

Tuition Teacher

BY

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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 “**Tuition Teacher**”, submitted by **Md. Rashedur Rahman Hridoy, ID No: 191-15-12882** and **Kazi Israt Zahan, ID No: 191-15-12402** 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 17 January 2023.

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We hereby declare that, this project has been done by me under the supervision of **Ms. Chowdhury Abida Anjum Era, 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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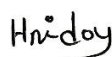
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ABSTRACT

This project is an "E-learning Platform" that is web-based. People may easily acquire any course through our system at the lowest price, and we also place a strong emphasis on the quality of the course material. The system makes it simple for users to find the courses that are ideal for them. This system differs from other e-learning service websites in a number of ways, including through the availability of free and paid courses, private tutors, become a tutor, online classes, and chats. Because of the operation size and time of the final year defense, functionalities like the online class and chat system are not yet complete. However, in the future, we will focus more comprehensively on it. Besides that, user comments will benefit us over time. People can simply provide feedback about their experiences, and the system as a whole and the admin panel can address their needs in response to that feedback. By providing all the required options, including the teacher search tool and the free courses that make up the bulk of our system, we have made an effort to provide a seamless experience with our platform. Any user can easily utilize every feature, but in order to access the entire system, they must register and log in.

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CHAPTER 1

INTRODUCTION

1.1 Introduction

“Tuition Teacher” is a web application which provides user with online courses and tutors. Firstly, by using this online platform anyone can sign up and purchase an online course to grow their skill or can request to hire a tutor who will guide them in their academic journey. “Tuition Teacher” provides a wide variety of free and paid courses, users can easily browse through these courses and enroll into any course they like. And any user who are looking for private tutor they will find “Tuition Teacher” very useful. “Tuition Teacher” provides lots of great tutors. Users can search and select the tutor that meet their needs. Secondly, “Tuition Teacher” also open opportunity for people who wants to teach other people in exchange for experience and emolument. And if anyone wants to work with “Tuition Teacher” and produce quality online course content then they can also do that too.

1.2 Motivation

In the modern world, it is undeniably true that both the world and everything in it are constantly evolving. Modern life has undergone a full transformation due to information technology. Everything is available in the palm of our hands nowadays which made our lives easier and simpler. And that much simplicity gave us the power to do everything online, we can buy groceries online, we can rent home online, we can visit doctors online, we can purchase cloths and foods online. So, our team thought why not make a platform where people can have the facility of both purchasing online courses and hiring tuition teachers. Specially, when there is no other platform which provides both of the services together.

1.3 Objective

Our main objective is to create an online platform which will make people's lives easier by meeting all their needs for online education. And In order to properly accomplish this goal, certain objectives must be put into practice. Like for consumers, we want to provide them a combo of both online course and private tuition, and those online courses would have higher quality standards than our competitors, we will try our best to charge the lowest and most reasonable price for our courses so that all of our users can easily enjoy and can grow from that experience. And for the private tutor part, we will verify every tutor's National Identity Cards (NID), we will be doing this process because it is very important, we hope not but if something unfortunate happens then we will contact with the law enforcement forces to take necessary action. And for the tutors, we want act kind towards them as they are the pioneers of building a nation. And we will be doing that by not taking higher commission charge like other websites and local services. But our objective has more purpose than just providing high quality course at cheaper rate, creating safe environment for students by verifying their teacher identity and by taking lower commission from tutors, we want to make the user interface user-friendly and light weight. So that, our user will get smooth user experience than other services which are clunky and boring. And even though we tried to make our website as much responsive we can but we want expand on it more. So that anyone can visit our platform from any type of device,

1.4 Expected Outcome

We are hoping that by using our platform consumers can save their time. They will not need to find different websites or platforms when our platform provides everything in one place and at low cost. And for tutors, they will be free from the hassle of finding new students and making leaflets. And from our point of view, we are expecting many things like:

- ❖ 20% commission from every new tuition contract for the first month.
- ❖ Up to 50% profit from every purchase of online course.
- ❖ Consumer satisfaction.

1.5 Project Management and Finance

As of now, this project has required only a little amount of financial assistance. However, we have high hopes for this project's future success. Cause we expect that, this project will need fundings to compete with other rivals in the sector to make itself known.

1.6 Report Layout

Chapter 1: Introduction

This chapter discussed the project's purpose, objectives, management and finance, and expected outcomes. The record format is described in the remaining section of this chapter.

Chapter-2: Background

This chapter described some background examples of the project. Here are described the project's terminologies, challenging circumstances, related effort, evaluation with many websites, and scope of the hassle.

Chapter-3: Requirement Specification

The requirements are covered in this chapter. This chapter covers business process modeling, requirement collection and analysis, use case versions of the project with descriptions, logical relational database versions, and layout requirements.

Chapter-4: Design Specification

The project's design specification is the focus of this chapter. These includes the front-end, back-end, UI/UX, and implementation requirements.

Chapter-5: Implementation Testing

The major focus of this chapter is database implementation, front-end design implementation, and testing implementation, along with test results and reports.

Chapter-6: Impact on Society, Environment and Sustainability

The focus of this chapter is on how the project will Impact on society and environment, what are the ethical obligation and aspects of project and what will be the sustainability plan for the project.

Chapter-7: Conclusion Future Scope

The last chapter explored the discussion and conclusion of the project as well as the potential future for advancements of the project.

CHAPTER 2

BACKGROUND STUDIES

2.1 Preliminaries/Terminologies

During the early stages of software development, use cases and customer needs help establish the system architecture. Several elements that should be incorporated into the design User interface papers, entity relationship diagrams, screen navigation, and system architecture papers fall under this category. A visual representation of the system employing these inputs at the outset of the project will be provided by the preliminary design. As developers, we frequently receive assignments and want to start working right away without fully understanding the needs of the customer. On the other hand, preliminary designs support software development by ensuring consensus and supplying a software plan. I attempted making the entire project user-friendly and responsive, which helped us attract more clients.

2.2 Related Works

“Tuition Teacher” helps the user with all the information and important features. The user can easily use these features and the information to make the right decision. There are some websites with similar concept but they lack to provide all facilities, they will provide either online course or only tutors, also those websites are lacking in providing valuable information and necessary details. And many websites don’t do any teacher verification which was one of the biggest concern for us. We try to verify every tutor through their NID else we reject their application.

This is an website called bdTutors[1]. Shown in figure 2.2.1 to 2.2.4.

This is the home page of bdTutors website, in this page we can see that they are providing information of featured teachers. Basically they charges teachers a amount every months to feature them in the front page.

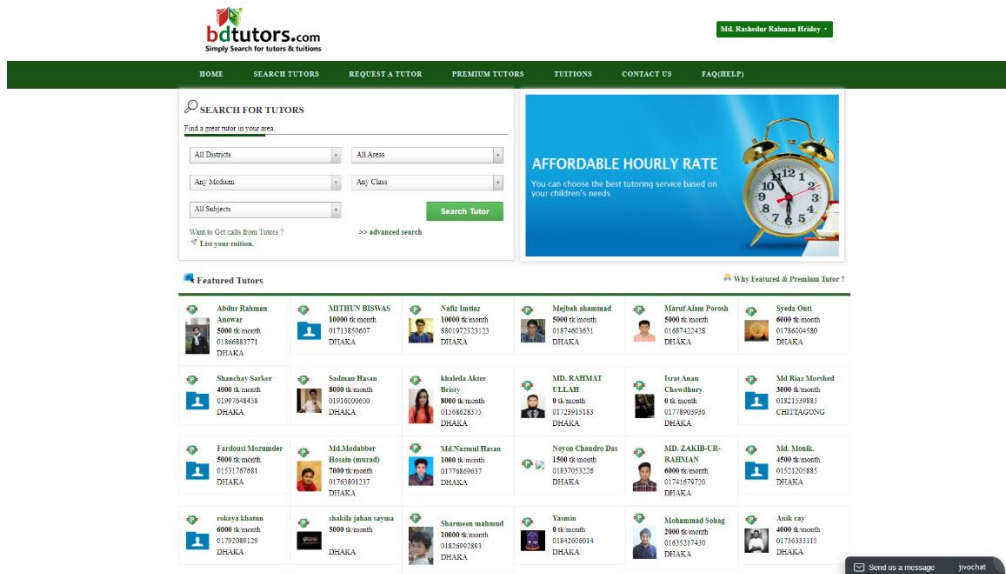


Figure 2.2.1 bdTutots (Home)

This is the search result page of bdTutors website. In this page, users get their search result. And then they can chose from this teacher to contact with them.

The screenshot displays the bdTutors website's search results page. At the top, the bdTutors logo is on the left, and the user 'Md. Raheed Rahman Hridoy' is logged in on the right. A green navigation bar contains links for HOME, SEARCH TUTORS, REQUEST A TUTOR, PREMIUM TUTORS, TUTORIALS, CONTACT US, and FAQ(HELP). The main heading is 'TUTOR SEARCH RESULT', with a breadcrumb trail 'Home > Tutor Search Result'. Below the heading, it states 'Search Result: 9004 Tutor(s) found:'. A pagination control shows 'Showing Page # 1 of 451' with '[Next]' and '[Last Page]' buttons. The search results are presented in a list of four tutor profiles. Each profile includes a profile picture, name, member since date, location (DHAKA), qualification, and subjects taught. Each profile also has 'View Details' and 'Contact' buttons. The 'Refine Your Search' sidebar on the right offers filters for District, Area, Medium, Class, Subject, Gender, and Salary Range, along with a 'Search Tutors' button. A 'Browse Tutors by Subjects' section is also visible, listing subjects like 2 Subjects, 3 Subjects, 3D Design, 4 Subjects, and Accounting. At the bottom right, there is a 'Send us a message' button and a 'jvachat' chat icon.

Figure 2.2.2 bdTutots (Tutor Search Result)

This is profile of a tutor from bdTutors website. So, after clicking on any teacher from the home page or from search results, user will get information of that tutor in this type of page.

The screenshot shows the profile of a tutor named Asif Iqbal on the bdTutors website. The page layout includes a header with the bdTutors logo and navigation links, a main content area with the tutor's details, and a right sidebar with contact options and featured tutors.

bdTutors.com
Simply Search for tutors & tuitions

MD. Rasheedur Rahman (Friday)

HOME SEARCH TUTORS REQUEST A TUTOR PREMIUM TUTORS TUTORIALS CONTACT US FAQ(HELP)

TUTOR PROFILE Home > Search Tutor > Tutor Profile

Asif Iqbal
ID # 82247961
Experience: search for infinity !!!

Qualification: Hsc candidate (admirer Cantonment college)
Area Covered: DHAKA (Cantonment)
Teaching: General Math, Multiple subjects, Bangla, English, Math, Biology, Chemistry, General Science, Higher Math, Physics
Phone: 01708378271
Email: asif11ace@gmail.com

PREMIUM TUTOR

Tuition Info:

Expected Minimum Salary: 4000 tk/month
Current Status for Tuition: Available
Days per week: 3 days/week
Preferred Tutoring Style: Group Tuition Private Tuition
Place of Learning: Home Visit
Extra Facilities: Outline Help Phone Help Provide Hand's Note
Preferred Medium Of Education: Bangla Medium
Preferred Classes: Class VI Class VII Class X S.S.C
Preferred Subjects: General Math Multiple subjects Bangla English Math Biology Chemistry General Science Higher Math Physics
Preferred Areas to Teach: DHAKA CANTONMENT

Educational Qualification

Exam	Subject/Group	Institute	Result	Year	Awards
------	---------------	-----------	--------	------	--------

Email this Tutor [BACK TO RESULTS](#)

Asif Iqbal
asif11ace@gmail.com
01708378271

Your Name:
Mobile:
Email:
Details Information:

Send Message

Call 01717-600889
ADVERTISE WITH US
Institute OR Individual Tutor
Display your banner

Featured Tutors

MD.Mominuzzaman
5000 tk/month
01724457878

Send us a message prochat

Figure 2.2.3 bdTutors (Tutor Profile)

This is the registration page for tutors from bdTutors website. So, if any person want to work with bdTutors they need to register from this page by submitting all the required information.

The screenshot shows the registration page for tutors on the bdtutors.com website. The page has a green header with the logo and navigation links. The main content area is titled "REGISTER AS A TUTOR FOR FREE!" and contains a registration form with the following fields: Full Name, Choose District (a dropdown menu), Phone Number, Verification Email or Phone (with a sub-field for "Email or Phone"), Password, and Confirm Password. A checkbox for "Terms & Conditions" is located below the password fields. A green "Register Me" button is positioned at the bottom of the form. To the right of the form is a "Help & Info" section with two questions and answers: "1. Is registration free of cost?" and "2. Why email need to be verified?". The footer contains social media links, customer service contact information (01711-443132), a newsletter sign-up form, and a list of payment methods including Visa, MasterCard, and PayPal. A small disclaimer is visible at the very bottom of the page.

Send us a message jivochat

Figure 2.2.4 bdtutots (Tutor Registration)

Another tutor based website called DeshTutor[2]. Their work is showing below in figure 2.2.5 to 2.2.8.

This is the DeshTutor website's home page, and as you can see, they provide information on their featured teachers there. In essence, they charge teachers a monthly fee to be shown on the first page.

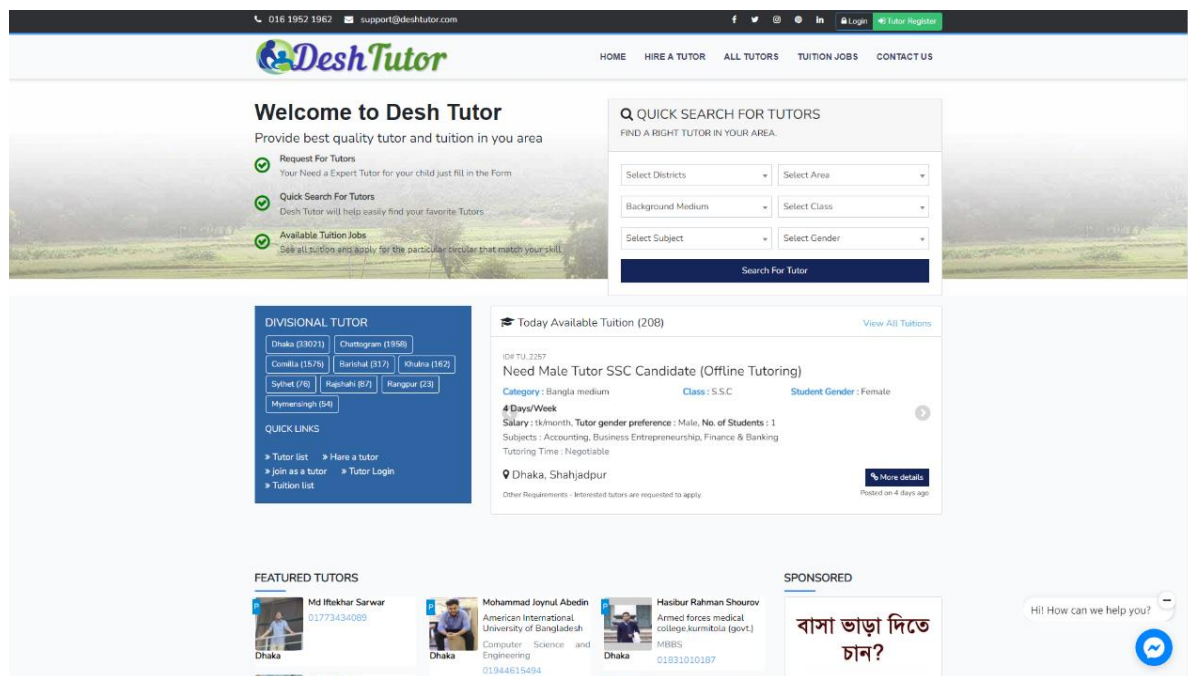


Figure 2.2.5 DeshTutor (Home)

This is the DeshTutor website's search results page. Users could find their search results on this page. After that, users could choose which teacher to get in touch with.

The screenshot displays the DeshTutor website's search results page. At the top, there is a navigation bar with the DeshTutor logo and links for HOME, HIRE A TUTOR, ALL TUTORS, TUITION JOBS, and CONTACT US. The main content area is titled "Search Result (102)" and features two tutor profiles. Each profile includes a profile picture, name, member since date, experience, and a list of subjects taught. The first profile is for Mosair Rahman, and the second is for Shahriar Azad Anik. To the right of the profiles is a sidebar with a "Filter by Category" section and a "Search for tutor" section with various dropdown menus for location, gender, and salary range.

Figure 2.2.6 DeshTutor (Tutor Search Result)

This tutor's profile is taken from the DeshTutor website. So, after selecting a tutor from the home page or the search results, the user will see information about that tutor on this kind of page.

TUTOR PROFILE

Profile Information:

- ID#: 1016062
- Name: Mosiur Rahman
- Gender: Male
- Institution: Bangladesh University of Engineering & Technology
- Background medium: Bangla Medium
- Subject: Materials & Metallurgical Engineering
- Qualification: HSC
- Present Location: Arambagh, Motijheel, Dhaka-1000
- Permanent Address: [Redacted]

Tuition Information:

- Current Status for Tuition: Available
- Expected Minimum Salary: 9000 tk/month
- Days per week: 3 Days/Week
- Preferred Medium Of Education: Bangla Medium, Admission Test
- Preferred Tuition Time: Morning, Afternoon, evening
- Preferred Tutoring Style: Group Tuition, Private Tuition
- Preferred Classes: Class VIII, Class IX, S.S.C, HSC 1st year, HSC 2nd year
- Preferred Subjects: Math, ICT, Physics, Chemistry, Higher Math, General Math
- Preferred Areas to Teach: Dhaka, Azimpur, Badda, Baily Road, Bakshi Bazar, Banani, Bangla Motor, Bashabo, Bashundhara R/A, Bonosree, Chackbazar, College Gate, Dhaka University Area, Dhanmondi, Farmgate, Fokirapul, Green Road, Gulistan, Gulshan, Hatijheel, Jeezbari, Kakral, Kailashganj, kamalapur, Mirabagh, Miranda, Mirskata, Mogbazar, Mahummadpur, Motijheel, Mouchak, Masjid, Naya Paltan, New Eskaton Road, New Market, Paltan, Pikhana, Puran Paltan, Rajarbagh, Ramna, Segunbagicha, Shajahanpur, Shaantinagar, Tejgaon, Tikatuli, Wari, Zgatala

Member Since: 13 Jul, 2022
Last Login: 5 months ago
0013 Total Views

Contact with This Tutor:

Name:

E-Mail (optional):

E-Mail:

Phone Number:

Details Information:

Hi! How can we help you?

Figure 2.2.7 DeshTutor (Tutor Profile)

This is the DeshTutor website's tutor registration page. Therefore, everyone who wants to work with DeshTutor must register from this webpage by providing all the necessary data.

016 1952 1962 support@desh-tutor.com

HOME HIRE A TUTOR ALL TUTORS TUITION JOBS CONTACT US

REGISTER AS A TUTOR, IT'S FREE!!

Complete all step.

Personal Information Educational Information Tuition Information

Personal information (* field validate)

Full Name*

Enter your full name

Select your Gender : MALE FEMALE

Phone Number *

Enter your phone number

Alternative Phone Number(optional)

Enter Alternative Phone Number

Email address (optional)

Enter email

Password*

Password

password confirmation*

password confirmation

Profile picture
Click here

Upload your profile picture must be clear

NEXT >

Figure 2.2.8 DeshTutor (Tutor Registration)

An online course website called BOHUBRIHI[3]. Their work is showing below in figure 2.2.9 to 2.2.12.

This is the home page of the BOHUBRIHI website, and as we can see, it contains information on a few courses.



Figure 2.2.9 BOHUBRIHI (Home)

This is a course description page from BOHUBRIHI website. So, after clicking on any course from the home page or from search results, users will be introduced to this type of page. Where, they can view all information and make decision if they want to purchase or not.

The screenshot shows the BOHUBRIHI website interface for a 'Complete GRE Preparation' course. The header includes the BOHUBRIHI logo, a dropdown menu for 'কোর্সেসমূহ', a shopping cart icon with '৳ ০', a 'কোর্সেসমূহ' dropdown, and a search icon. The main content area features a large image of two men with the text 'BOHUBRIHI COMPLETE GRE PREPARATION'. Below this image is a section titled 'কেন এ কোর্সটি করবেন?' (Why take this course?) with a sub-heading 'GRE-তে মূলত তিনটি সেকশন আছে - Verbal Reasoning, Quantitative Reasoning, আর Analytical Writing। এই ব্যতলে ৩টি সেকশনকেই একসাথে রাখা হয়েছে যারত একজন স্টুডেন্টের জন্য GRE-এর কমার্শিট প্রিপারেশন নেয়া একদম সহজ হয়।' (GRE has three main sections: Verbal Reasoning, Quantitative Reasoning, and Analytical Writing. These three sections are kept together, making it easier for a student to prepare for the GRE.) To the right of the main image is a blue box titled 'এই কোর্সের ভেতরে যা যা রয়েছে' (What's inside this course?) listing features: 'Approx. 5 Hours', '100+ Total Students', 'Mentor Support', 'Basic To Advanced', 'Language: Bengali', 'Discussion Forum, Q/A', '1 Year Of Content Access', and 'Course Certificate'. Below this list, the course price is shown as 'কোর্সের মূল্য' (Course Price) 'ট ৩,০০০' (৳ 3,000) and 'ট ২,৮০০' (৳ 2,800). A yellow button labeled 'এখনই ভর্তি হোন' (Enroll now) is at the bottom of this box. Below the main content area are two buttons: 'পারভেঞ্জের বিস্তারিত' (Details of the promotion) and 'ইন্সট্যান্ট' (Instant). Below these buttons is a section titled 'কেন এ কোর্সটি করবেন?' (Why take this course?) with the same text as the section below the main image.

Figure 2.2.10 BOHUBRIHI (Course Page)

Any user who wishes to purchase a course will be sent to this checkout page, where they must enter their billing information and choose a payment option. Then they only need to click the order button to be redirected to the payment gateway after that.

BOHUBRIHI কেন্দ্র

₹ 2,800 অর্ডার

প্রোমো কোড ব্যবহার করুন এগাই

বিলিং ইনফো

Full name * Phone *

Email address *

পেমেন্ট পদ্ধতি বেছে নিন

bKash

Mobile Banking

Credit & Debit Card

Net Banking

এক নজরে আপনার অর্ডার

PRODUCT	মোট
Complete GRE Preparation	ট 2,800
মোট	ট 2,800
সর্বমোট	ট 2,800

SSLCommerz দিয়ে নিরাপদ পেমেন্ট

অর্ডার করুন

Figure 2.2.11 BOHUBRIHI (Checkout)

It's the BOHUBRIHI user's dashboard or profile page. The purchased courses are displayed on this page, along with the total number of courses purchased, completed, and certificates obtained.

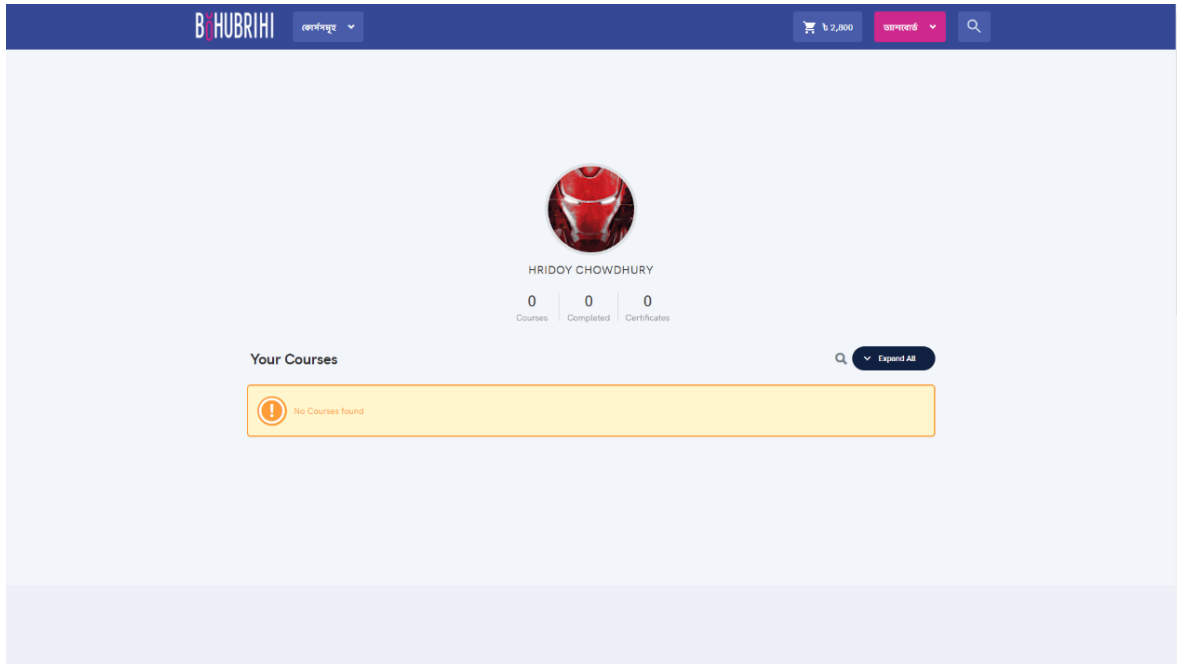


Figure 2.2.12 BOHUBRIHI (Dashboard)

2.3 Comparative Analysis

We discovered that most websites utilize a similar approach, but most of them are not user-friendly, and many of them lack features. For example, many of those websites offer only one option, either tuition or online course. These websites are not easily accessible for the users. Our project was compared to other websites that were similar to it. Comparatively speaking, our project is more beneficial than other websites in this industry. We are putting in a lot of effort, and we soon plan to update our websites with additional distinctive features. Greater user assistance than other websites is what we want to provide.

2.4 Scope of the Problem

The development of this project ran into a variety of issues. We conducted research on our target demographic and made an effort to understand their needs. In an effort to aid anyone looking to use a platform to find teachers or courses online, we made an effort to consider every factor. In order for users to simply browse our site and utilize this system when necessary, we sought to make our project more practical. Because PHP is an easy-to-use language for programming, we decided to build our web application using the Laravel framework. We utilized Visual Studio as the IDE and a MySQL database to store the system's data.

2.5 Challenges

This project is fairly large, and a large project carries a large problem. And one of the major challenges was the changes in our team, we were a team of three, but one of our team members left us in the middle of due to a family matter, which made the journey much more difficult. The remaining difficulties are listed below:

- It was difficult to gather information from Google and different websites.
- We had a tremendously hard time utilizing MySQL to manage large amounts of data.
- We had little experience with web programming, thus it was difficult for us to come up with a fix if we failed.
- Maintaining the project and the study together was challenging with one fewer person.
- Gathering information about teacher from various background and different area to add into our database was quite challenging.

CHAPTER 3

REQUIREMENT SPECIFICATION

3.1 Business Process Modeling

Software development life cycle (SDLC) model is employed to explain each stage of the software development process, from early planning and design to testing and maintenance of the final result. In order for teams to properly plan, carry out, and track their work, software development should be approached in a disciplined and organized manner utilizing an SDLC model. We used prototyping model for this project. Because A prototype, or early version of the program, is created, tested, and then improved according to user feedback under the prototyping model of software development life cycle (SDLC). The purpose of the prototyping approach is to create a functioning version of the software fast, collect feedback on it, and then utilize that input to enhance the design and functionality of the finished product. The prototype technique is frequently employed when the needs for the program are not well defined or when major requirements changes are anticipated throughout the development phase. A preliminary version of the software may be built by developers, and users, or tester can then provide input on it. This can assist to clarify the requirements and guarantee that the end result will satisfy the demands. One of the key benefits of the prototype approach is that it enables developers to quickly provide a functional version of the program to consumers, which can assist to collect important feedback and enhance the final product. The prototyping methodology, which entails creating and testing several prototypes before the final product is produced, may, however, also be time-consuming.

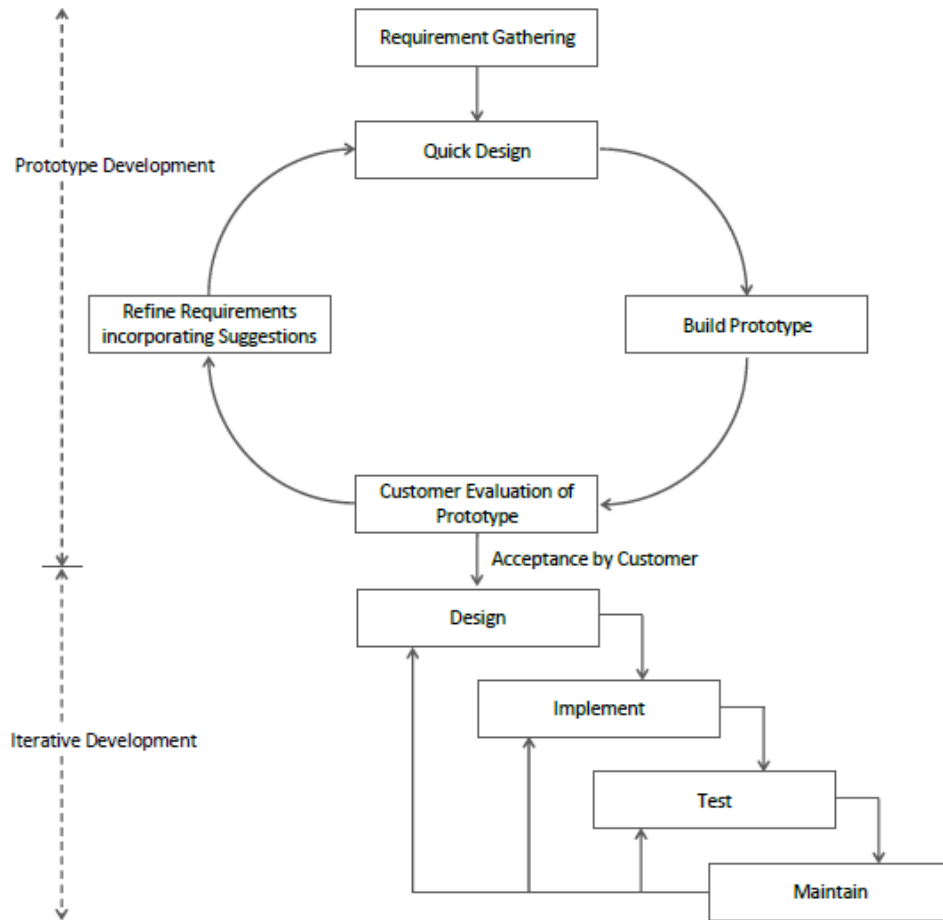


Figure 3.1.1 Prototyping model of SDLC

3.2 Requirement Collection and Analysis

1. OS : Windows 11
2. IDE : Visual Studio
3. Html
4. CSS3 and Bootstrap
5. Java Script
6. Framework : Laravel
7. Database : MySQL
8. Server : Hostinger (shared web hosting)

3.3 Use Case Modeling and Description

Here is the use case model of our system. In this diagram, we have shown the working process. At first user can login/signup and view his profile, then user can search for tutors and request for tutors. In the courses section users can user can also enroll/purchase courses. On the other hand admin has lots of work, always update and add new course and teachers, monitor information. Which is shown in the Figure 3.3.1.

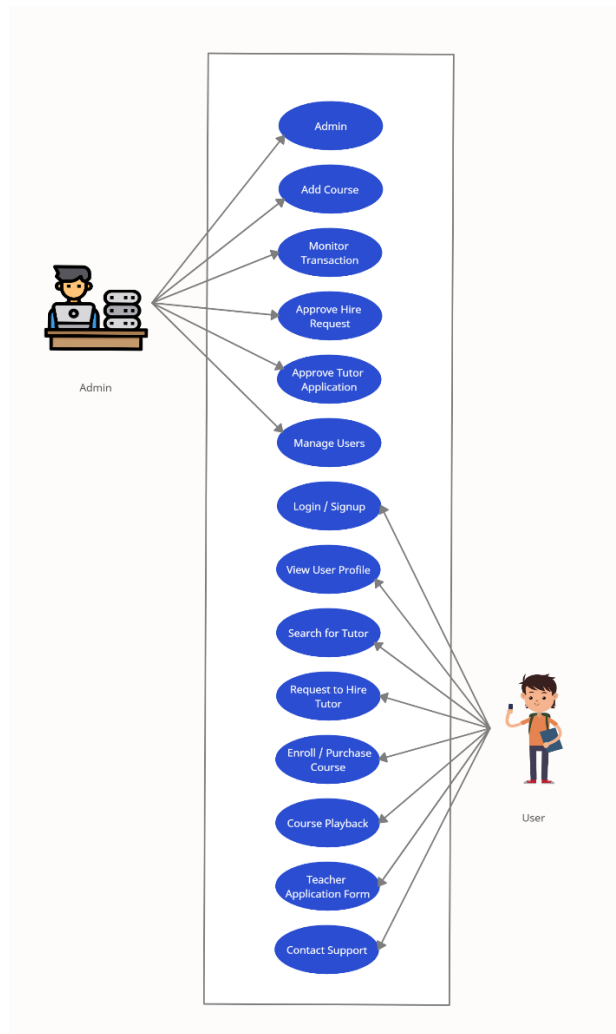


Figure 3.3.1 Use Case Diagram

3.4 Logical Data Model

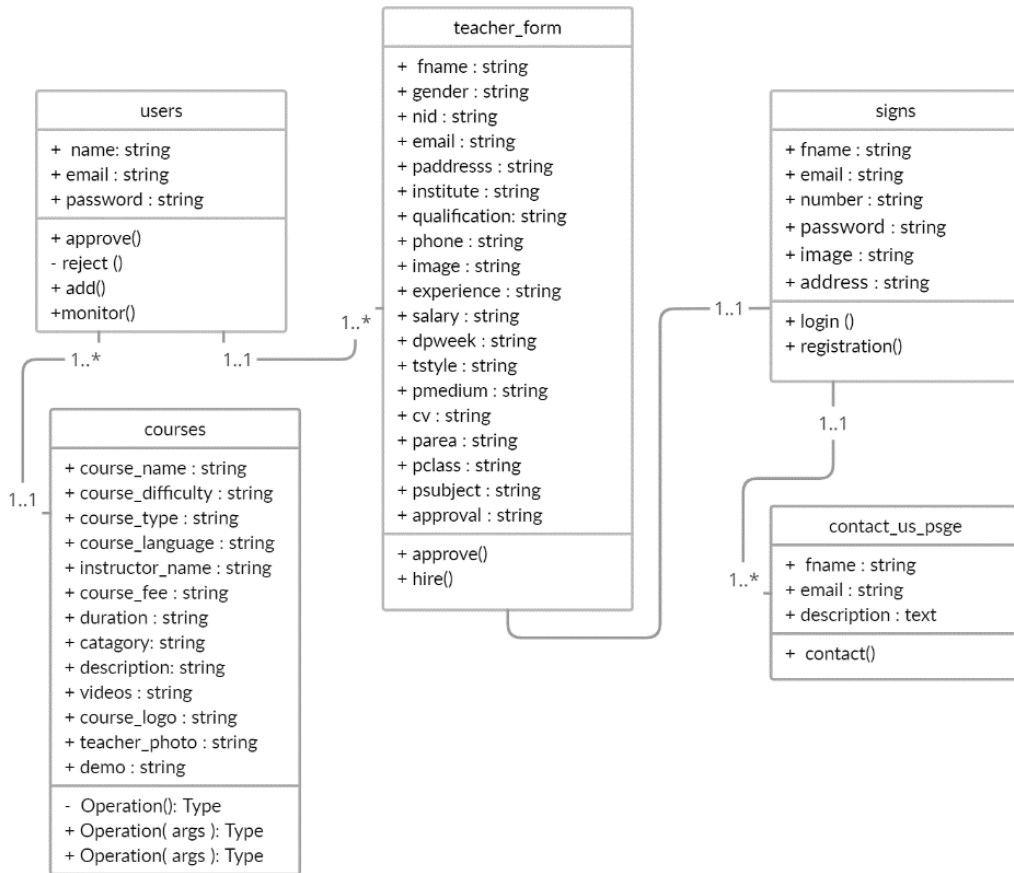


Figure 3.4.1 Logical Data Model

3.5 Design Requirement

1. Determine the project's objectives and purpose. This will serve as a guide for the front- end's design and layout so that the needed information is properly communicated to the target audience.
2. Investigate the industry and generate concepts for the design This can involve examining related websites or apps, and also understanding the tastes and requirements of the intended users.
3. Make prototypes or mockup for the design. It is a low-fidelity illustration of the design that illustrates the interface's fundamental structure and features.
4. Pick a color palette and typography that enhances the project's identity and look. This is easily achieved by picking fonts which are simple to comprehend and suitable for the content, as well as colors that represent the character and concept of the project.
5. Create the interface's fundamental layout and style using both HTML and CSS. In addition to adding font styles, colors, and other visual aspects, this can involve constructing headers, paragraphs, lists, and other structural components.
6. Use JavaScript to include interactive features like form validation, animations, and other interactive elements.
7. To make sure the interface is responsive and functions properly across all platforms, test it on various devices and browsers. Tools like browser dev tools or online testing platforms can be used for this.
8. Finish the design and make any necessary alterations in consideration of testing and suggestions.

CHAPTER 4

DESIGN SPECIFICATION

4.1 Front-end Design

A document that describes the user interface design of a website is known as a front-end design specification. It gives developers instructions on how to apply the design and outlines the website's layout, graphic design, and user experience. The specification should provide information on the page's layout, including where headers, footers, and navigation bars should be placed as well as the text's font, color, and style. Additionally, it should include any interactions or animations that are a component of the design, as well as how the website will function on various screen sizes and devices. Using a front-end design specification may assist ensure that the finished website correctly represents the planned design and offers a consistent user experience.

Landing Page

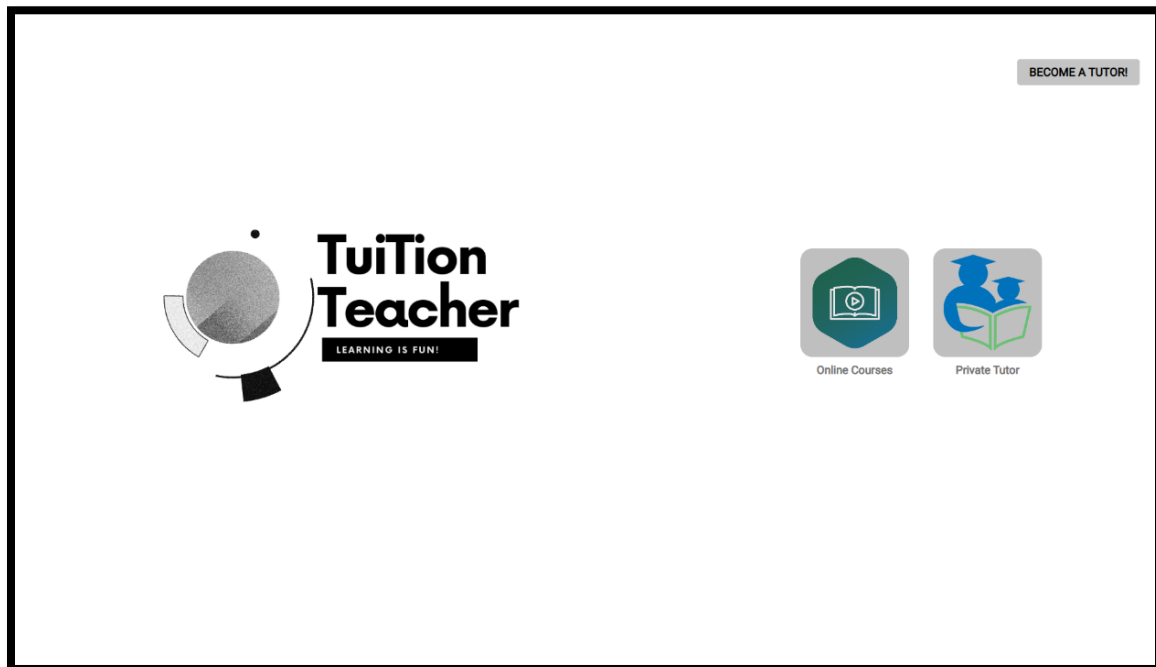


Figure 4.1.1 Tuition Teacher (Landing)

Login Page

This is the login page of our website. Any user must login first to visit our website.

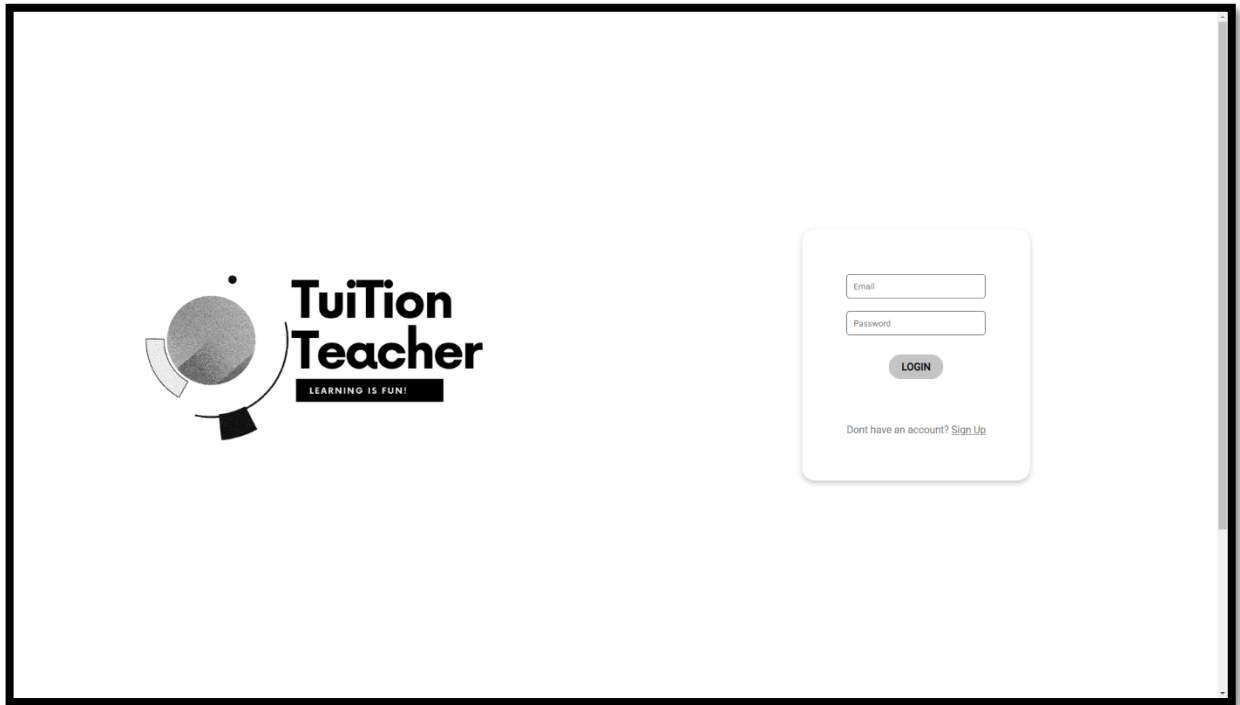
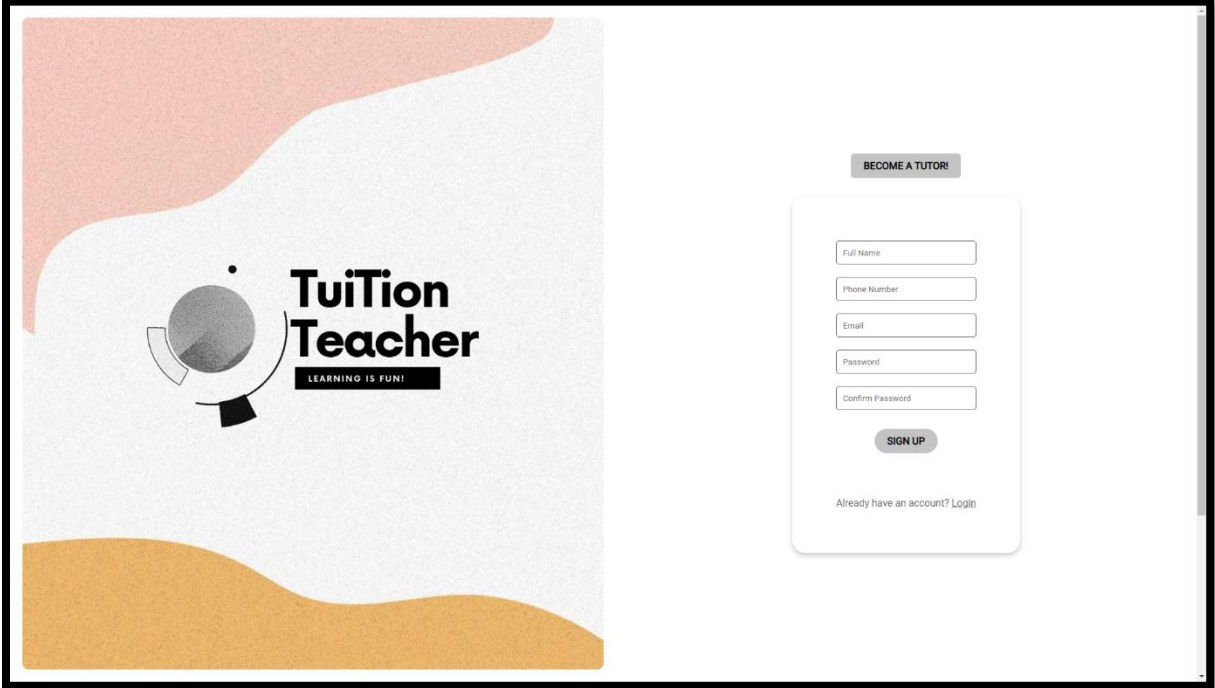


Figure 4.1.2 Login

Sign-Up Page

The user signup page is located here. Anyone may register on our website by entering their full name, email address, phone number, and password.

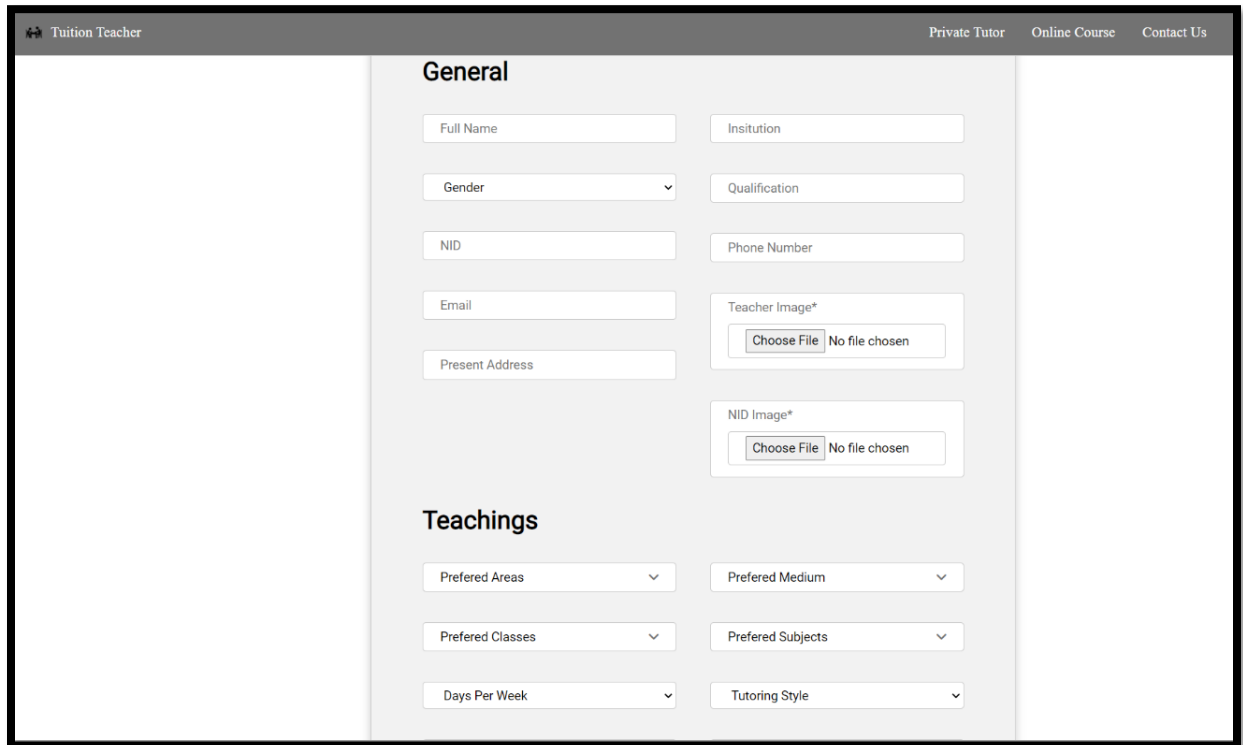


The image shows a web page for 'Tuition Teacher'. On the left side, there is a logo consisting of a stylized grey circle with a white arc and a black dot, next to the text 'Tuition Teacher' in a bold, sans-serif font. Below the text is a small black rectangle with the white text 'LEARNING IS FUN!'. The background of the page is white with abstract, wavy shapes in shades of orange and peach. On the right side, there is a sign-up form. At the top of the form is a grey button with the text 'BECOME A TUTOR!'. Below this are five input fields: 'Full Name', 'Phone Number', 'Email', 'Password', and 'Confirm Password'. At the bottom of the form is a grey button with the text 'SIGN UP'. Below the button is a link that says 'Already have an account? Login'.

Figure 4.1.3 Sign up

Teacher Application Page

Any tutor can submit a request to collaborate with us on this page by including all the relevant details. We shall decide whether to approve or deny their application after confirming this and their NID.



The screenshot shows a web application interface for a 'Tuition Teacher'. The page has a dark header with the text 'Tuition Teacher' on the left and navigation links 'Private Tutor', 'Online Course', and 'Contact Us' on the right. The main content area is divided into two sections: 'General' and 'Teachings'. The 'General' section contains several input fields: 'Full Name', 'Institution', 'Gender' (a dropdown menu), 'Qualification', 'NID', 'Phone Number', 'Email', and 'Present Address'. There are also two file upload sections: 'Teacher Image*' and 'NID Image*', each with a 'Choose File' button and the text 'No file chosen'. The 'Teachings' section contains five dropdown menus: 'Preferred Areas', 'Preferred Medium', 'Preferred Classes', 'Preferred Subjects', and 'Days Per Week', along with a 'Tutoring Style' dropdown menu.

Figure 4.1.4 Tutor Application

User Profile Page

This page shows the user's profile. On this page, users may access their personal information, courses they have registered for, and hired tutors.

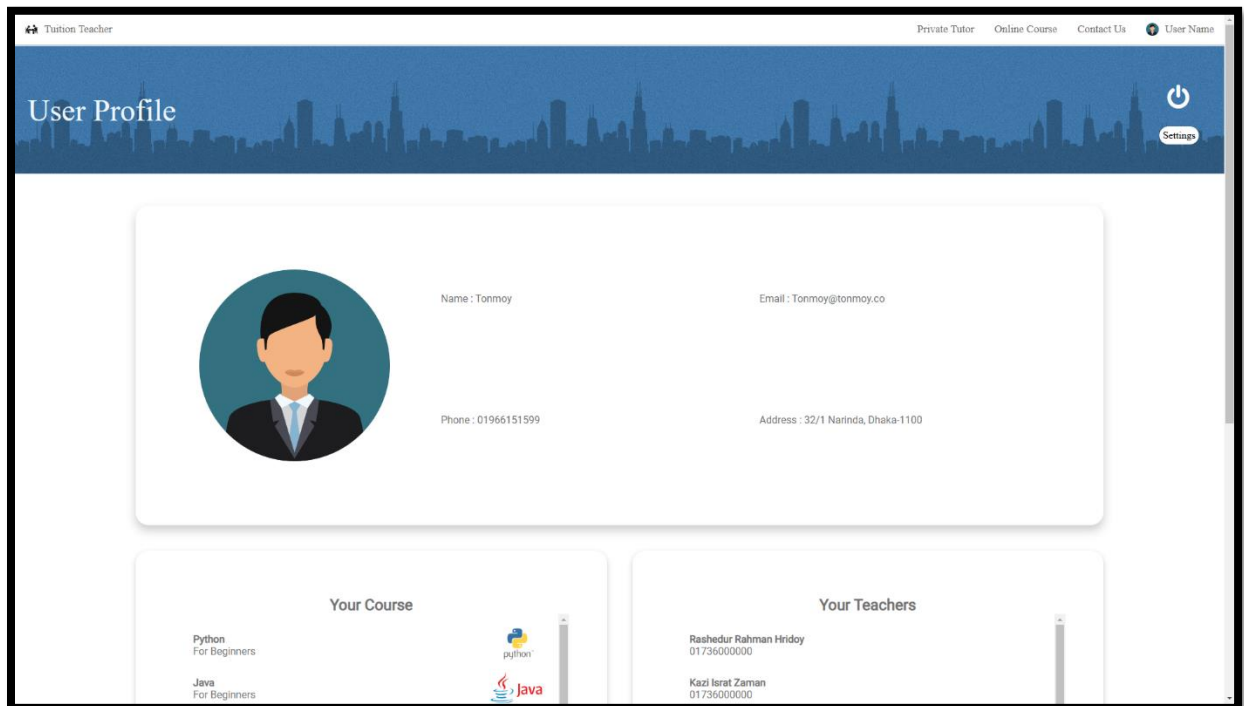
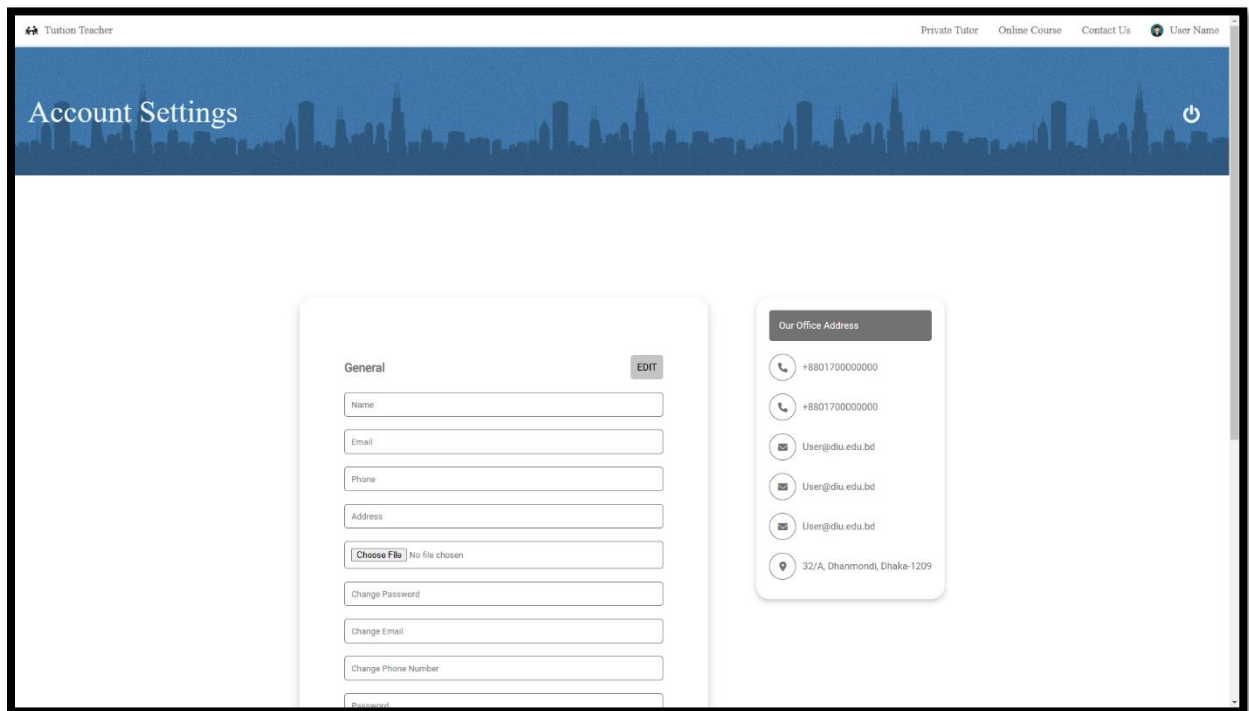


Figure 4.1.5 User Profile

User Settings Page

From this page, users may update their password, email address, and personal information.



The screenshot shows a web application interface for user settings. At the top, there is a navigation bar with the text "Tuition Teacher" on the left and "Private Tutor", "Online Course", "Contact Us", and "User Name" on the right. Below the navigation bar is a dark blue header with the text "Account Settings" and a power icon on the right. The main content area is white and contains two panels. The left panel is titled "General" and has an "EDIT" button. It contains several input fields: "Name", "Email", "Phone", "Address", a file upload field labeled "Choose File" with the text "No file chosen", "Change Password", "Change Email", "Change Phone Number", and "Password". The right panel is titled "Our Office Address" and contains a list of contact information: two phone numbers (+880170000000), three email addresses (User@diu.edu.bd), and a physical address (32/A, Dhanmondi, Dhaka-1209).

Figure 4.1.6 User Settings

Online Course Page

This page will provide both free and paid courses, allowing users to choose from a broad variety.

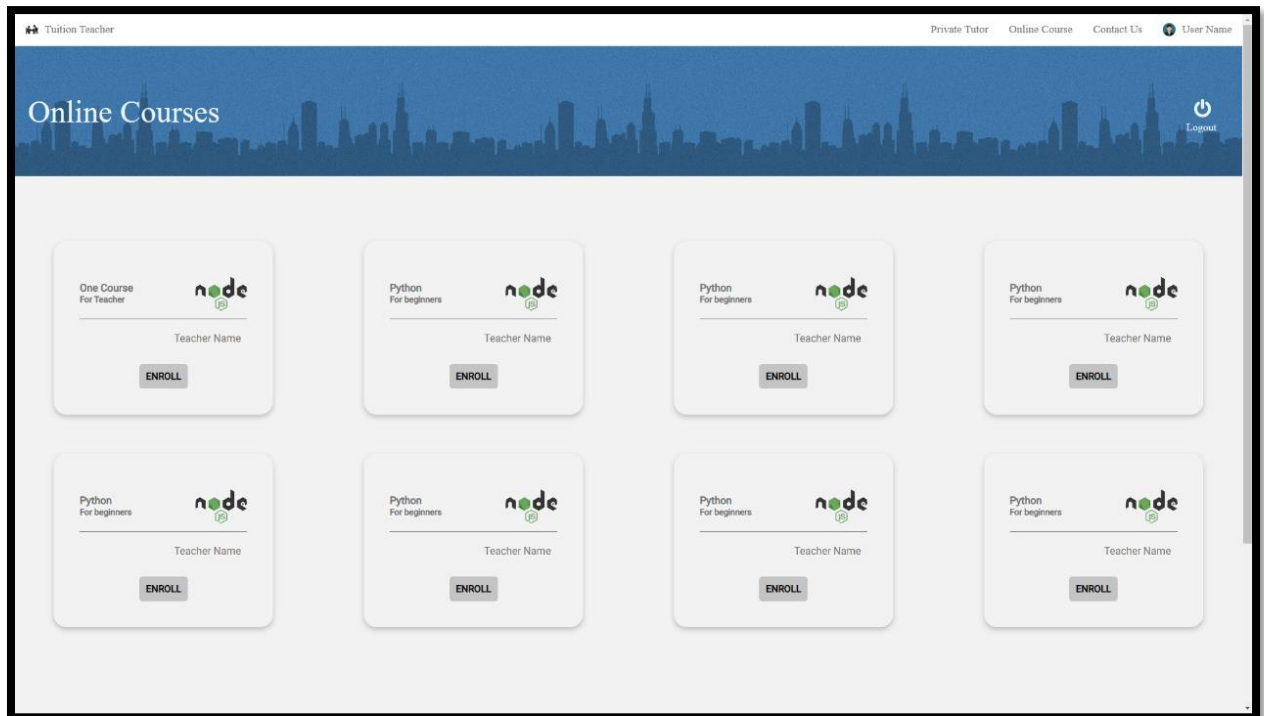


Figure 4.1.7 Online Courses

Free Course Page

Users will be sent to a page like this after choosing any free course from the courses page, which allows them to view all of the free course's details. Plus, they can quickly enroll by clicking the "enroll now" option.

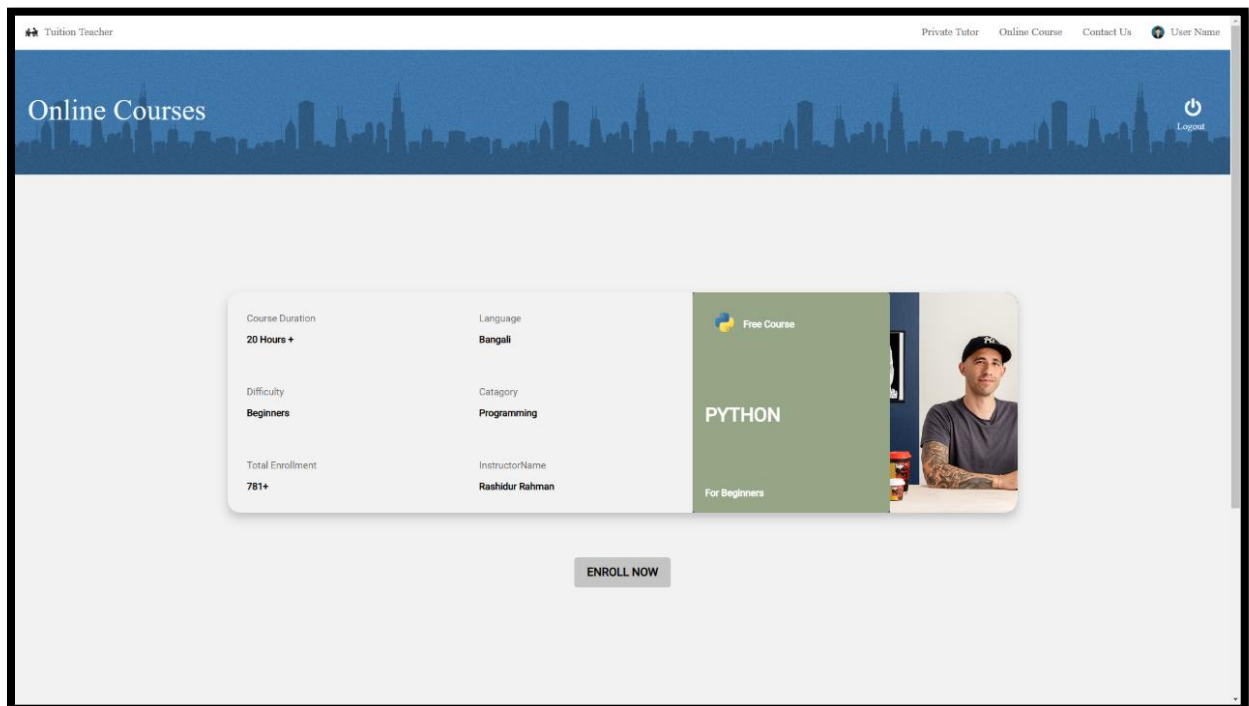


Figure 4.1.8 Free Online Courses

Paid Course Page

Users will be sent to a page like this after choosing any paid course from the courses page, which allows them to view all details of that paid course. Additionally, users must finish the purchase and wait an hour for approval if they wish to add that course to their library.

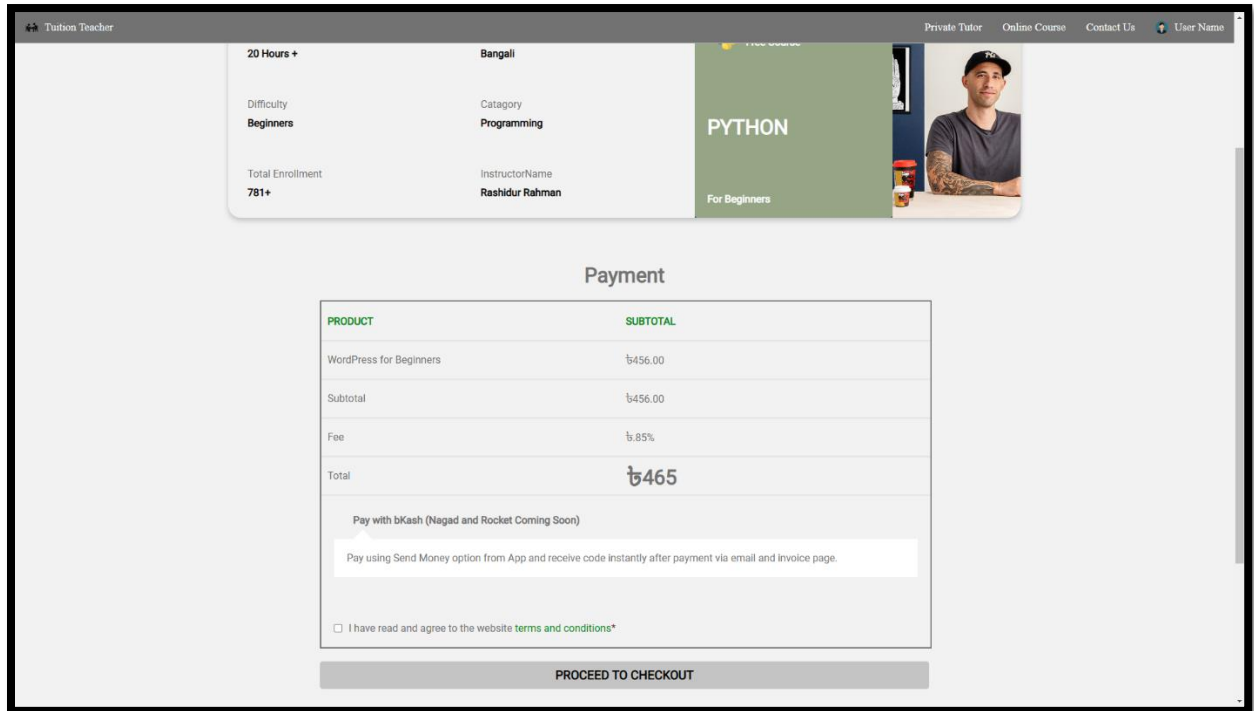


Figure 4.1.9 Paid Online Courses

Online Course Player Page

Videos for courses will be played on this page. After making a purchase or enrolling for a course, users must go to their profile to locate all the courses connected to their account and choose the one they want to watch.



Figure 4.1.10 Online Course Player

Private Tutor Page

Users will see all the teachers who have signed up for our website on this page, and they can use the search tool to focus their teacher inquiry by selecting different parameters.

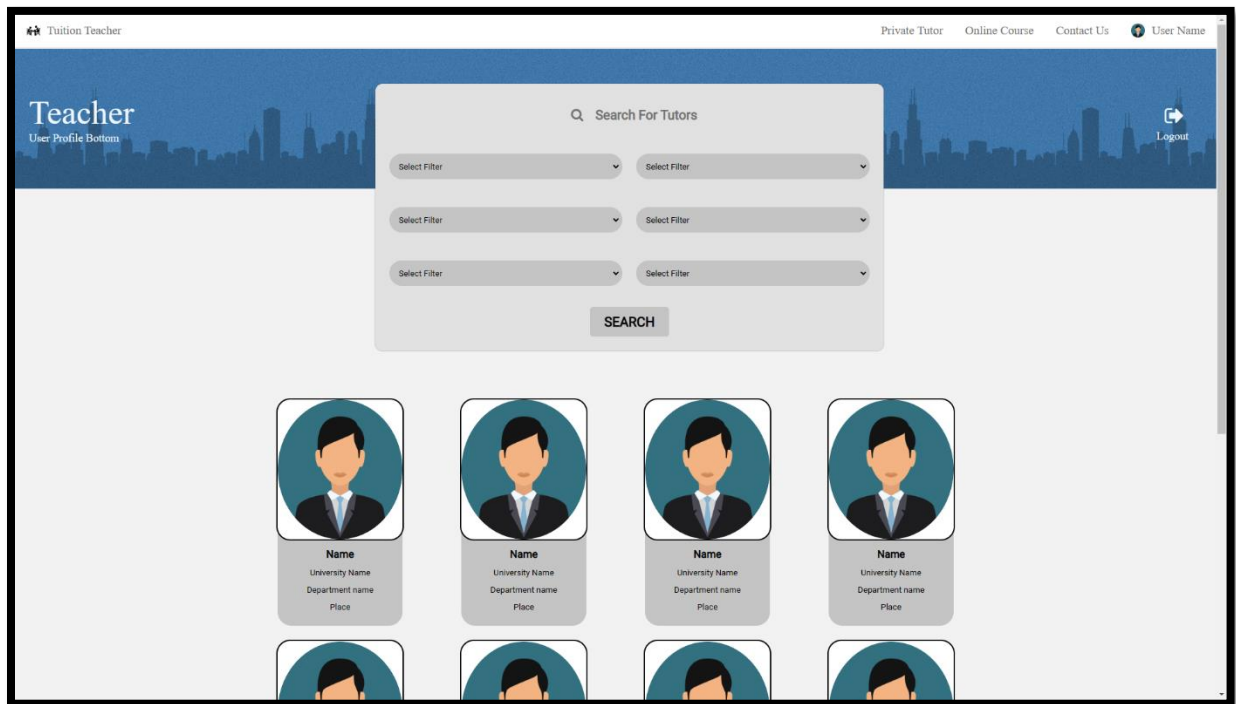


Figure 4.1.11 Private tutor

Teacher Details Page

This is a tutor profile taken from our website. So, after selecting an tutor from the private tutor page or the search results, the user will see information about that tutor on this type of page.

The screenshot shows a user interface for a 'Tuition Teacher' profile. At the top, there is a navigation bar with 'Tuition Teacher' on the left and 'Private Tutor', 'Online Course', 'Contact Us', and 'User Name' on the right. The main content area features a profile card for a tutor named John. The card includes a profile picture of John, a man wearing a dark t-shirt and a baseball cap. Below the photo, his name 'John' and affiliation 'Daffodil International University CSE' are listed. To the right of the photo, a grid of details is displayed:

Preferred Medium Bangla	Preferred Class 7,8,9	Preferred Subject English , Bangla, Math,
Preferred Areas Wari, Tikatuli, Shamibag	Tutoring Style Private	Days Per Week 4
Gender Male	Experience 2 years	Expected Salary(min.) 5000

At the bottom center of the profile card, there is a 'Hire Now' button.

Figure 4.1.12 Teacher Profile

Contact Us Page

Contact Us page of our website typically provides a way for our users to get in touch with us. This page includes contact information such as email addresses, phone numbers, and physical address, as well as a contact form that users can fill out to send a message or inquiry. The purpose of this page is to provide an easy and fast way for users to get in touch with us for any questions, comments or issues they may have.

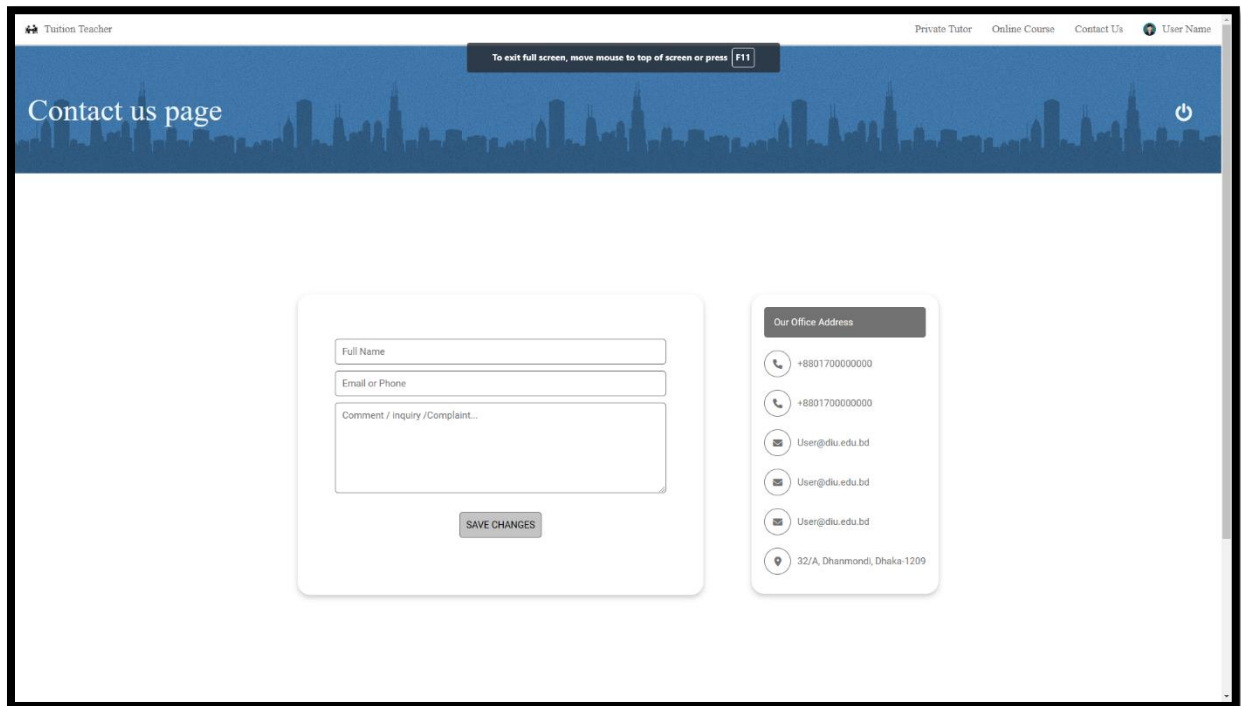


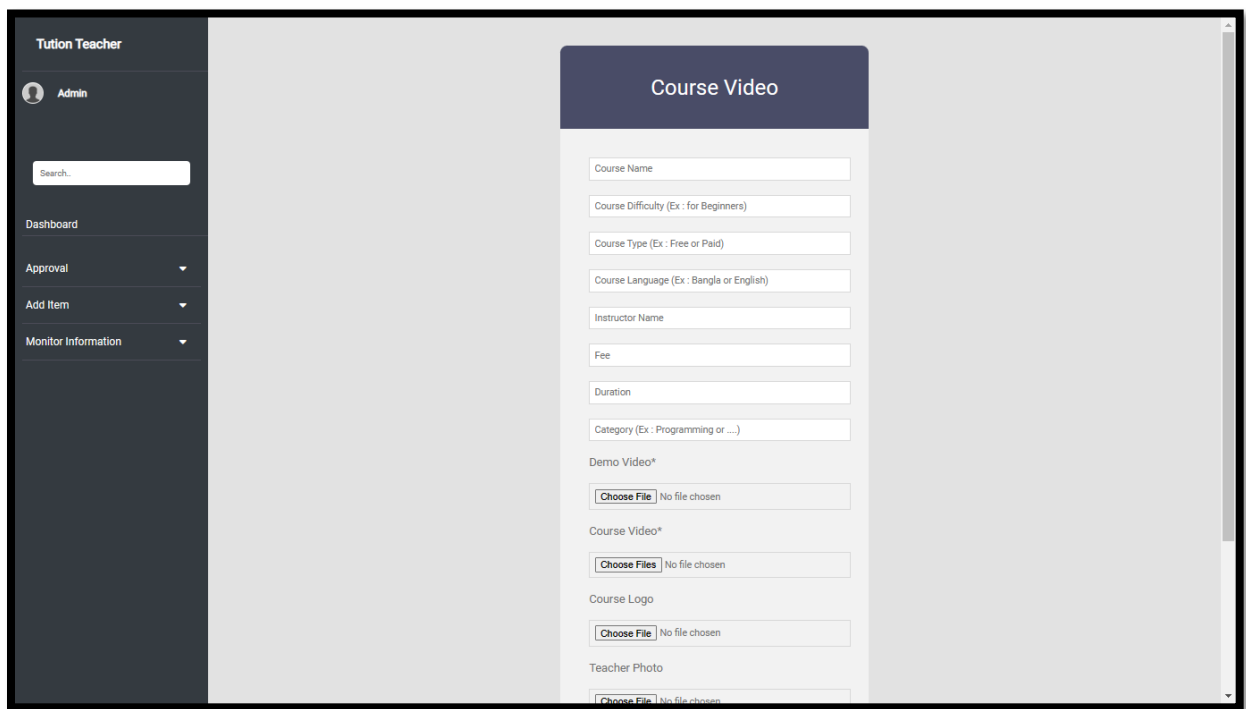
Figure 4.1.13 Contact us

Admin Panel

An admin panel is an important part of a website that allows the administrator or owner to manage various aspects of the website or application. The admin panel typically has a login page that requires a username and password to access the panel. Once logged in, the administrator can access various features and functions, such as adding and managing content, managing users and permissions, analyzing website traffic and performance, and configuring various settings.

Admin - Add Item - Course Video

Admin can add courses from this page.



The screenshot displays the 'Add Item - Course Video' form within an admin panel. The interface includes a dark sidebar on the left with the following elements: 'Tution Teacher' at the top, a user profile for 'Admin', a search bar, and a 'Dashboard' menu with sub-items: 'Approval', 'Add Item', and 'Monitor Information'. The main content area features a form titled 'Course Video' with the following fields: 'Course Name', 'Course Difficulty (Ex : for Beginners)', 'Course Type (Ex : Free or Paid)', 'Course Language (Ex : Bangla or English)', 'Instructor Name', 'Fee', 'Duration', 'Category (Ex : Programming or ...)', 'Demo Video*' (with a 'Choose File' button and 'No file chosen' text), 'Course Video*' (with a 'Choose Files' button and 'No file chosen' text), 'Course Logo' (with a 'Choose File' button and 'No file chosen' text), and 'Teacher Photo' (with a 'Choose File' button and 'No file chosen' text).

Figure 4.1.14 Add Item

Admin - Approval – Teacher Application

Tutors' requests to work with "Tuition Teacher" will be verified on this page by the admin, who will then either approve or reject their request.

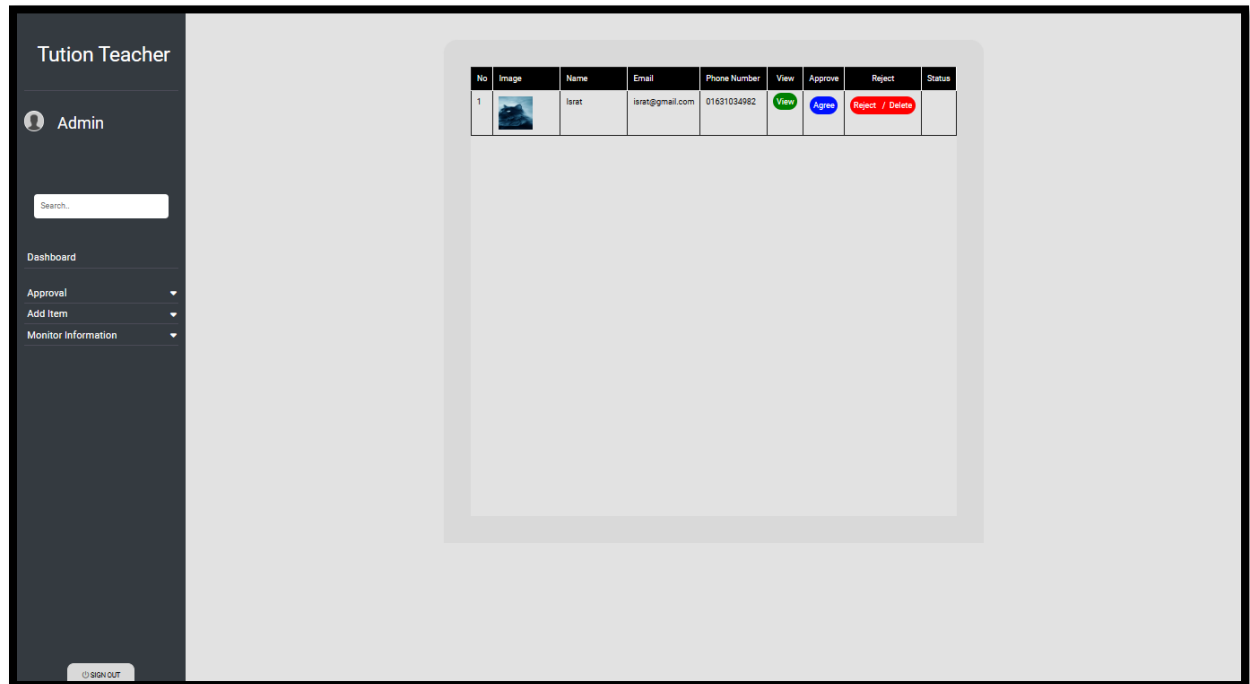


Figure 4.1.15 Approval

4.2 Back-end Design

In website design, the back-end refers to the part of the website that is responsible for storing, organizing, and processing data, as well as handling communication with other systems or servers. This typically involves the use of a server-side language such as PHP, Python, or Ruby to build APIs or other interfaces for the front-end to access data and perform other tasks. That is why back-end is the most important component of any system. The front end is the client side, which the client sees or access. The server side refers to the back end of a website. We used the Laravel framework for our project, because it is a PHP web application framework which is easier for us developers to build modern, reliable, and scalable web applications. And for database, MySQL powers our database server. Due to its speed, dependability, and ease of use, MySQL was our choice. A preview of our backend code is shown below in figure 4.x and 4.x.

```
resources > views > layouts > Admin > AdminLogin.blade.php
33
34
35 
37
38 <h3>Admin</h3>
39 </a>
40 <input type="text" placeholder="Search.." name="search" class="profile_active_search">
41 <a href="{{route('admin.login')}}" class="dropdown-btndash">Dashboard</a>
42
43 <button class="dropdown-btn">Approval
44 <i class="fa fa-caret-down"></i>
45 </button>
46
47 <div class="dropdown-container_nav">
48 <a href="{{route('teacher.approve')}}">Teacher Application</a>
49 <a href="{{route('teacher.approve')}}">Hire request</a>
50 </div>
51
52 <button class="dropdown-btn">Add Item
53 <i class="fa fa-caret-down"></i>
54 </button>
55
56 <div class="dropdown-container_nav">
57 <a href="{{route('Course')}}">Course</a>
58 <a href="#">Course video</a>
59 <a href="{{route('transaction.id')}}">Transaction ID</a>
60 </div>
61
62 <button class="dropdown-btn">Monitor Information
63 <i class="fa fa-caret-down"></i>
64 </button>
65
66 <div class="dropdown-container_nav">
67 <a href="#">Teacher</a>
68 <a href="#">User</a>
69 </div>
70
71 {{-- <a href="#" class="dropdown-btndash">Media</a> --}}
72
73
74
```

Figure 4.2.1 Back-end Code

4.3 Interaction Design and User Experience (UX)

Interaction design and user experience (UX) are important aspects of website design that involve creating a seamless, intuitive, and enjoyable experience for users as they interact with a website or web application. It needs specific elements to be conveniently managed and presented. For example, buttons, icons, language, etc. So that it is simple to understand and may be used effectively. We used a straightforward UI-UX design that we made for our online application using. Thus, using our program was simple and easy.

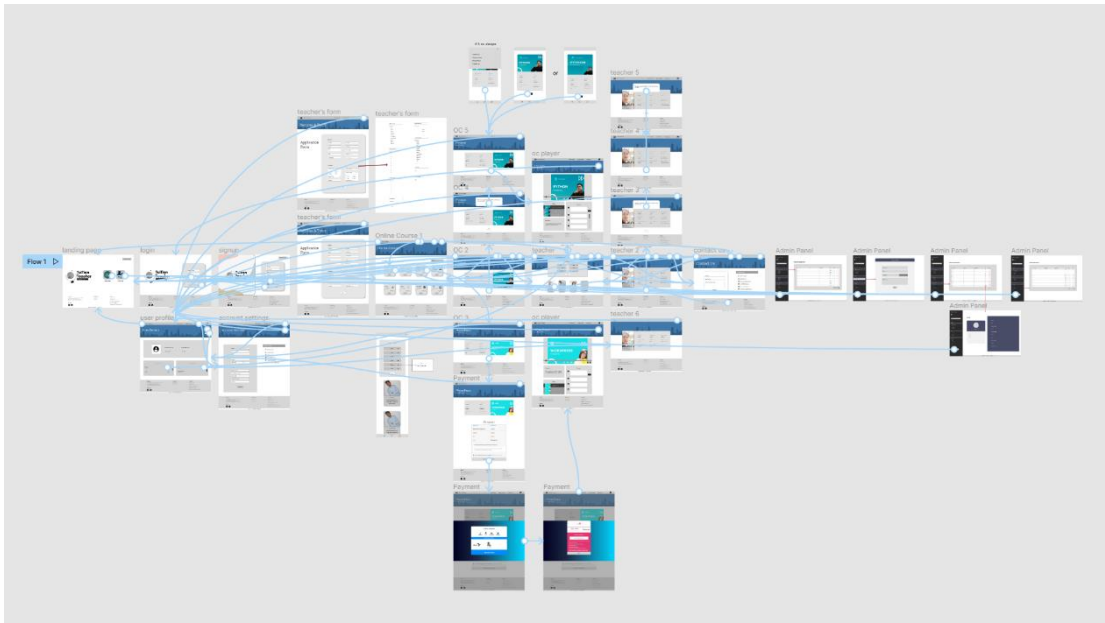


Figure 4.3.1: Figma Prototype (Design)



Figure 4.3.2 Figma Prototype (screenshot of UI)

4.4 Implementation Requirements

It was our first application, so we learned something new about technology. So, I spend a lot of time getting the application. There is a lot to think about to make the UX design.

Front-End:

- HTML
- CSS
- JavaScript
- Bootstrap

Back-End:

- Laravel Framework

Database:

- MySQL

IDE:

- Visual Studio

CHAPTER 5

IMPLEMENTATION AND TESTING

5.1 Implementation of Database

We are using MySQL for our database. Because, in order to store and manage data for web-based applications, many people utilize the well-known open-source relational database management system (RDBMS) MySQL. It is an excellent tool that can be used to manage and arrange massive volumes of data in an efficient and effective manner. Installing the MySQL server and building a database are prerequisites for using MySQL. In the database, make tables to hold data, and then use primary and foreign keys to establish relationships between the tables. We may insert, update, remove, and retrieve data from your tables using SQL after we have set up our database. To alter data and formulate more complicated queries, we may also make use of MySQL's built-in functions and stored procedures. For interacting with MySQL from a variety of programming languages, there are several tools and libraries available.

5.2 Implementation of Front-end Design

Front-end design is important for web applications because it plays a crucial role in the user experience. The front-end is what users interact with when they visit a website or use a web application, so it is important for it to be visually appealing, easy to navigate, and intuitive to use. A well-designed front-end can also improve the overall performance of a web application, as it helps to ensure that the interface loads quickly and efficiently. This can help to keep users engaged and reduce the risk of them abandoning the application. In addition, front-end design is important for branding and identity. The visual design of a web application can help to convey the company's values and personality, and can play a role in building trust with users. Overall, front-end design is a crucial part of the web

development process, as it helps to create a positive and seamless user experience. We had to spend a lot of effort into designing our front-end as a beginner. It was hard for us because we had to study a variety of subjects, features for our web application. We used a combination of HTML, CSS, Bootstrap, and JavaScript to build the front-end of the website to ensure that the website is visually appealing and easy to use.

5.3 Testing Implementation

We have put our application through many types of testing. During our testing, we found a few problems, mistakes, or flaws with the way the program was running. Those bugs were successfully fixed by us. Then we tested the website's front end, back end, database, and other components again after fixing those errors. To assure the quality of the project, we develop a variety of test cases. There are still some procedures to complete, and our application is still being developed for potential future features.

5.4 Testing Results and Reports

Table 5.4.1: Test Results and Reports of the application

Test Case	Expected Outcome	Obtain Outcome	Pass/Failed	Testing Period
Registration	Work Successfully	Did not Work Successfully	Failed	27/09/22
Registration	Work Successfully	Did not Work Successfully	Failed	28/09/22
Registration	Work Successfully	Work Successfully	Pass	30/09/22

Login	Work Successfully	Did not Work Successfully	Failed	07/10/22
Login	Work Successfully	Work Successfully	Pass	07/10/22
Course	Work Successfully	Work Successfully	Pass	15/10/22
Private Tutor	Work Successfully	Work Successfully	Pass	15/10/22
Enroll Free Course	Work Successfully	Did not Work Successfully	Failed	15/10/22
Enroll Free Course	Work Successfully	Did not Work Successfully	Failed	27/10/22
Enroll Paid Course	Work Successfully	Did not Work Successfully	Failed	27/10/22
Enroll Paid Course	Work Successfully	Work Successfully	Pass	04/11/22
Teacher Application	Work Successfully	Work Successfully	Pass	04/11/22
Teacher Application Approval (Admin Panel)	Work Successfully	Did not Work Successfully	Failed	04/11/22
Teacher Application Approval (Admin Panel)	Work Successfully	Work Successfully	Pass	04/11/22
Teacher Search tool	Work Successfully	Did not Work Successfully	Failed	05/11/22
Teacher Search tool	Work Successfully	Did not Work Successfully	Failed	05/11/22
Teacher Search tool	Work Successfully	Work Successfully	Successful	05/11/22

User Profile	Work Successfully	Did not Work Successfully	Failed	10/11/22
User Profile	Work Successfully	Did not Work Successfully	Failed	10/11/22
User Profile	Work Successfully	Work Successfully	Successful	10/11/22
User Settings	Work Successfully	Did not Work Successfully	Failed	03/12/22
User Settings	Work Successfully	Work Successfully	Successful	09/12/22
Add Course Video (Admin)	Work Successfully	Did not Work Successfully	Failed	10/12/22
Add Course Video (Admin)	Work Successfully	Work Successfully	Successful	11/12/22
Contact Us	Work Successfully	Work Successfully	Successful	14/12/22
Home/Landing Page	Work Successfully	Did not Work Successfully	Failed	17/12/22
Home/Landing Page	Work Successfully	Work Successfully	Successful	17/12/22
Hire Now	Work Successfully	Did not Work Successfully	Failed	20/12/22
Hire Now	Work Successfully	Did not Work Successfully	Failed	20/12/22
Hire Now	Work Successfully	Did not Work Successfully	Failed	23/12/22
Hire Now	Work Successfully	Did not Work Successfully	Failed	23/12/22
Hire Now	Work Successfully	Work Successfully	Successful	02/01/23

CHAPTER 6

IMPACT ON SOCIETY, ENVIRONMENT AND SUSTAINABILITY

6.1 Impact on Society

E-learning platforms now offer significant social and financial benefits. It encourages learning, personal growth, connectivity, economic expansion, job creation, increased living standards, decreased poverty, and acts as a lifeline for those who are left behind and act as a fast emergency reaction. We think that many people, including customers, users, and others, will benefit from our effort.

6.2 Impact on Environment

E-learning platforms have a positive impact on environment. Because it reduces many factors which causes pollution. For example, when a tutor is trying find students, they use leaflet, painting and banner but this type of harmful act to environment can simply be avoided by registering their name on our website. Another example is people get admit into various institution to enrich their skills for career or academic life but most of the time those institutions are far away, and for that reasons people uses buses, cars, autos and bikes to travel which is a big reason behind global warming and traffic jam. On the other hand, online courses do not create this type of problem.

6.3 Ethical Aspects

Social responsibility is the managerial obligation to operate in a way that protects and advances both the interests of the company and the greater well-being of society. The e-learning industry needs a strategy for setting goals based on their social implications, a logical and clear definition of social purpose, and a structured view of social obligation.

6.4 Sustainability Plan

Although this project does not affect environment in negative way that much still our aim is to minimize the negative impact on environment as much as possible. To fulfill that goal, we will be planting 500-1500 tree yearly. Also, in near future we will promoting tree plantation on our website to offset carbon emissions.

CHAPTER 7

CONCLUSION AND FUTURE SCOPE

7.1 Discussion and Conclusion

We created this website as our final year project. We mostly drew inspiration from our own personal experiences. For instance, when we search for tutors but we are unable to find any or when we want enroll in a course but it is located far away from us or, we are too tired to participate on the course lecture after a long day of work or class. So, we tried to find teacher through online but most of the time we were disappointed because either the information was not accurate or the experience of those website was not pleasing. So, we created this platform that is easy to use and user friendly. But the process of developing and implementing new features was time-consuming. So, Following the feature's evaluation, we started constructing the system and designing the diagram. When the designing was finished, we started coding. After completing the coding phase, we are now starting the testing process. Our supervisor helped us with several test concepts.

7.2 Scope for Further Developments

This project is created in a way that makes upgrades simple and easy if and when they become necessary. Because the e-learning industry is changing on a regular basis. So, the project needs to adapt and update itself with time and change of user's necessity. That is why we have planned many features for our websites.

1. Live online class.
2. Chat system for tutor-student.
3. Forum and comment system for online course.
4. Leaderboard and achievement system for online course.
5. Certificate for online course (Like 10 minute school[4]).

6. 24/7 live support. (Like udemy[5])
7. Faster payment system with more payment method.
8. Make responsive platform for all kind of device.

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