

Internship as a Young Professional in Application Team of White Services Technology

by

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An Internship report submitted to the Department of
Computer Science and Engineering
in partial fulfillment of the requirements for the degree of
B.Sc. in Computer Science and Engineering

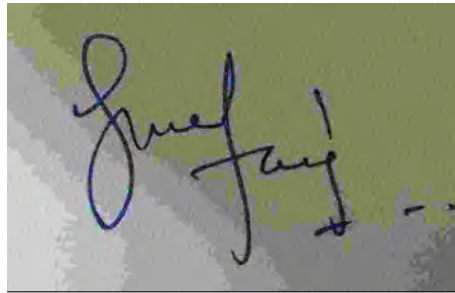
Bachelor in Computer Science
Department of Computer Science and Engineering
Brac University
April 2023

Declaration

It is hereby declared that

1. The thesis submitted is my/our own original work while completing degree at Brac University.
2. The thesis does not contain material previously published or written by a third party, except where this is appropriately cited through full and accurate referencing.
3. The thesis does not contain material which has been accepted, or submitted, for any other degree or diploma at a university or other institution.
4. I/We have acknowledged all main sources of help.

Student's Full Name & Signature:

A photograph of a handwritten signature in blue ink on a light-colored surface. The signature is written in a cursive style and appears to read 'Syedy Sulvy Taj'.

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Approval

The thesis/project titled “Internship as a Young Professional in Application Team of White Services Technology” submitted by

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Of Spring, 2023 has been accepted as satisfactory in partial fulfillment of the requirement for the degree of B.Sc. in Computer Science on April 2023.

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Ethics Statement

1. This material is our own unique work, which has not been recently published somewhere else.
2. The paper is not lately being considered for publication somewhere else.
3. The paper reflects our own exploration and examination in an honest and complete way.

Abstract

This paper provides a summary of my internship experience in front-end development, with a concentration on my work with HTML, CSS, JavaScript, ReactJS, and PHP. The apprenticeship was completed at White Services Technology Company, a software development company specialising in the creation of custom web applications for clients in a variety of industries. During the internship, I acquired hands-on experience in front-end development by working on multiple projects, including the creation of responsive web pages, the design of interactive user interfaces, and the incorporation of PHP server-side functionality. I also obtained experience with ReactJS, a well-known JavaScript library for constructing user interfaces. The paper begins with an overview of front-end development and its significance in the creation of contemporary web applications. It then describes in detail the tools and technologies used during the apprenticeship, such as HTML, CSS, JavaScript, ReactJS, and PHP. The following section of the paper describes the projects I worked on during my apprenticeship, including their objectives, obstacles, and outcomes. This section also emphasizes the front-end development skills I acquired during my internship, such as working with CSS frameworks and implementing responsive design. Finally, the paper concludes with a reflection on the effect of the internship on my professional development. It discusses the lessons learned, skills acquired, and how the apprenticeship prepared me for a career in front-end development. Overall, this paper demonstrates the significance of hands-on experience in acquiring the skills required for a career in front-end development and provides insight into the tools and technologies used in the field.

Acknowledgement

Firstly, all praise to the Great Allah for whom our thesis have been completed without any major interruption.

Secondly, to our supervisor Nabuat Zaman Nahim for her kind support and advice in our work. She helped us whenever we needed help.

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Chapter 1

Introduction

1.1 About Internship

Internships are usually viewed as opportunities for students and recent graduates to obtain work experience and apply classroom knowledge to real-world issues in a particular sector. Students were provided opportunities to gain practical experience in their chosen field. This considerably improves the student's transition from college to the working world. In addition, employers will have a better understanding of their new student and will be able to place him or her in the most suitable position. An internship opportunity broadens the intern's knowledge of the practical world, which boosts the intern's CV and leads to increased career opportunities. Some candidates would rather complete an internship than write a thesis paper as the prevalence of internships grows. Students at BRAC University must either perform an internship or write a research paper related to their field of study. Despite the fact that fewer students choose internships, those who do receive adequate support from the institution and are encouraged to gain as much knowledge and experience from the organization as possible. Students may choose any internship that is relevant to their degree program. To be eligible for an internship, students must complete a minimum of 72 credits, and the internship must last at least six months at a recognized business. As a senior at BRAC University, I assumed that an internship would be a preferable alternative to working on a thesis. As a result, I applied to White Services Technology for an academic internship and was invited to an interview. I was selected as a young professional to work with the application team, enabling me to begin my six-month academic internship on 1 March 2022. White Service Technology is recognized as Bangladesh's third pioneering ITES company, having a global presence. It has been in the software business for over five years.

1.2 What this report is about

This internship is required for completion of my degree, BRAC University will evaluate me based on this report. In this report, I have written about my workplace's atmosphere and customs. I've also blogged about my experiences and lessons learned at White Services Technology.

1.3 Objective

The purpose of this report to provide information to academics.

1.4 Aim

The goal of this report is to demonstrate my practical expertise and experience.

1.5 Goals

The report's specific objectives are as follows:

1. Given the description of the business.
2. Describe the environment in which workers work.
3. To inform clients about all of White Services Technology services.
4. To show what I've learned throughout my internship.
5. To monitor my progress on the duties that have been allocated to me.

1.6 Procedure

Following is a report on my internship at White Services Technology and the lessons I gained there. Some of the information and figures were obtained from the company's websites, while others were based on my own experiences. The vast majority of the information was collected from a variety of sources, including:

1.7 First data

1. Discussions and lessons from colleagues and the team leader.
2. Meetings and presentations are held on a weekly and monthly basis.

1.8 Secondary

1. Internet

Chapter 2

Company Profile

2.1 Overview

White Service Technology. is a pioneering ITES company in Bangladesh, with local and international operations. It is one of Business Automation's branches. It has over six years of experience in the information and communication technology (ICT) sector in Bangladesh. It provides custom application development, service-oriented architecture (SOA), mobile application building, system integration, and additional services. Due to its knowledge of multiple industries and vast resources. White Service Technology ernational focuses on mobilizing the appropriate personnel, skills, and innovation to assist businesses in transforming their performance and cost constraints into competitive industry assets.

2.2 Vision and Mission

The company's operations have been governed by the following vision:

1. To enable organizations to improve the customer experience through the use of technology, procedures, and individuals.
2. Generate original concepts in order to identify company-specific needs.
3. It is necessary to design, implement, and deliver transformative consumer experiences.

2.3 Services provided by the firm

The company is a leader in a variety of IT service categories in Bangladesh, including web development, custom software, and web application packaging. Available services include data preservation and document management, content development, and others. The subsequent services are offered:

1. Applicable for Mobile Devices
2. API Connectivity Permits Integration of Stakeholders
3. Website and web portal construction

4. Services for maintenance and technical help
5. Provision of ICT-related education
6. Customer Flow Management System
7. System for Customer Relationship Management (CRM)
8. System for One-Stop Service (OSS)

2.4 Services

White Service Technology. provides clients with innovative IT services and technologies that enable them to embrace technology and build their businesses in the future. Cloud and traditional technologies, along with a blend of corporate, technological, and industrial technologies expertise, are utilized to give solutions and support for IT infrastructure, as well as connectivity and security services expertise. White Service Technology. provides customers with access to cutting-edge technologies and proven processes throughout the whole software life cycle, from customer engagement through technology installation to service delivery. They provide the following services:

2.5 POS Solution

WS-Tech POS is a scalable, secure, multi-user multi-branch decentralized application that consists of Sales Management, Inventory Management, Product Management, Refund Exchange Management, Profit Loss Calculation, Customer Management, User Management, and Configuration modules with numerous related features and a dynamic reporting system. It is platform-independent and provides the management with real-time updates on Sales and Inventory.

2.6 Solution for Customer Flow Management

People are considered the most essential component of every firm. It is challenging to direct client flow while preserving service quality. White Service Technology's groundbreaking product Queue-Pro is a well-known name in the customer flow management solutions industry. It is a well-considered and well-designed management system that provides a guided and informative user experience.

2.7 Software Development

Any organization can benefit from analyzing and improving their short-term and long-term business operations with the assistance of White Service Technology. They will design new business processes and reengineer existing ones in collaboration with the stakeholders and subject matter experts of your company. The former is preoccupied with the creation of new processes, whereas the latter is focused on improving upon those that are already in place. Because they focus on activity

optimization and process modeling in their consulting services, they can help you cut expenses and cut down on the amount of time it takes.

2.8 HRM

WS-Tech HRM software solution is a scalable, secure, multi-user and userfriendly Human Resource Management Software which fulfills the requirements of HR Department. It is fully customizable software allows to customize it as per client's requirement and suitable for business operation. HRMS is a scalable multi-tiered Windows platform web solution built using latest Microsoft technology and Microsoft SQL Server as Database. It works on all major operating systems.

2.9 Banking reporting Solution

In the banking and financial sector, WS-Tech has developed a variety of reporting solutions. There have been no reported issues with the use of our products in the operation of several domestic and international financial institutions, including banks. Major innovations up to this point include the Foreign Exchange Reporting System, the Go-AML Reporting System, and the CIB Software Reporting System, amongst others.

2.10 ERP System

WS-Tech Enterprise Resource Planning (ERP) is a complete Enterprise Resource Planning Solution for small and mid-sized businesses that helps manage, monitor, and analyze every area of your business in one interface. , It is modular, flexible, secure, customizable, and incredibly robust for Small and Medium Enterprises.

2.11 Training

Various initiatives have been provided with the training. Their training program includes seminars and training facilities for I needed to understand committed to providing the best knowledge-transfer sessions to their evaluation clients.

Chapter 3

Working Plan Overview

3.1 Overview

Allowing an intern to work in the firm is a significant date advancement both in University and practical full-stack experience and is a valuable advantage in today's employment market when competition is fierce. It also helps students effectively transition from school to work when they finish their education. I began working for White Services Technology as an intern in the application team. This internship is required for graduation at BRAC University and is a good opportunity for me to earn new skills and gain processes while I'm here. My supervisor has been quite helpful during my internship. Several screenshots are featured throughout the article, however, won't be able to post some of the works owing to confidentiality concerns.

3.2 Getting to Know Your Workplace

Before starting work, I was told to read up on a few important concepts and techniques. As a member of the application team, it was necessary for me to understand and learn about the Software Development Life Cycle. I had been told to start with the front end. And all the fundamentals of front end so that I can use them in the future. After that I will move to back end so that in near future I can be a full stack developer.

3.3 What is Front End

The process of creating HTML, CSS, and JavaScript for a website or Web application so that a user can see and interact with them directly is known as front-end web development, sometimes known as client-side development. The difficulty with front end development is that the methods and technologies used to build a website's front end are continually changing, necessitating constant monitoring of the industry's advancements. A front end web developer is the person who makes everything you see on a website, including the buttons, links, animations, and other elements. The front end developer's responsibility is to translate the client's vision and design concept into code.

3.4 What Qualifications Are Necessary for a Front End Developer?

I learned these language to be a front end developer.

1. Html
2. CSS
3. JavaScript
4. Bootstrap
5. ReactJS(Framework)

3.5 HTML

HTML is the abbreviation for Hypertext Markup Language. A hypertext is a type of metatext used to link to other texts. HTML's Markup Language element consists of a series of markers that instruct a web browser on how to interpret the content. HTML is a standardized technique for categorizing text files that establishes the structure for the majority of the online pages we encounter and use. HTML is used to add page breaks, paragraphs, bold text, and italics, among other elements. HTML constructs this structure using tags that instruct browsers how to interpret text.

For instance, to make a word appear in bold, we place it between the tags `strong` and `strong`. The initial tag specifies the beginning of the word(s) to bold, while the closing tag (`/`) indicates where the bold should end. It is the basis for the majority of web pages. If you are learning to code, you should begin here.

As you may have anticipated, the HTML paragraph element is one of the most frequent elements and specifies a paragraph.

Similar to print media, a paragraph generates a line break below it to visually distinguish it from adjacent paragraphs. This is used to emphasize a semantic distinction between content. The framework of a novel and a magazine are identical. Block elements are those that create the space below themselves on a page. At least until they are styled by CSS, block elements show vertically along the left side of a page. Examples of block elements are `div`, `article`, and `table`. This capability enables HTML to begin dividing a webpage into distinct sections.

Together, paragraphs and headings constitute the majority of a web page's text content and its structure. There are six heading elements in HTML, listed from 1 to 6. `h1` is the most important heading and often provides the title of the content - not to be confused with the tab title. `h2` indicates a subsection. `h3` and so on represent subject identifiers for subsequent subsections till `h6`.

3.6 CSS

We may have encountered a page that fails to fully load and has a white backdrop with predominantly blue and black text. This indicates that the CSS portion of the

web page did not load properly or does not exist. This is how HTML-only web sites appear, and I think you would agree that this is not very appealing.

Prior to CSS, all styling had to be provided within the HTML markup. This meant that site developers had to specify the background color, font size, and alignments independently.

CSS enables you to style everything in a separate file, allowing you to create the design there before combining the CSS files on top of the HTML code. This makes the actual HTML markup considerably more streamlined and manageable. In short, CSS features eliminate the need to continuously specify the appearance of specific elements. This saves time, condenses the code, and makes it less error-prone. CSS enables many styles on a single HTML page, hence enabling nearly limitless modification options. Currently, this is becoming more of a necessity than a luxury.

3.7 What is framework?

By providing infrastructure on top of which you can base your own code, a framework is a boilerplate that speeds up development. Alternatively, you may consider it a template that offers pre-programmed, reusable functionalities to make software creation easier.

This all seems extremely ethereal, so let's use a brief illustration to bring things into focus:

Consider a scenario in which you, a frontend developer, take on a full-stack development project. If you need server-side functionality, you may utilize one of the numerous well-liked backend frameworks, then add your own bespoke frontend code.

3.8 Used Framework ReactJS

React is a Facebook-developed JavaScript package that, among other things, was used to build Instagram.com. Its purpose is to facilitate the creation of efficient user interfaces for websites and applications. React.js's core notion is virtual DOM. It is a tree generated with React from JavaScript components that mimics a DOM tree. It performs as little DOM changes as possible to keep your React components up-to-date. As part of the JavaScript programming language, utilizing React generates numerous benefits. React-based products are easy to scale, a single language used on the server/client/mobile side of things provides exceptional productivity, workflow patterns facilitate teamwork, UI code is readable and maintained, and more. React and other JS technologies have been employed in some of the most market-defining products available by global leaders. In contrast to other popular frameworks such as Vue and Angular, there is no avalanche of extra HTML attributes (produced when JavaScript is "crammed" into HTML - a common technique in traditional frameworks and JS library solutions). By literally reversing the order of JSX and JavaScript, React generates cleaner, more readable, and more comprehensive code over time.

3.9 Used Framework

Bootstrap is a sizable collection of reusable pieces of code that can be of great use to web developers. It is a Frontend-Development Framework that was written in HTML, CSS, and JavaScript respectively. Bootstrap makes it possible for web designers and developers to rapidly create websites that are fully responsive. When it comes to the development of responsive and Mobile-First applications, it is possible to consider it the most popular CSS framework. The following is a list of the primary features that Bootstrap has to offer:

Bootstrap is a free front-end framework that aims to make the process of developing websites more efficient and less complicated. It also contains design templates based on HTML and CSS for forms, typography, buttons, navigation, tables, modals, picture carousels, and many more components, in addition to other JavaScript plugins that are optional.

The customers are also provided with the opportunity to easily construct designs that are responsive while using Bootstrap. Bootstrap's responsive CSS makes it simple to adapt websites to mobile devices, tablet computers, and desktop computers. It works with the most recent versions of all popular browsers, including Chrome, Firefox, Internet Explorer, Edge, Safari, and Opera.

Chapter 4

Front-End Project

4.1 Introduction

My Employee Management System is an all-inclusive CRUD (Create, Read, Update, and Delete) program that was developed to assist small and medium-sized enterprises in managing their personnel in an efficient and effective manner. The software was developed with a number of different web technologies, some of which are HTML, CSS, Bootstrap, ReactJS, Axios, JSON server, and React-Toastify.

The administration of employees can be a difficult undertaking, particularly for companies that employ a big number of people. This technology was developed to make the procedure easier to handle by giving businesses access to a centralized database where they can keep all employee records and manage those records. It provides a variety of tools that make managing employees fast, simple, and stress-free for the manager. One of the most important aspects of this system is the intuitive nature of its user interface. The user interface of the application is contemporary and user-friendly, which makes it simple for users with varied degrees of technical expertise to operate the platform. Also, the system is completely responsive, which ensures that it functions faultlessly on all devices, including desktop computers, laptops, tablets, and mobile phones.

Users are able to create, read, update, and remove employee records since the system has full CRUD capability. CRUD stands for create, read, update, and delete. A new employee record can be generated by users by having them fill out a straightforward form with personal information such as their name, address, contact information, and other relevant information. Users of the system have the ability to filter employee records by name, job title, or department, which makes it simple and straightforward to locate certain individuals in a short amount of time.

The system automatically performs real-time updates whenever users make modifications to employee records. This ensures that all users have access to the most recent information at all times. Notifications for successful activities and alerts for any faults that may arise can be received via the system's built-in notifications, which are powered by the React-Toastify library.

The Employee Management System offers a variety of advantages to companies

of varying sizes and scopes. The potential to increase the accuracy of staff record-keeping and lower the risk of making errors can help firms save time and effort. Employers are able to save time and energy by streamlining the processes involved in managing their employees with the help of this system, which frees them up to concentrate on other critical facets of their company.

In general, the Employee Management System is a potent instrument that may assist companies of any size in managing their employees in a manner that is both successful and efficient. Any company that is interested in streamlining its staff management procedures will undoubtedly reap major benefits from implementing the system because of its user-friendly design, constant upgrades, and complete functionality.

4.2 JSON-Server

JSON Server is a lightweight backend server that helps developers to rapidly establish RESTful APIs (Application Programming Interfaces) for front-end applications. It works by reading a JSON file that contains data and then exposing that data over a number of RESTful routes.

JSON Server aids in the development and testing of client-side apps. It permits developers to prototype and test their apps without having to build and configure a backend server. They can instead describe their data in a JSON file and use JSON Server to serve it via HTTP endpoints.

JSON Server has a vast array of capabilities that make it a potent tool for front-end developers. It provides pagination, sorting, and filtering of data, making it simple to work with enormous datasets. In addition, it supports CORS (Cross-Origin Resource Sharing), which permits cross-domain queries, and it has built-in support for authentication and permission.

In conclusion, JSON Server is a valuable solution for front-end developers that need to rapidly construct a RESTful API for their applications. It is lightweight, user-friendly, and supports a vast array of functions, making it a robust and versatile solution.

4.3 Login Page

Because my website is inaccessible to anyone who has not first logged in, the "Login" page is among the most vital of all the pages. When a user tries to view a page that requires login credentials but does not have a name and password, the application will prompt them to provide those details before allowing access to the page.

After that, the application will compare these credentials to the information that is saved in the db.json file. If the user's credentials are correct, the application will let them into the buttons red section of the website. In that case, the user will be given the option to either try again or get in touch with the administrator of the

site for what distance. Figure 4.1 shows the login page.

WST

Username *
taj2110

Password *
.....

Remember Me

Login

Didn't register yet? [Sign Up](#)

Figure 4.1: Login

4.4 Sign Up page

A User can register for the website to access the website. If a user is not have any login information he/she can register.

Figure 4.2 shows the login page.All registered information will save inside my db.json file.

4.5 Home page

Figure 4.3 shows the homepage which will come after a successful login.

Empwhat employee Informatilooksable will display here. We can see there are three button(edit, remove and details). We can add more information inside the table if we want to like employee salary, Expenses etc.

4.6 Edit

Clicking on the "Edit" button should trigger an event that retrieves the data for that specific record from my database. we can change information.

we have to click the save button and all the information will be updated on the table we can cancel edit if we don't want to change anything. Figure 4.4 shows my edit page.

User Registration

User Name * <input type="text" value="taj2110"/>	Password * <input type="password" value="....."/>
Full Name * <input type="text"/>	Email * <input type="text"/>
Phone * <input type="text"/>	Country * <input type="text" value="Bangladesh"/>
Address <input type="text"/>	
Gender <input checked="" type="radio"/> Male <input type="radio"/> Female	

|

Figure 4.2: Sign Up page

WST Dashboard Employee Dropdown
Log Out

Employee Listing

Add New (+)

Name	Email	Phone	Action
Shajib Yusuf	Shajib@white.services	01790820209	<input type="button" value="Edit"/> <input type="button" value="Remove"/> <input type="button" value="Details"/>

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Figure 4.3: Home Page

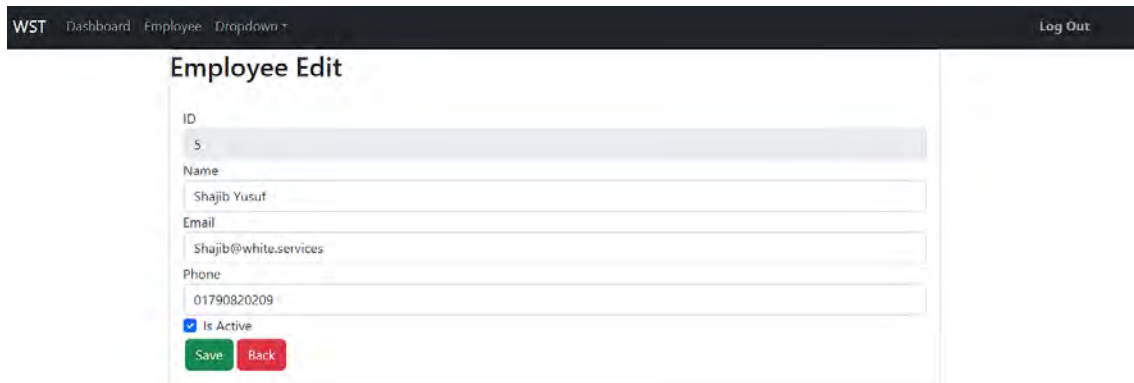


Figure 4.4: Edit

4.7 Delete

If I select the Delete button from the menu, a dialog box asking for approval will appear. If I go ahead and click "OK," the information that I have chosen to remove from the database will be done so. In addition, from the table itself.

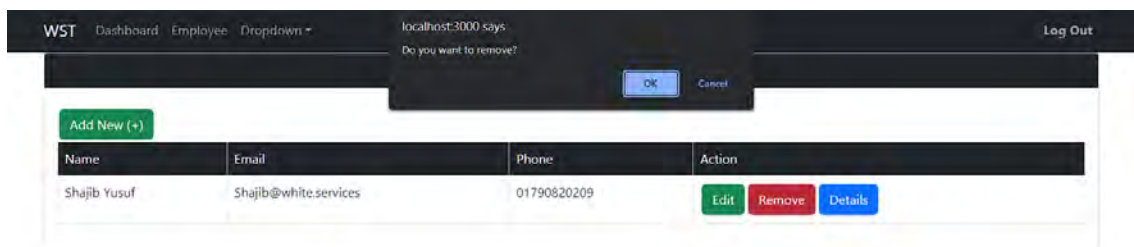


Figure 4.5: Delete

Figure 4.5 shows the delete page.

4.8 Notification feature(React Toaster)

Figure 4.6 shows the notification feature. React Toastify is a commonly used notification module for React apps. It enables developers to display user notifications, alerts, and messages in a simple and configurable manner. React Toastify offers an extensive selection of functionalities, including:

Developers can modify the position, colors, and animations of notifications with ease.

Customizable durations: developers can decide how long a notification should be shown before vanishing.

Many sorts of alerts supported React Toastify supports multiple types of notifications, including success messages, error messages, warnings, and informational messages.

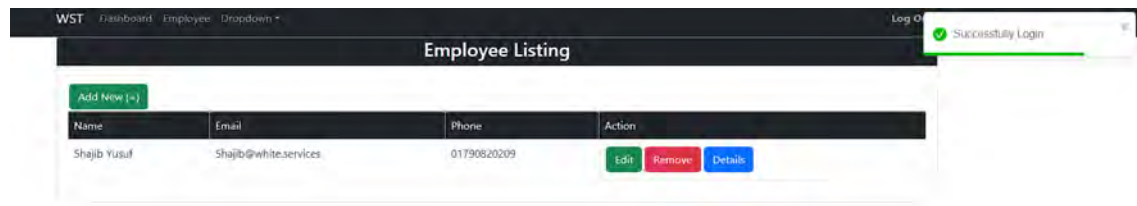


Figure 4.6: React Toaster

Event handling: developers can provide callbacks that will be executed when a notice is shown, closed, or clicked.

React to accessibility Toastify guarantees that notifications are accessible to all users, including those who employ assistive technologies.

The npm package React Toastify is simple to use and install. Several developers use it in their projects, demonstrating its extensive community support. Overall, React Toastify is a good option for developers that need to display user notifications in a straightforward and configurable manner.

Chapter 5

PHP Project

5.1 Introduction

Online Course Registration System is Web-based registration software that facilitates online course registration. It is great for schools, camps, corporate training, and internet training programs. It also gives current course status information on a periodic basis. It can assist the student in registering for the preferred course by providing the required information.

1. It is crucial to establish the database schema for your online course management system before you begin writing code for it. Your database schema should include the tables essential to record the information you require to operate your online courses, such as the courses themselves, the users who enroll in them, the assignments they submit, the quizzes they take, and their marks.
2. After you have finished designing the schema for your database, you can move on to writing the PHP scripts that will communicate with the database you created. You will need to construct scripts in order to handle user identification, the development of courses, enrollment, the generation of assignments and quizzes, and the grading of coursework. The following are some examples of PHP scripts:

register : php is the file that manages user registration and adds user information to the users table.

login: php is the file responsible for user login and authentication.

courses : php presents a list of classes for which enrolment is possible and gives users the ability to sign up for those classes.

mycourses: php presents a list of courses to the user that he or she is currently registered for.

create course :php is the script that enables instructors to create new courses and add data about those courses to the courses table.

5.2 Login Page

Admin Login: In order for the user to log in as an administrator, they need to perform the procedures below:

1. The user must go to the login page and choose the admin login option from the drop-down menu.
2. The user must input their admin login and password before continuing.
3. The user is required to click on the login button after first inputting their username and password.
4. The next step is for the system to check whether the user supplied the correct login and password.
5. The system ought to reroute the user to the admin dashboard if the login and password are correct.

Table of Students :This table is where you should keep a record of each student's login details. The following are examples of possible fields in this table:

Student ID: A unique ID for each student.

Username of the Student: The unique identifier for the student.The student's password is the same as the password for their account.

You can build the admin and student login capabilities in your online course management system by using PHP and MySQL, and the following are some basic instructions that can help you do so. You are able to further adapt these functionalities to meet the requirements that are unique to you.



Figure 5.1: Login Page

Figure 5.1 shows the login page.

5.3 Admin Panel

After logging in as admin This page shall arrive. The Admin panel consists of session, semester, department course, registration, manage student enrollment history, student logs, news, and logout.

Figure 5.2 shows the Admin Panel.

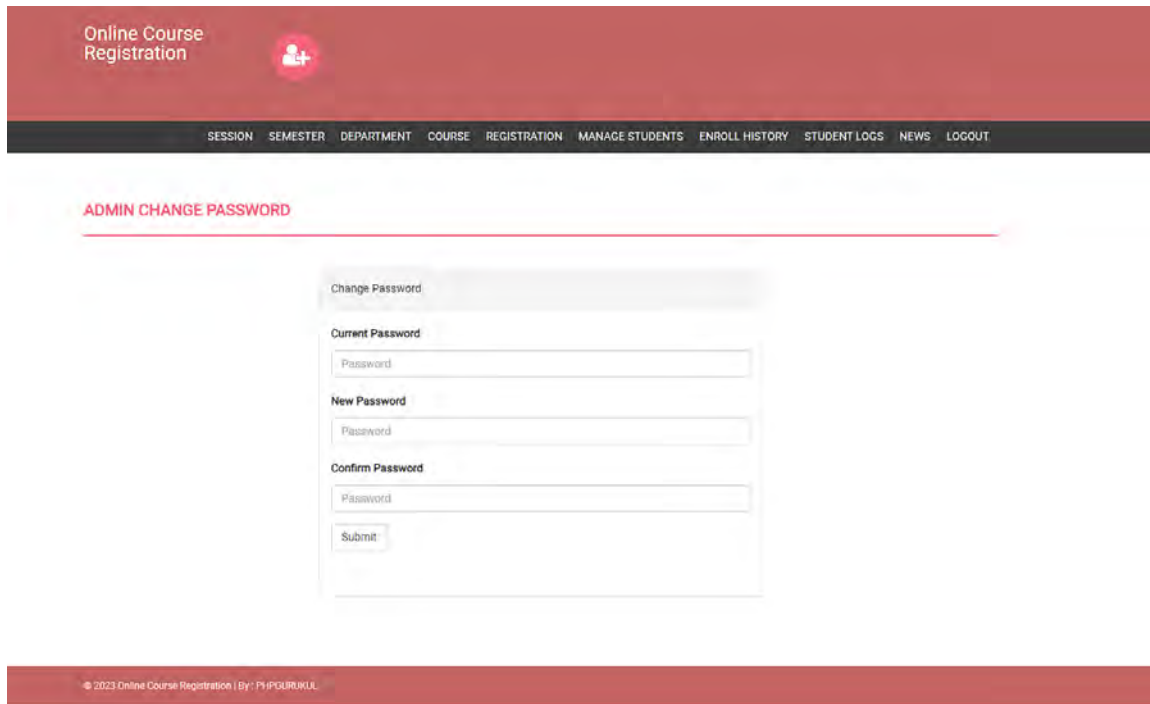


Figure 5.2: Admin Panel

5.4 Admin Features

1. **Creating Courses** :After login in as an administrator, the administrator should be able to create a new course using the methods below.
 - (a) The administrator must visit the "Create Course" page.
 - (b) The administrator must enter the appropriate information, including course name, course code, description, duration, and other pertinent information.
 - (c) The administrator should then select "Create Course" to include the course into the system.
 - (d) The administrator should then select "Create Course" to include the course into the system.
2. **Creating Departments** : Once an administrator has logged in as an admin, that administrator should be able to create a new department by following the procedures outlined below:
 - (a) The administrator must first go to the "Create Department" page.
 - (b) The administrator is responsible for entering the required details, which may include the name of the department, the department code, and any other pertinent information.
 - (c) The administrator must then choose the "Create Department" option in order to include the department into the system.

3. **Students Profile** : After successfully login in as an administrator, the administrator should be able to create a new student profile by adhering to the procedures outlined in the following section:

- (a) The administrator needs to go to the page that's labeled "Create Student."
- (b) The administrator is responsible for entering the required information, which may include the student's name, student ID, email address, phone number, and any other pertinent information
- (c) Then, the administrator will need to select the "Create Student" button in order to include the student's profile into the software.

4. **Enroll History** :

- (a) The administrator needs to go to the page that's titled "See Enrollment History."
- (b) The administrator is responsible for entering the pertinent information, such as the student's ID number or name.
- (c) The system should then display the enrollment history of the selected student. This history should contain the date and time at which a student enrolled in a course, the name of the course, and the state of the enrollment.

Figure 5.3 shows the Admin Features.

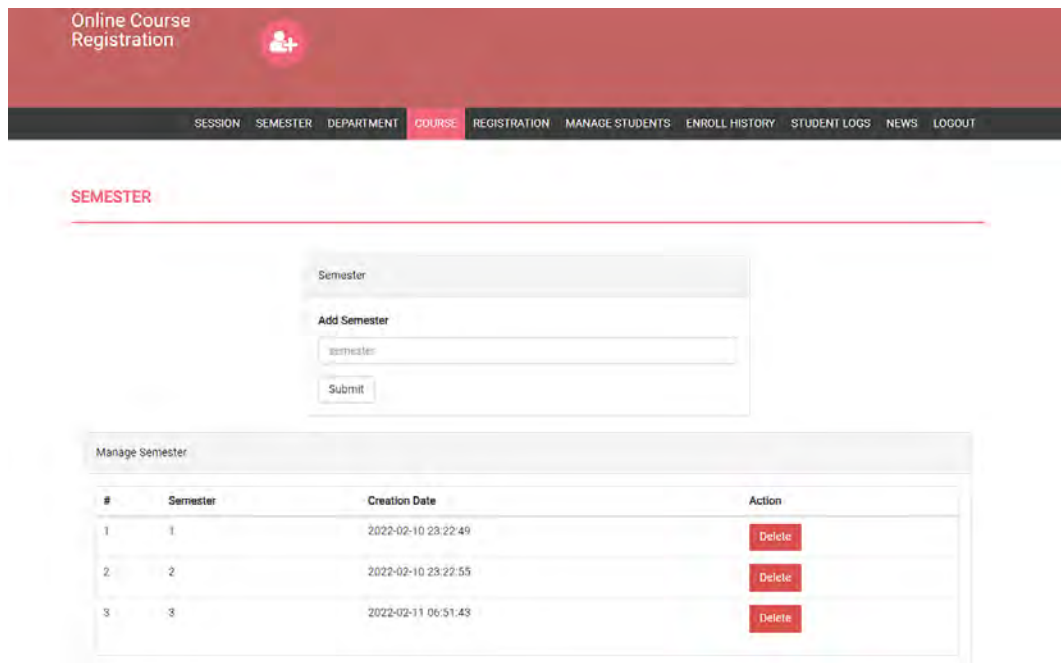


Figure 5.3: Admin Features

5.5 Student Panel and Features

1. **Pincode Verification** :Prior to registering in any class, the student is required to provide a valid pincode in order to have his or her identification confirmed. The following is a list of the steps for verifying a pincode:
 - (a) The administrator must visit the "Create Course" page.
 - (b) The student is responsible for navigating to the page labeled "Pincode Verification."
 - (c) The pupil is required to input the one-of-a-kind pincode that was provided to them.
 - (d) The system should then authenticate the student's identification by comparing the pincode that was input with the pincode that was stored in the database.
2. Following successful authentication as a student, the student should then be able to enroll in a course by carrying out the actions outlined in the following section.
 - (a) The student needs to find their way to the page that is labeled "Enroll in Course."
 - (b) The student is responsible for selecting the department, course, section, and semester from the respective drop-down boxes.
 - (c) In order to enroll in the chosen class, the student is required to click the "Enroll" button.

After successfully logging in as a student, the user should be able to examine their enrollment history by completing the steps outlined in the following section after successfully checking in as a student.

- (a) The student is responsible for going to the page of the website that is named "View Enrollment History."
- (b) After that, the system need to present the student with an enrollment history that details the date and time of enrollment, the name of the course, and the enrollment status.

Figure 7.1 and Figure 5.5 show the Student Panel and Features.

5.6 Logut

Logout Functionality: The capability to log out of an application is an essential component of any program that requires user authentication. It gives the user the ability to log out of the system, which brings an end to the session and deletes any session data that could have been stored. Doing a logout consists of the following steps:

1. The user should click on the "Logout" button, which is often found in the header or navigation bar of the program they are using.
2. The system should subsequently delete the session data and log the user out of the system when they have left the system.



Figure 5.4: Student Panel and Features

Figure 5.5: Student Panel and Features

3. The system should then route the user to the login page or any other page that is appropriate based on the architecture of the application.

Termination of the Session: When the user clicks on the "Logout" button, the system is supposed to end the user's session. This indicates that any session data that may have been stored should be discarded, and the user should be logged out of the system before proceeding forward.

Redirecting to the Login Page: The system should, after the session has been terminated, take the user back to the login page. This prevents the user from entering any of the application's restricted sections without first logging in again, which is a security measure.

Things to Consider About Safety: In order to forestall any potentially harmful behavior, it is essential to check that the logout feature is protected. Many aspects of safety should be kept in mind, including the following:

1. Make use of a safe logout method that eliminates all session data and deletes all cookies and cache from the user's browser.
2. Make sure that only authenticated users, and not unauthorized users or attackers, may access the logout capability.
3. Provide a time-out option that will automatically log users out after a predetermined amount of inactivity on their part.
4. If you want the process of logging in and out to have an increased level of safety, you should think about integrating two-factor authentication.

In general, the logout capability is necessary to guarantee the data of the user is kept private and secure within an online learning management system that makes use of PHP and MySQL.

Chapter 6

Conclusion

In conclusion, software development is a dynamic profession that includes the creation of new computer programs and applications, as well as their design, testing, and ongoing maintenance. It is an essential area of study in the current era of digital technology since software has become so prevalent that it runs everything from portable electronic devices like smartphones and laptops to complex business networks.

Programming languages, software engineering principles, database architecture, and user experience design are only few of the areas of expertise that are required for developing software. Participation with other specialists, including but not limited to project managers, quality assurance specialists, and software architects.

It is necessary for effective software development to place primary emphasis on the production of high-quality solutions that meet the expectations of consumers while also complying to the standards and best practices established by the industry. This typically comprises an iterative process, in which software is generated in phases and tested periodically to ensure that it satisfies the intended functionality and performance criteria. This is done to ensure that the program is functioning as intended. Overall, developing software is a challenging but rewarding career choice; however, in order to be successful in this field, one must have a strong interest in technology and a commitment to ongoing education in order to remain current with the most recent technological developments and industry trends.

Chapter 7

Internship Competition Certificate

Internship Competition Certificate has been attached here.



Figure 7.1: Internship Competition Certificate

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