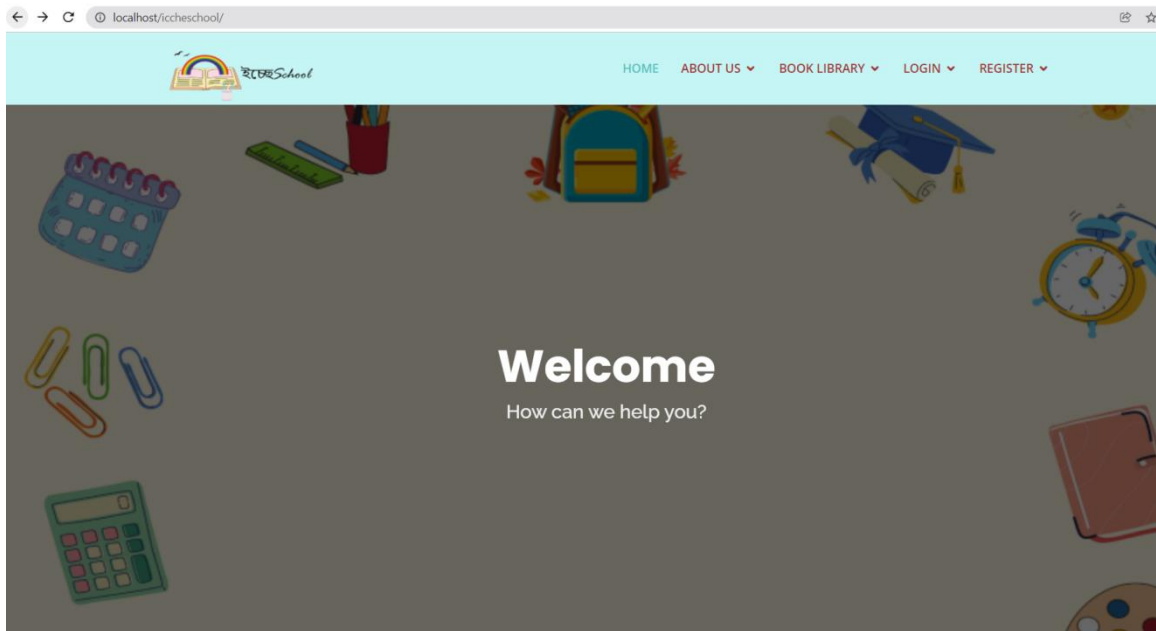


Figure 4.2.5: Localhost

#### 4.3 Interaction Design and User Experience

Interaction design is the strategy of interconnection between users and the system. By using this plan, we can make an attractive website. It would make our system more user-friendly. On the other hand, UX (User Experience) design is more like shaping the experience of users about a system.

#### 4.4 Implementation Requirements

We used Visual Studio Code editor to design the application for implementing our project. We used it with PHP programming language in the back-end using Laravel framework. We also use a browser and a local host to run the project.

## **CHAPTER 5**

### **IMPLEMENTATION AND TESTING**

#### **5.1 Implementation of Database**

To implementing the database, we applied

- Laravel Framework
- MYSQL

Laravel is a framework for build a website using PHP programming language. It is a powerful and easily accessible framework.

MYSQL is an open-source relational database management system [1].

#### **5.2 Execution of Front-End Design**

For designing the front-end, we use- HTML, a library from CSS called bootstrap, a library from JavaScript called JQuery. We also used Postman library to build and use API in an API platform.

#### **5.3 Implementation of Interactions**

For feedback of our website, we discuss our idea with our teachers, family, friends and supervisor. They give us some ideas to improve our work. We used lots of features and options to make our website user-friendly.

#### **5.4 Testing Implementation**

Testing is a basic process of creating website. We tested our project multiple times while processing the website. We found many bugs and errors during this testing. But, because we tested the website in every step, it takes us less time to fix the bugs or errors. That's why we should test a system regularly to avoid any obstacle and build a standard website.

#### **5.5 Test Results and Reports**

For test results and report a test case table is given below:

Table 1: A Test Case for the Website

Test Case Objective	Test Input	Expected Outcome	Actual Result	Status	Date
Logo	Insert a logo	Set logo	Done setting the logo	Pass	04-12-2021
Welcome Picture	Add a picture	Set picture	Picture added successfully	Pass	04-12-2021
Teacher Information	Try to see personal information's as a guest	Hide personal information	Personal information hidden	Pass	04-12-2021
Result	Try to see the results as a guest	Hide	No result	Pass	04-12-2021
Login	Login with an invalid email	Login fail	No account with this email	Pass	04-12-2021
Video Lecture	Provide video lecture	Upload Video	Uploaded successfully	Pass	04-12-2021
Download Books	Download book	Download PDF book	Downloaded	Pass	04-12-2021
Profile Update	Make any change on a profile	Update any information	Updated successfully	Pass	04-12-2021

## **CHAPTER 6**

### **IMPACT ON SOCIETY, ENVIRONMENT AND SUSTAINABILITY**

#### **6.1 Impact on Society**

In this era of technology, website has become an important part for every profession. A website can make a strong impact in every work. Our website is an educational website. It could change the point of view of our society by updating the usual way of studying. Students can explore the world of study with the help of our website. We are hoping that with the help of our website, the society will change way of thinking.

#### **6.2 Impact on Environment**

Online education is a good way of excellent study that offers benefit, reduced expenses and a different experience. Web based education reduces the negative impacts on environment which comes from production, delivery and transportation. The equipment's textbooks, pens, papers, desks, electricity, buildings needed for education institutions are reduced. It minimize waste and preserves natural resources. This also saves money and time for both the institution and the student [9].

#### **6.3 Ethical Aspects**

Ethical Aspect is the sense of choosing between good and bad. Ethical Aspects is a very sensitive part when it comes to use websites. All the users have to be careful at what they are looking for and using. It is a challenge to control users what they are doing online. So we have to teach ethical values to our younger's. Some rules can help us follow those values for using a website.

- We have to take care of the equipment's of a website.
- Have to explore appropriate and safe sites.
- Have to stop cyber bullying.
- Have to maintain copyright law.
- Have to be more responsible.

#### **6.4 Sustainability Plan**

Our website is a sustainable website to use. To maintain the sustainability of our our website we had some plans.

- Need to identify required resources.
- Need to decide financing strategies.
- Need to create a working scheme.
- Need to create case statements.
- Have to recognize effective partners.
- Have to identify which materials need to be sustained.

## **CHAPTER 7**

### **CONCLUSION AND FUTURE OPPORTUNITIES**

#### **7.1 Future Opportunities**

We have prepared this application for our Final Project. So, we have had to do it in a limited time. For that we couldn't do much variation and also couldn't add many features. If we get any opportunities later to improve our website, we will surely do it. We want to add more languages so anyone can use it easily. There is a feature called future goal. We want to add university links on that part, so that students can have an idea about which university is good for which subject in Bangladesh. Would like to take permission to provide certificate if anyone complete any class. We want to upgrade it in an international level website.

#### **7.2 Limitations**

Just because we created this website in a limited time for our final year project, we couldn't add all the features we wanted.

This app translates everything in English only. We can't use any other language to use this website.

If anyone wants to use this application, they have to register first with an email as a student or parent or teacher. Guest facilities are not available.

No certificate will be given for completing any class.

#### **7.3 Discussion and Conclusion**

##### **7.3.1 Discussion**

There are many interesting and meaningful features in this application. There are so many features which makes our application different from others.

A general consideration is the parent's registration part. No website allows a parent to see their Childs student life or progress this way. They can connect with any teacher directly through our website.

Another pertinent point is book library. In our book library, users can find any kind of book along with text books. If they couldn't find any book, they can also suggest us.

Future Goal is another unique feature in our website. Students get to know the career options they could get in our country.

Last but not the least, if users face any problem using our website, they can directly contact with us.

### **7.3.2 Conclusion**

For our final year project, we thought of many types of web application, android application etc. But couldn't find any suitable project that could actually help our country. After thinking and doing some research for a while, we notice some big changes in the way of our younger generations study methods. Because of the lockdown situation they hardly followed any specific routine for studying a day. Most of them avoided study for a long time. Many students were leaving studies for their financial crises. By seeing this entire situation, we finally got the idea to make an educational website.

In this website, we want to provide standard level of education to all.

While creating this website, we also learned many things to improve our web development skill. We also get to know the importance of team work. Making this project was a good experience for both of us.

We hope that this website stands as we wanted and hopefully will help our users to improve themselves on their own field.

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# PLAGIARISM REPORT

ICCHE SCHOOL: DESIGN AND DEVELOPMENT OF A WEB BASED HOMESCHOOLING APPLICATION BY Md. Joynal Abedin (ID: 181-15-10963) AND Warda Dewan (ID: 181-15-10603)

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