

VISVESVARAYA TECHNOLOGICAL UNIVERSITY
“JNANA SANGAMA”, BELAGAVI - 590 018



A REPORT ON INTERNSHIP

Carried Out at

“Redhill Softec”

Submitted by

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4SF19CS138

In partial fulfillment of the requirements for the VIII semester

BACHELOR OF ENGINEERING

in

COMPUTER SCIENCE & ENGINEERING

Under the Guidance of

Internal Guide

External Guide

Ms. Vanishree B S

Mr. Nithesha K

Assistant Professor

Project Manager

Dept. of CSE, SCEM

Redill Softec

at



SAHYADRI

COLLEGE OF ENGINEERING & MANAGEMENT

AN AUTONOMOUS INSTITUTION

MANGALURU

2022 - 23

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2022 - 23



CERTIFICATE

This is to certify that the internship has been carried out by **Sandhya Ramesh Naik (4SF19CS138)**, the bonafide student of Sahyadri College of Engineering & Management at **Redhill Softec** from **13/02/2023 to 14/03/2023** in partial fulfillment of the requirements for the **VIII Semester of Bachelor of Engineering in Computer Science & Engineering of Visvesvaraya Technological University, Belagavi** during the year 2022 - 23. It is certified that all corrections/suggestions indicated for Internal Assessment have been incorporated in the report deposited in the departmental library. The internship report has been approved as it satisfies the academic requirements in respect of internship prescribed for the said degree.

Internal Guide

Ms. Vanishree B S

Internship Coordinator

Mr. Raghavendra Sooda

HOD

Dr. Nagesh H R

External Viva:

Examiner's Name

Signature with Date

1.

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2.

.....



REDHILL SOFTEC
"Engineering Simplified"

Date: 17 April 2023

TO WHOM IT MAY CONCERN

REDHILL SOFTEC certifies that **Ms. Sandhya Ramesh Naik** student of **Sahyadri College of Engineering and Management** had undertaken and successfully completed the Internship from **13 February 2023 till 14 March 2023**.

During the internship, **Sandhya Ramesh Naik** has demonstrated a high level of dedication, professionalism, and aptitude in Java Full Stack Development. She has acquired practical experience in front-end and back-end technologies, database management, and software development methodologies.

We wish her the best of luck in future endeavors and trust that the skills and experience gained during the internship will be valuable in her academic and professional pursuits.



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2022 - 23

Department of Computer Science & Engineering



DECLARATION

I hereby declare that the entire work embodied in this Internship Report and the project entitled “**Employee Management System - A Java Full Stack Project**” as a part of internship has been completed by me at **Redhill Softec** under the supervision of **Ms. Vanishree B S** and **Mr. Nithesha K**, in partial fulfillment of the requirements for the VIII Semester of **Bachelor of Engineering in Computer Science & Engineering**. This report has not been submitted to this or any other University for the award of any other degree.

Place: Mangaluru

Date: 24/04/2023

Sandhya Ramesh Naik

4SF19CS138

VIII Semester, B.E., CSE

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Executive Summary

This internship report stresses the work experience that I have gained as an Intern in Development team at Redhill Softec from 13/02/2023 until 14/03/2023. I have included my experience of 1 month of internship working on software development using various languages and frameworks and understanding how IT industry works. I had got an opportunity to intern and be a part of projects built along with fellow interns and employees. Redhill Softec thrive to empower and enhance the lives of people through profound IT Innovative solutions, with the help of very effective and efficient solutions in transforming ambitious goals into reality. As a part of the internship, I have worked on a project entitled "Employee Management System - A Java Full Stack Project". This includes different frontend and backend frameworks which were used in the development in many phases. At last, this internship has given me new insights and motivation to pursue a career in a reputed IT company. The main objective of this internship was to understand how projects are built in a company and to understand how collaboration works.

Acknowledgement

It is with great satisfaction and euphoria that I am submitting a report on internship carried out at ”**Redhill Softec**” as a part of the curriculum of Visvesvaraya Technological University, Belagavi in partial fulfillment of the requirements for the VIII Semester of Bachelor of Engineering in Computer Science & Engineering. I have completed the project entitled “**Employee Management System - A Java Full Stack Project**” during the internship.

I am profoundly indebted to my internal guide **Ms. Vanishree B S**, Internship Coordinator & Assistant Professor, Department of Computer Science & Engineering and external guide **Mr. Nithesha K**, Project Manager, Redhill Softec for innumerable acts of timely advice, encouragement and I sincerely express my gratitude.

I express our sincere gratitude to **Dr. Nagesh H R**, Head & Professor, Department of Information Science & Engineering for his invaluable support and guidance.

I sincerely thank **Dr. Rajesha S.**, Principal, Sahyadri College of Engineering & Management

Finally, yet importantly, I express my heartfelt thanks to my family & friends for their wishes and encouragement throughout the work.

Sandhya Ramesh Naik (4SF19CS138)

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Chapter 1

Introduction

1.1 Company Profile

Redhill Softec is a company that is dedicated to empowering and enhancing people's lives through innovative IT solutions. The team is of highly skilled technical experts is specialized in delivering effective and efficient solutions to transform ambitious goals into reality. With a focus on profound solutions, the company strives to provide the best services possible to our clients, ensuring that to achieve the desired outcomes. The approach is based on a deep understanding of the client's needs, and working collaboratively with the clients to develop solutions that are tailored to their unique requirements. At Redhill Softec, the team is committed to making a positive impact on people's lives through technology and believes that the work can make a significant difference in the world.



Figure 1.1: Logo of Redhill Softec

1.2 Vision

To Provide Quality Service and Solutions in the field of Computer Technology.

1.3 Mission

- Train future Taskforce with Quality internship and training
- Provide the IT solution in various domains.
- Get Recognized by Government and other Quality Assurance bodies.

1.4 Policies

- The company focuses on delivering innovative and effective IT solutions that are designed to empower and enhance the lives of people.
- Redhill Softec has a competent technical team that specializes in providing efficient solutions that can turn clients' ambitious goals into reality.

1.4.1 Safety Policies

- Not to disclose the internal affairs of the company to others.
- Provide the IT solution in various domains. Maintaining a safe and clean workspace.

1.4.2 HR Policy

- Safety in the workspace
- Development of Human Resources
- Follow employee-oriented culture leading to personal development Maintaining a safe and clean workspace.

1.5 Products

1.5.1 TechnoMedicare

Redhill Softec' TechnoMedicare Mobile Application is a simple yet effective tool for medical reminder management. This app tracks medications and dosages, ensuring users never miss a dose. Its user-friendly interface makes it easy to use for anyone. Developed with the user in mind, TechnoMedicare is an essential tool for people looking to simplify and stay on top of their medication schedules

1.6 Services

1.6.1 Graphics Design

The graphic design team is focused on providing effective and efficient solutions to empower and enhance people's lives through innovative design. They offer services such as logo design, creative poster design, visiting card design, and brochure design.

1.6.2 App Development

Redhill Softec has a specialized technical team that provides effective and efficient custom application development solutions. They aim to empower and enhance people's lives through innovative IT solutions. The team works closely with clients to transform their ambitious goals into reality, building wonderful applications that meet their unique needs.

1.6.3 Web Development

Redhill Softec is an IT company that aims to improve people's lives through innovative and efficient IT solutions. Their competent technical team specializes in building effective and efficient websites for businesses. They provide end-to-end services from designing, and hosting to maintenance, and work closely with their clients to turn their ambitious goals into reality

1.6.4 Digital Marketing

Redhill Softec has a competent technical team that specializes in providing effective and efficient digital marketing solutions. They work on Search Engine Optimization,

Translation, Quality Assurance, Keyword Strategies, and Research Work to empower and enhance people's lives through profound IT innovation. The team transforms ambitious goals into reality through its expertise in the field of digital marketing.

1.6.5 Game Development

The company provides game development by employing a team of specialized professionals with skills in programming, design, art, audio, and quality assurance. The team works together to create engaging and entertaining games for various platforms.

1.7 Customers

Redhill Softec has a diverse set of potential clients, including MCF, Bhoomi Hardware, Sky Ladder, Namaste Online, Redhill Softec, and Payana. These clients come from a range of industries, including manufacturing, hardware, e-commerce, software development, and travel. Redhill Softec is well-equipped to cater to the unique needs of each client, thanks to its innovative and adaptable approach to software development.

Chapter 2

Task Performed

2.1 First Week

During the first week of the internship, the focus was on HTML and CSS. This provided a solid foundation in creating and styling web pages. Topics covered included the basic structure of HTML documents, CSS selectors and properties, and the box model. The practical sessions allowed for hands-on experience in creating simple web pages and applying styling using CSS.

2.1.1 Introduction To Web Development

The process of building websites and web apps is known as web development. It uses a variety of frameworks and technologies. The three core web development technologies are HTML, CSS, and JavaScript. When creating and presenting material for the web, HTML (Hypertext Markup Language) is utilised, while CSS (Cascading Style Sheets) is used for styling and layout. Web pages can be made dynamic and interactive with JavaScript. A well-liked JavaScript framework for creating web apps is Angular. It offers a selection of features and tools for building potent and responsive web apps. A well-liked Java framework for creating web apps is Spring Boot. It offers a streamlined method for creating online applications, and enterprise-level web applications frequently use it.

2.1.2 HTML Fundamentals

The most used markup language for making web pages and web applications is HTML (Hypertext Markup Language). It specifies how a web page is displayed in a browser and gives the structure and content of a web page. Each of the parts that make up HTML stands for a particular kind of content, including headings, paragraphs, photos, videos, and links. The resulted from the HTML website can be seen in figure 2.1

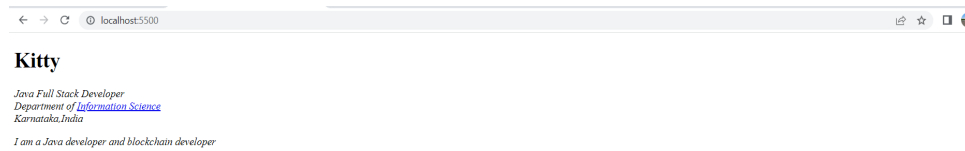
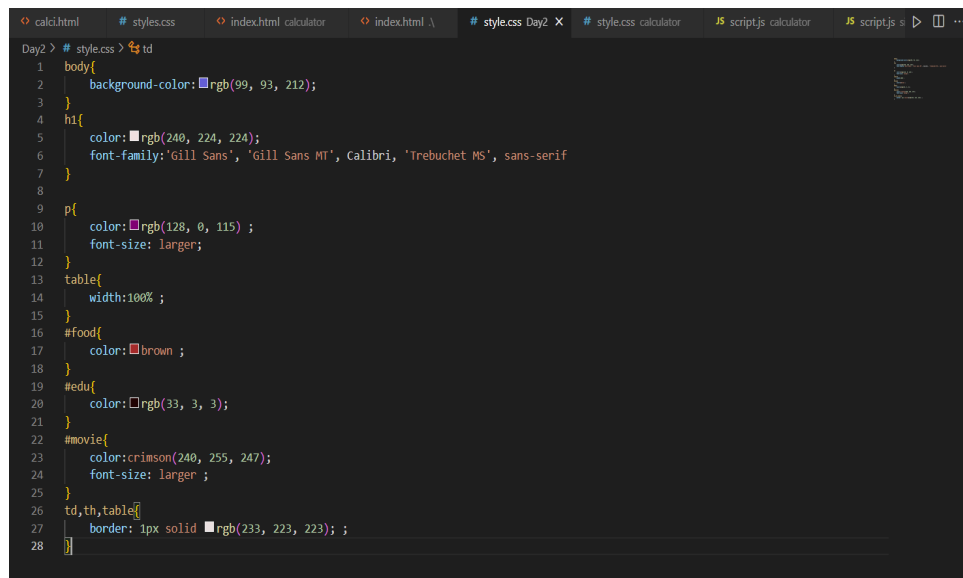


Figure 2.1: The resultant HTML website

In conclusion, this HTML code represents a simple webpage with a header, main content section. The content of the page includes a welcome message, a short paragraph about the author, and a list of their skills. The paragraph describes the author as a developer named xyz. An image is also included next to the paragraph. The list of skills is displayed as an ordered list and includes three items: HTML, CSS. Overall, this is a very basic web page that could be used as a starting point for further development.

2.1.3 Overview Of CSS

CSS, or Cascading Style Sheets, is a styling language used to describe the presentation and layout of web pages written in HTML and XML. It allows web developers to separate the structure of a document from its presentation, making it easier to maintain and update a website's design. With CSS, developers can control aspects such as font styles, colors, positioning, and more. This CSS code defines the styling for a webpage, including the background color, header, navigation menu, main content area, sections, headings, paragraph text, image, and footer.



```

Day2 > # style.css > td
1 body{
2   background-color: #rgb(99, 93, 212);
3 }
4 h1{
5   color: #rgb(240, 224, 224);
6   font-family: 'Gill Sans', 'Gill Sans MT', Calibri, 'Trebuchet MS', sans-serif
7 }
8
9 p{
10  color: #rgb(128, 0, 115);
11  font-size: larger;
12 }
13 table{
14   width: 100%;
15 }
16 #food{
17   color: #brown;
18 }
19 #edu{
20   color: #rgb(33, 3, 3);
21 }
22 #movie{
23   color: #crimson(240, 255, 247);
24   font-size: larger;
25 }
26 td, th, table{
27   border: 1px solid #rgb(233, 223, 223);
28 }

```

Figure 2.2: Code snippet of CSS code for the basic HTML tags

This is a CSS code that defines the style for a web page. It includes styling for an unordered list, including removing the default list style, setting the margin and padding to zero, and setting the background color. The code also styles the list items by floating them to the left and setting their appearance, including the display as a block, color, text alignment, and padding. Additionally, it adds a hover effect for the list items by changing the background color when the user hovers over them. The ".center" class centers the heading by setting a margin-left of 600 pixels, and the "footer" block sets the background color and padding for the footer section of the page. Overall, this CSS code provides a basic style for a web page, including a navigation menu and a footer.

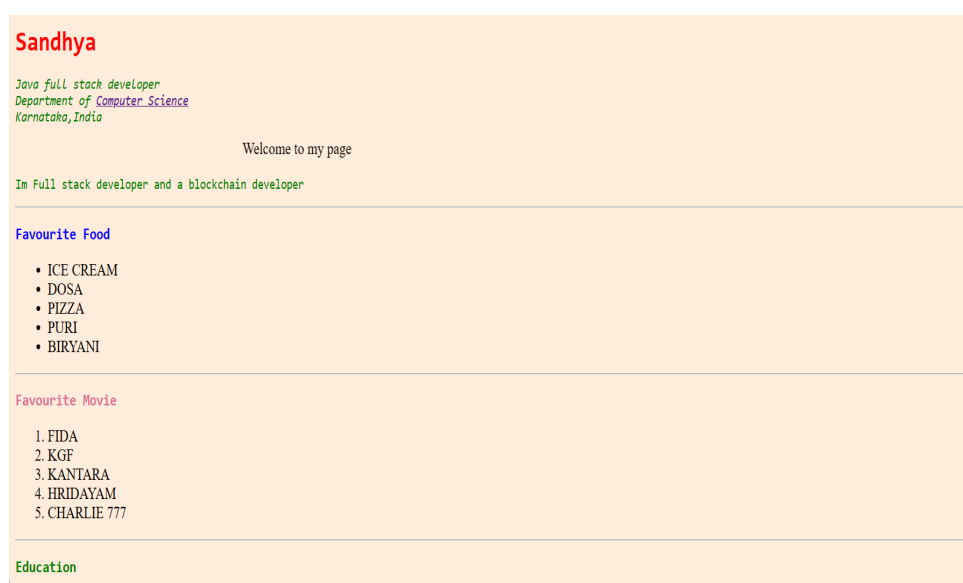


Figure 2.3: The resultant HTML website with CSS

2.2 Second Week

Learning JavaScript and Angular was the main goal of the second week of the internship. Web development is done using JavaScript, and Angular is a front-end framework that makes it easier to create web apps. The interns studied both technologies' basics and engaged in exercises that let them put what they had learned to use.

2.2.1 A simple clone website using HTML and CSS

A Myntra clone using HTML and CSS was developed to improve the skills in front-end development. By replicating Myntra, one can better understand HTML and CSS code and improve the ability to create responsive and user-friendly web pages. This project also provides an opportunity to practice form validation techniques and learn about the best practices for designing web forms. The design is shown in Figure 2.4.

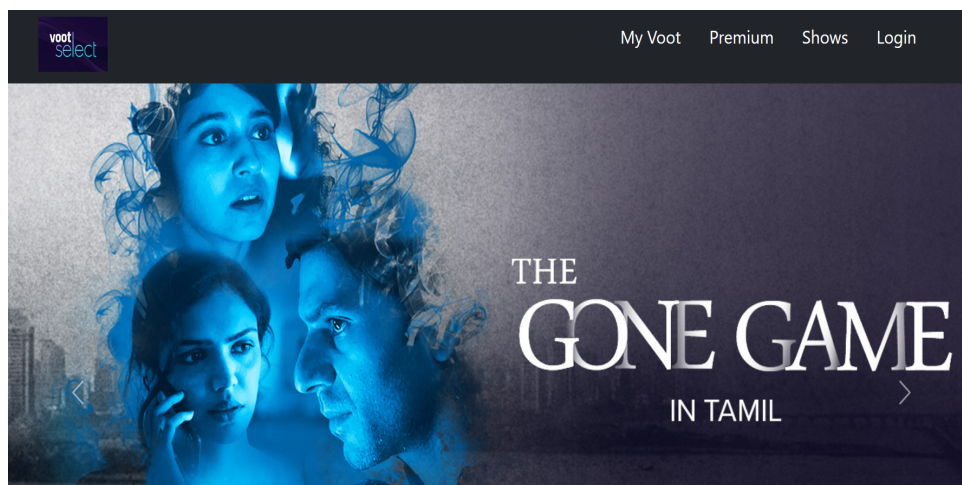


Figure 2.4: A simple clone of Myntra website using HTML and CSS

2.2.2 In-depth study of JavaScript

JavaScript is a programming language that is widely used for creating interactive and dynamic web pages. It is a client-side scripting language that can be added to HTML pages to create dynamic effects and improve user interactivity. JavaScript is a highlevel language that is easy to learn and has a flexible syntax. It can be used for a variety of purposes, including form validation, creating animations, manipulating the Document Object Model (DOM), and much more. One of the most significant features of JavaScript is its ability to interact with HTML and CSS. This makes it possible to modify the content and style of web pages dynamically, without the need for page reloading. JavaScript is also used

extensively in web development frameworks like React, Angular, and Vue. JavaScript can be executed on any modern web browser, making it a widely adopted language. It has a vast developer community, which means that there are many libraries, frameworks, and plugins available to extend its functionality. Popular libraries like jQuery and React make JavaScript programming much easier and efficient. JavaScript is a versatile language that is used for creating dynamic web pages and improving user interactivity. It has a flexible syntax, and its ability to interact with HTML and CSS makes it a powerful tool in web development. Its popularity and the availability of many libraries and frameworks make it an essential language for web developers.

2.2.3 Study of AngularJS

AngularJS is a popular open-source JavaScript framework developed and maintained by Google. It is designed to help developers build dynamic and responsive web applications. AngularJS provides a robust set of tools and features that allow developers to create complex and modular applications in a relatively short amount of time. One of the key features of AngularJS is its use of two-way data binding. This means that changes made to the model automatically update the view, and vice versa, making it easier to manage complex data flows in the application. AngularJS also includes a powerful templating engine, which allows developers to define custom HTML elements and attributes, and reuse them throughout the application. Additionally, AngularJS provides a set of builtin directives that enable developers to manipulate the DOM, handle events, and perform other common tasks. Overall, AngularJS is a versatile and powerful framework that can help developers build high-performance, modular, and scalable web applications.

2.3 Third Week

The third week covered the two key web application development tools, Spring Boot and MySQL Workbench. Popular Java framework Spring Boot makes it easier to create web apps by offering a selection of pre-configured modules and packages. On the other side, MySQL Workbench is a potent visual tool that aids developers in managing and working with databases, particularly MySQL databases. The use of both tools was demonstrated through practical exercises, and it was discovered how they could be combined to create reliable and effective web applications.

2.3.1 Designing a simple calculator using HTML, CSS, and JavaScript

A simple calculator can be built using HTML, CSS, and JS to perform basic arithmetic operations. The HTML structure will consist of a form with input fields for the numbers and buttons for the operations. CSS can be used to style the calculator's layout, buttons, and display area. JavaScript will handle the calculations and display the results on the screen. The JS code can use the document object model (DOM) to access the HTML elements and perform the necessary operations. Overall, building a simple calculator using these web technologies can be a great way to practice and improve one's skills in front-end web development.

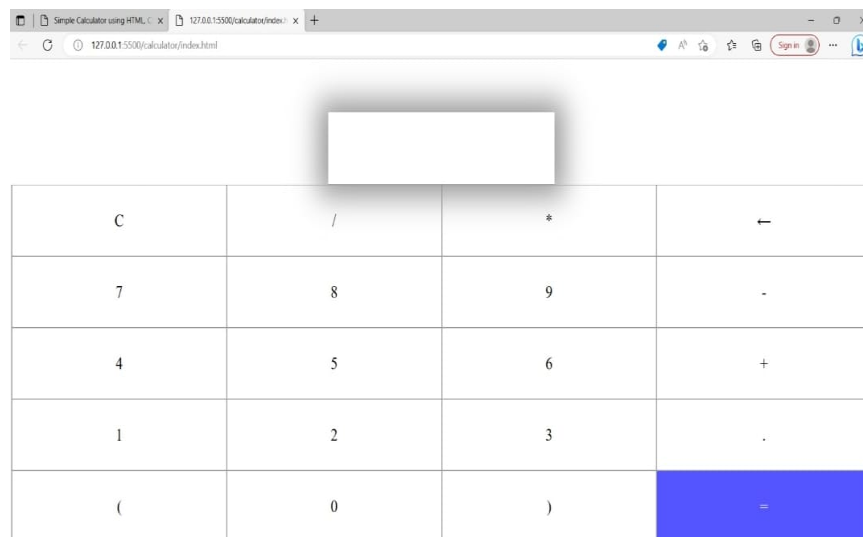


Figure 2.5: Design of a simple calculator

2.3.2 Exploring MySQL Workbench

MySQL Workbench is a graphical user interface (GUI) tool used for designing, modeling, and managing MySQL databases. It is a comprehensive application that allows users to manage their databases efficiently and easily. MySQL Workbench is available for Windows, Mac OS, and Linux operating systems. With MySQL Workbench, users can create, edit, and manage database schemas, tables, and indexes using a visual drag-and-drop interface. It also provides tools for visual data modeling, SQL development, and server administration. Users can perform database queries, run stored procedures, and view the results within the application. MySQL Workbench has a built-in migration tool that allows users to migrate data from other database systems to MySQL. It supports

various database systems, including Microsoft SQL Server, PostgreSQL, and Oracle. In addition, MySQL Workbench includes a powerful backup and restore feature that can create and restore full or partial backups of a database. Users can also monitor and optimize database performance using the tool's query profiler and performance dashboard. Overall, MySQL Workbench is a robust and user-friendly tool that provides a comprehensive solution for database design, development, and administration. It can help users save time and improve productivity by simplifying complex database management tasks.

2.3.3 Getting Started with Spring Boot

Spring Boot is a popular Java-based framework that makes it easier to create web applications and microservices. It simplifies the configuration process by providing autoconfiguration and opinionated defaults, reducing the amount of boilerplate code required to set up a project. With Spring Boot, developers can quickly create standalone, production-grade applications that can be easily deployed to a variety of platforms. One of the key features of Spring Boot is its embedded web server, which allows developers to run their applications as standalone executables without requiring a separate web server installation. It also provides a wide range of libraries and plugins that integrate with popular tools and technologies, such as databases, security, logging, and more. Overall, Spring Boot provides a powerful set of tools and features that streamline the development process, making it a popular choice for building enterprise-grade applications and microservices. Its simplicity and ease of use make it an ideal choice for developers of all levels, from beginners to seasoned professionals.

2.4 Fourth Week

2.4.1 Coding of Fashion Outlet Store - A Java Full Stack Project

The full-stack project Fashion Outlet Store was developed utilising a variety of technologies, including HTML, CSS, JavaScript, MySQL Workbench, Spring Boot, and AngularJS. Users can register, log in, add things to their cart on this website, which is meant to provide a wide variety of clothing options. The idea aims to make it simple and comfortable for people to order from the comfort of their homes, eliminating the need to physically visit a shop. The website offers a user-friendly interface that is simple to use. Users can browse the website's various clothing categories, perform a quick product search, and add any items they find to their shopping cart. Before making a purchase, users have the option to view the product details, which include the price, description and can update his personal details.

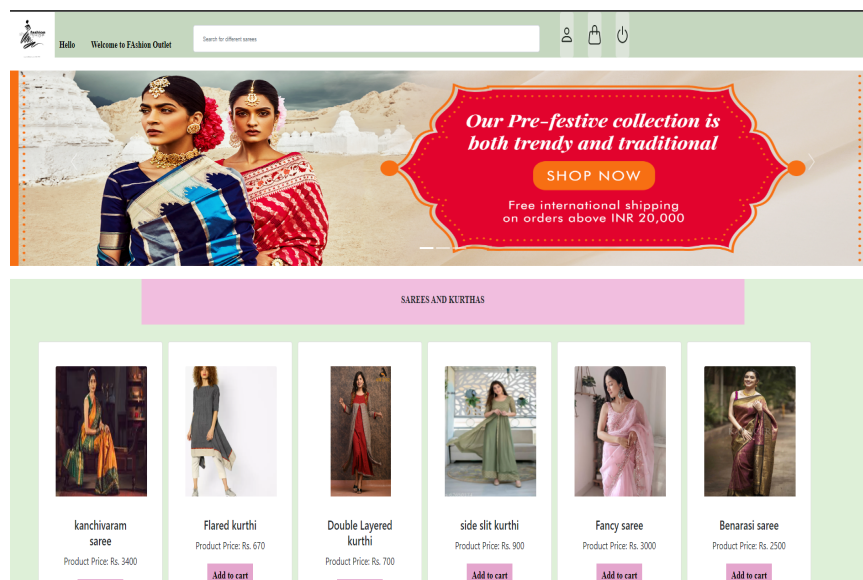


Figure 2.6: The home page interface of Fashion Outlet Store

For the development of safe user accounts and the monitoring of orders, BakeHouse provides signup and login tools. Data is conveniently stored via MySQL Workbench, while deployment and programming are made simple with Spring Boot. A fluid user experience for front-end development is provided by AngularJS. Overall, Fashion Outlet Store is a safe, effective, and easy-to-use website for placing online food orders.

Chapter 3

Outcomes

Overall, I had a great internship experience at Thaniya Technologies. My mentor helped me navigate different workflows and get through challenging circumstances. I got the chance to develop my interpersonal abilities, which are highly transferable across fields and jobs, in addition to honing my technical talents. I was able to develop my leadership and teamwork abilities by taking on leadership responsibilities all throughout.

3.1 Learning Outcomes

- Obtained technical knowledge in JavaScript, CSS, and HTML to build dynamic, responsive web pages.
- Gained understanding of the front-end framework Angular to construct dependable and scalable online apps.
- Learned how to use MySQL Workbench to design, implement, and query relational databases.
- Gained practical experience in Spring Boot for building efficient and scalable back-end systems.
- Worked with other programmers and team members to meet project deadlines and goals.
- Developed soft skills in problem-solving, teamwork, and effective communication.

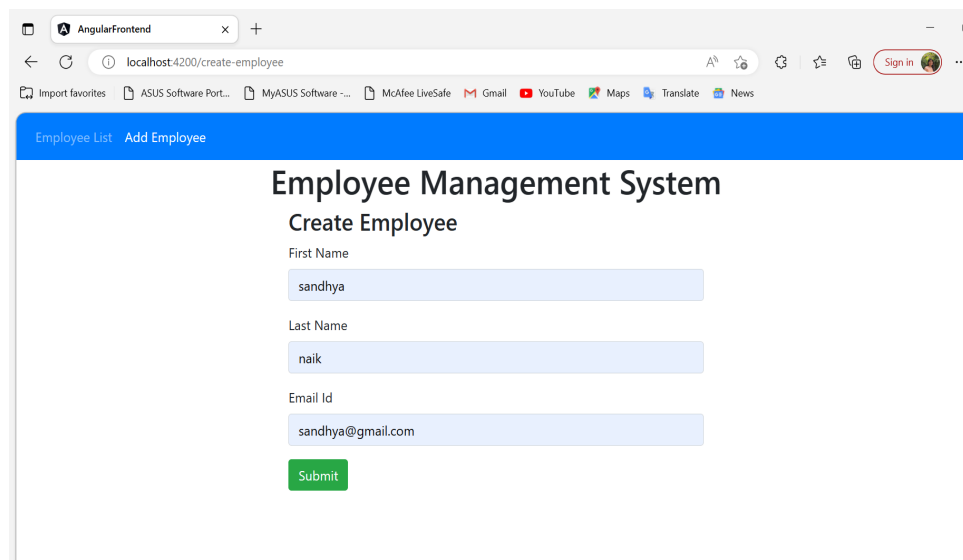
- The balancing of conflicting priorities while maintaining the accuracy and reliability of work.

3.2 Project Outcomes

A full-stack online application called Fashion Outlet Store is created using HTML, CSS, JavaScript, MySQL Workbench, Spring Boot, and Angular. Signing up, logging in, adding items to their carts, and checking out carts are all options for users and can update his personal details.

3.2.1 Page for Create Employee

The figure below in 3.1 shows interface for insert Employee.



The screenshot shows a web browser window with the address bar displaying 'localhost:4200/create-employee'. The page has a blue header bar with the text 'Employee List' and 'Add Employee'. Below the header, the main content area is titled 'Employee Management System' and 'Create Employee'. It contains three input fields: 'First Name' with the value 'sandhya', 'Last Name' with the value 'naik', and 'Email Id' with the value 'sandhya@gmail.com'. A green 'Submit' button is located at the bottom of the form.

Figure 3.1: Create Employee Page

3.2.2 Page for View Employee

The figure below in 3.2 shows interface for display of the employee.

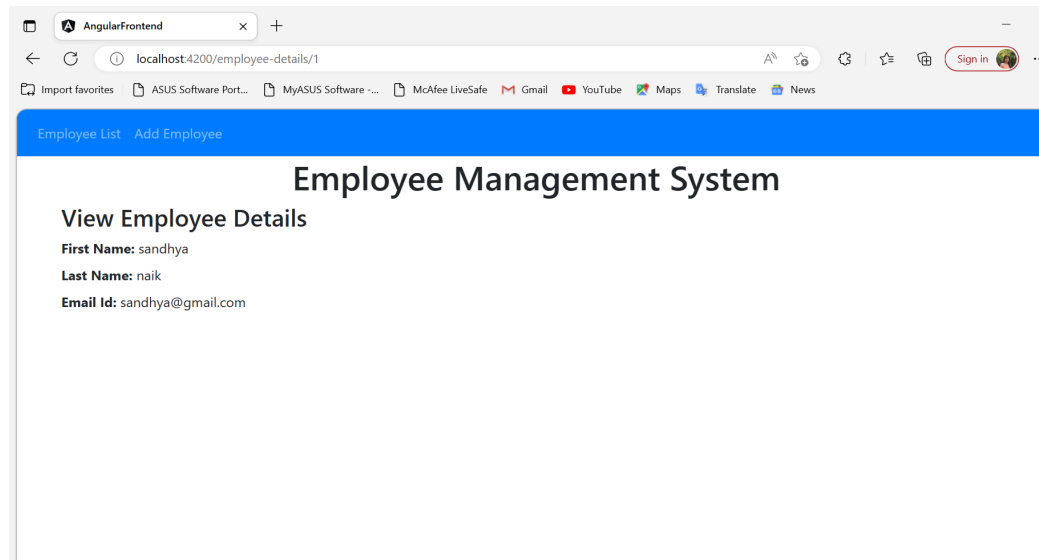


Figure 3.2: View Employee Page

3.2.3 Page for Updating Employee Details

The figure below in 3.3 is to edit customer details.

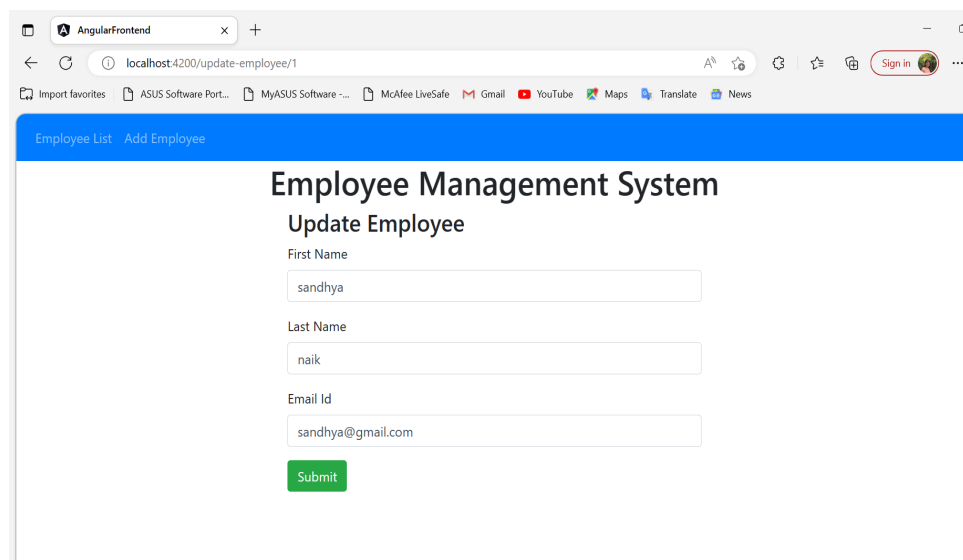


Figure 3.3: Employee Details Update Page

3.2.4 Employee List Page

The figure below in 3.4 shows List of Employee inserted.

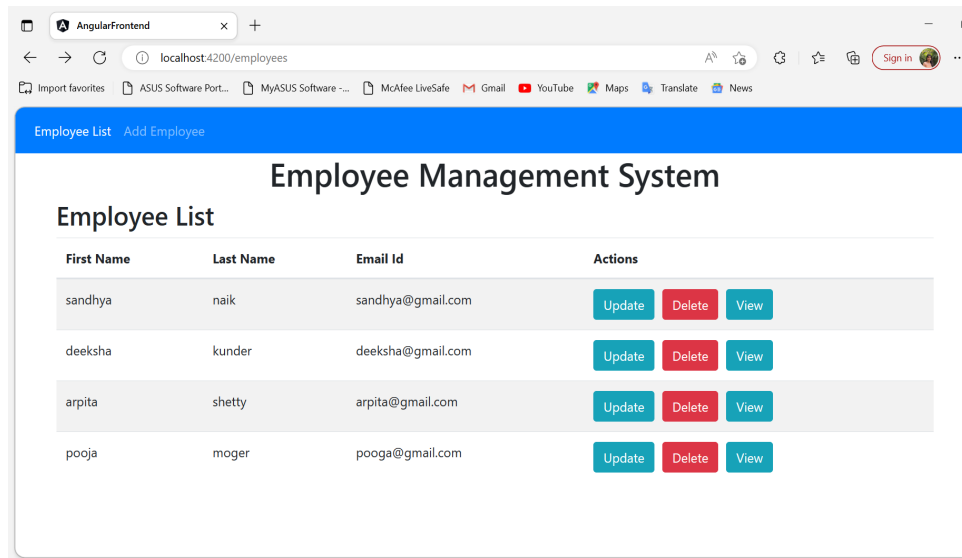


Figure 3.4: Employee List Page

Chapter 4

Conclusion

I developed a wide range of technical abilities and knowledge during my internship as a Java full-stack developer that have allowed me to contribute to the creation of online apps. During my internship, I had the chance to work with HTML, CSS, and JavaScript to construct responsive and dynamic web pages. I also developed my knowledge of Angular, a well-known front-end framework, which enabled me to make reliable and scalable online applications. I also got to learn how to design, construct, and query relational databases while using the robust database administration tool MySQL Workbench. Additionally, I received experience using Spring Boot, a popular Java platform for creating web apps. My understanding of the development, upkeep, and integration of effective, scalable, and integrated back-end systems with front-end apps has been aided by this experience. I was able to use these abilities throughout my internship to contribute to the creation of a number of initiatives, such as a blogging and social networking platform. I gained useful soft skills in addition to technical ones, such as problem-solving, teamwork, and effective communication. In order to meet project deadlines and goals, I worked alongside other developers and team members. In the process, I developed the ability to balance competing priorities while maintaining the calibre and integrity of my work. Overall, my internship as a Java full-stack developer has been really beneficial to me as I work to hone my abilities as a web developer. I'm comfortable working with a variety of tools and technologies, and I'm eager to put my knowledge and abilities to use on new projects.

References

- [1] www.redhillsoftec.com
- [2] www.linkedin.com/company/technotriumph/
- [3] <https://www.youtube.com/@BTechDays>
- [4] <https://www.geeksforgeeks.org>