SAHYADRI
COLLEGE OF ENGINEERING & MANAGEMENT
An Autonomous Institution
MANGALURU

Internship Report on

"FULL STACK DEVELOPMENT"

Submitted by

KISHORE N **4SF22CS406**

In partial fulfilment of the requirements for the VIII Semester of

BACHELOR OF ENGINEERING

In

COMPUTER SCIENCE ENGINEERING

at

Thaniya Technologies

Mangalore

Under the Guidance
of
Ms. Prapulla G
Assistant Professor, Dept. of CS&E
at

SAHYADRI
College of Engineering & Management

(An Autonomous Institution)

Adyar, Mangaluru – 575 007

AY: 2024- 25

SAHYADRI
COLLEGE OF ENGINEERING & MANAGEMENT
An Autonomous Institution
MANGALURU

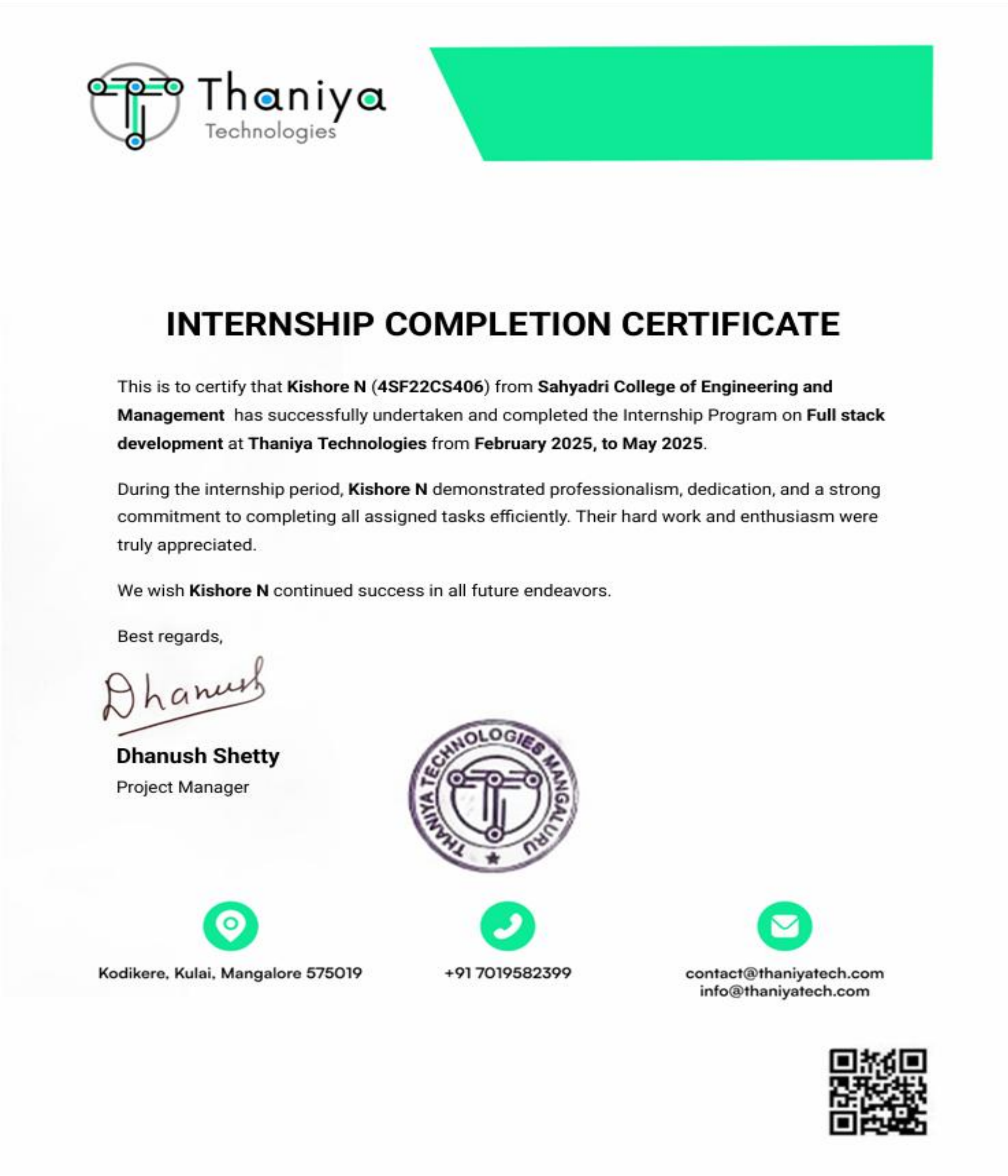
CERTIFICATE

This is to certify that “FULL STACK DEVELOPMENT” is a bonafide document of internship work carried out by KISHORE N bearing USN 4SF22CS406, student of Sahyadri College of Engineering & Management, Mangaluru at Thaniya Technologies from 02/02/2025 to 10/05/2025 in partial fulfilment for the VIII Semester of Bachelor of Engineering in Computer Science Engineering of Visvesvaraya Technological University, Belagavi during the academic year 2024-25. The internship report has been approved as it satisfies the academic requirements as per university guidelines.

Internal Guide	Internship Coordinator	Head of the department
Ms. Prapulla G	Mrs. Chaithra	Dr. Mustafa Basthikodi
Asst. prof, Dept. of CS&E	Asst. prof, Dept. of CS&E	Head & Prof, Dept of CS&E

Name of Examiners	Sign with date
1. …………………………..	1. ………………………..
2. …………………………..	2. ………………………..

INTERNSHIP CERTIFICATE



Thaniya
Technologies

INTERNSHIP COMPLETION CERTIFICATE

This is to certify that **Kishore N** (**4SF22CS406**) from **Sahyadri College of Engineering and Management** has successfully undertaken and completed the Internship Program on **Full stack development** at **Thaniya Technologies** from **February 2025, to May 2025**.

During the internship period, **Kishore N** demonstrated professionalism, dedication, and a strong commitment to completing all assigned tasks efficiently. Their hard work and enthusiasm were truly appreciated.

We wish **Kishore N** continued success in all future endeavors.

Best regards,

Dhanush

Dhanush Shetty
Project Manager

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ABSTRACT

During my internship at Thaniya Technologies, we are trying to develop a full-stack web application named Gym Tribe, designed to replicate the essential features of a modern gym management and booking system. The project was built using the MERN stack (MongoDB, Express, React, Node.js) alongside TailwindCSS for responsive and modern user interface design.

The application is structured into three primary components: frontend, backend, and admin panel. Users can register, log in, browse available trainers by specialization, and schedule workout sessions through a user-friendly interface. Each trainer has a dedicated page displaying their profile and available booking slots, while users have the ability to manage or cancel their bookings through their personal dashboard. Additionally, an admin panel was implemented to allow administrators to manage trainer details, their specializations, and professional credentials.

Key technologies such as Axios, React Router, and React Toastify were integrated to facilitate API communication, seamless navigation, and real-time user notifications. This project not only enhanced my technical proficiency in modern frontend and backend frameworks but also provided practical experience in developing scalable, real-world applications tailored for service-based platforms.

ACKNOWLEDGEMENT

It is with great satisfaction and euphoria that I am submitting the Internship Report on **"FULL STACK DEVELOPMENT"**. I have completed it 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 am profoundly indebted to my internal guide, **Ms. Prapulla G** Assistant Professor, Department of Computer Science & Engineering, Internship Coordinator **Mrs. Chaithra** Assistant Professor, Department of Computer Science &Engineering and external guide **Mr. Vipul Gajragavonkar**, Domain Trainer at Company Name for innumerable acts of timely advice, encouragement and I sincerely express my gratitude.

I express my sincere gratitude to **Dr. Mustafa Basthikodi,** Professor & Head, Department of Computer Science & Engineering for his invaluable support and guidance.

I sincerely thank **Dr. S S Injaganeri** , Principal, Sahyadri College of Engineering & Management and **Dr. D. L.Prabhakara**, Director, Sahyadri EducationalInstitutions, who have always been a great source of inspiration.

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

KISHORE N
(4SF22CS406)

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CHAPTER 1

INTRODUCTION

WEB DEVELOPMENT FUNDAMENTALS

Web development is the process of building and maintaining websites and web applications. It encompasses various aspects including web design, front-end development, back-end development, and database management. The field has evolved significantly over the years, from simple static HTML pages to complex, interactive applications that provide rich user experiences.

HTML (Hypertext Markup Language) is the standard markup language used to structure content on the web. It provides the fundamental building blocks for web pages through a system of elements and tags that define different types of content such as headings, paragraphs, images, and links. HTML5, the latest version, introduced semantic elements like <header>, <footer>, <article>, and <section>, which provide more meaningful structure to web documents and improve accessibility and SEO.

CSS (Cascading Style Sheets) is a style sheet language used to describe the presentation of HTML documents. It controls the layout, colors, fonts, and overall visual appearance of web pages. CSS3, the current standard, introduced advanced features such as animations, transitions, gradients, and flexible box layouts (Flexbox) and grid layouts, which have revolutionized web design by enabling more sophisticated and responsive layouts without relying on JavaScript or other scripting languages.

JavaScript is a high-level, interpreted programming language that enables interactive web pages and is an essential part of web applications. Unlike HTML and CSS, which are primarily concerned with content structure and presentation, JavaScript adds behavior and functionality to web pages. It allows developers to create dynamic content, validate forms, handle events, manipulate the Document Object Model (DOM), and communicate with servers asynchronously. Modern JavaScript (ES6+) has introduced significant improvements such as arrow functions, template literals, destructuring, and promises, making code more concise and readable.

Together, HTML, CSS, and JavaScript form the foundation of front-end web development. They work in harmony to create the user-facing aspects of websites and web applications. HTML provides the structure, CSS enhances the visual presentation, and JavaScript adds interactivity and dynamic behavior. Mastering these three technologies is the first step in becoming proficient in the MERN stack, as they form the basis for more advanced frameworks and libraries like React.js.

INTRODUCTION TO MERN STACK

The MERN stack is a comprehensive JavaScript-based technology stack used for building modern web applications. It consists of four key components: MongoDB, Express.js, React.js, and Node.js. Each technology in the stack serves a specific purpose and together they enable developers to create full-stack applications using JavaScript throughout the entire development process.

MongoDB is a NoSQL database that stores data in flexible, JSON-like documents. Unlike traditional relational databases that use tables and strict schemas, MongoDB's approach allows for variable data structures and dynamic schema evolution. This flexibility makes it particularly suitable for applications where data requirements may change over time or where the data structure is not rigidly defined from the outset.

Express.js is a minimal and flexible Node.js web application framework that provides a robust set of features for building web and mobile applications. It simplifies the process of creating server-side applications by providing tools for routing, middleware integration, and HTTP request/response handling. Express.js follows the middleware pattern, allowing developers to create a pipeline of functions that process HTTP requests in sequence.

React.js is a JavaScript library developed by Facebook for building user interfaces. It uses a component-based architecture where UIs are composed of reusable, independent components. React's virtual DOM implementation efficiently updates the actual DOM by only rendering components that have changed, resulting in improved performance. This declarative approach to UI development makes code more predictable and easier to debug.

Node.js is a JavaScript runtime environment that executes JavaScript code outside a web browser. It uses an event-driven, non-blocking I/O model that makes it lightweight and efficient for data-intensive applications. Node.js enables server-side JavaScript execution, allowing developers to use the same programming language on both the client and server sides, thus streamlining the development process.

The MERN stack offers several advantages for web development. It allows for consistent use of JavaScript throughout the entire application, reducing the cognitive load of switching between different programming languages. The modular nature of the stack enables developers to work on individual components independently, facilitating parallel development and maintenance. Additionally, all components of the MERN stack are open-source and have large, active communities, ensuring ongoing support and a wealth of available resources and libraries.

COMPANY PROFILE

1.1 COMPANY PROFILE

Thaniya technologies is an IT solutions based company which specializes in performing custom design and development of projects which perfectly matches client business requirements. Their subsidiaries include Rooloo designs, Rooloo Fixme and Drony Aeriels. Their team uses cutting edge technologies to customize everything in a product development process whether it's about the look & feel feature of front-end to skilled back-end programming. Their customized methods and technologies result in full- functional, highly dynamic and interactive solution.

They offer variety of services such as web design, web development, app development, machine learning, Internet of things, game development and event management. With a team of qualified professionals that are dedicated to delivering quality services for the success of client's projects.

ORGANIZATIONAL STRUCTURE

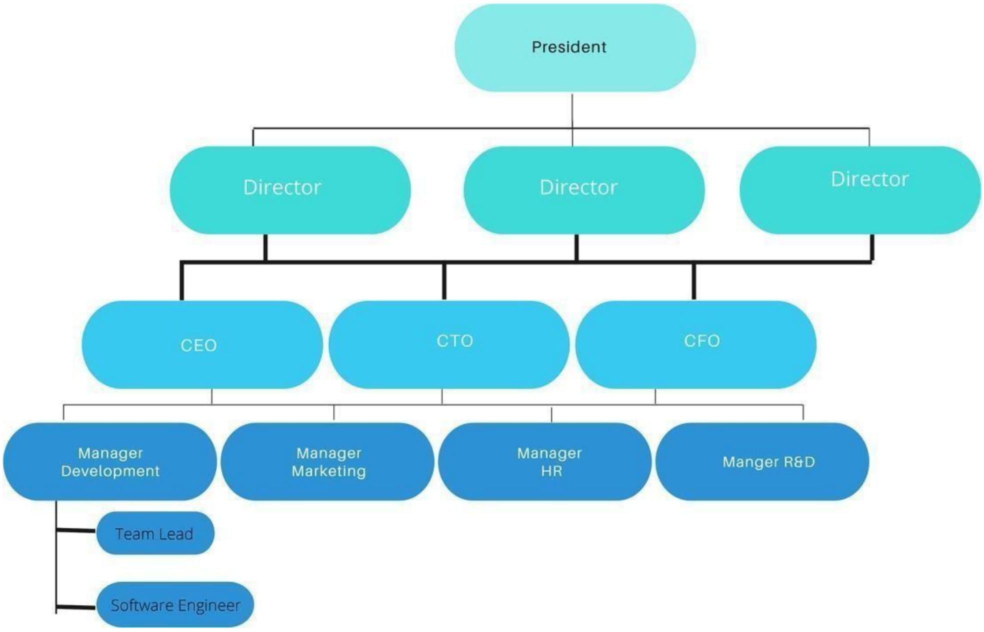


Fig 1.1: Organizational structure

1.2 PRINCIPLES

- **Interdependency**: Whole is greater than the sum of parts, knowing this has helped us to develop and cultivate a culture of interdependency. It portrays a power of connection and strives for the synergy through power of relationships. Interdependency between different departments, individuals, clients and partners for a greater good is what we are aiming at Thaniya technologies.
- **Sharing:** No social technology can grow without the benefit of sharing. The word sharing is thrown around with wild abandon by almost any organization you interact with, but very few works toward imbibing this concept in their products and services. At Techno Triumph, we value sharing and in fact have it a core concept in our internal as well as customer dealings. We also realize that sharing is a two-way street and the more you share something, the more you will receive from it.
- **Openness:** Openness as a business trait has gained a lot of momentum in recent times. Gone are the days when organizations were shy about revealing their business plans. Openness is intrinsic to all our business dealings. Advent of social media has brought about the change in the organizations and openness has become imperative. Openness becomes more important when dealing with digital ventures.

1.3 VISION

"To Provide Quality Service and Solution in the field of Information Technology"

1.4 MISSION

- Train future task force with Quality internship and training.
- Provide IT solution in various domain.
- Get Recognized by Government and other Quality Assurance bodies.

1.5 POLICIES

Talent Acquisition policies

Resume Screening and Short Listing

- The HR Department will do the initial screening & short listing of resumes for the position.

- HR Department during the short listing will focus on: Education, Experience, Current role/responsibilities, Salary level, Technical/ Functional/Domain Knowledge, Culture fit, etc.
- The short listed resumes are sent to the concerned Business/Unit/ Functional Heads for evaluation requesting them to indicate the action to be taken. As far as possible (depending on the availability), reasonable number of candidates will be provided for final selection.

Staffing Authority

The CEO/GCXO is the authority for staffing with the prior consent of Director.

Quality Policy General

As our first priority the management of Thaniya Technologies is committed to delivering quality software to our customers. We recognize that consistent satisfaction of customer needs is essential to business survival.

Planning

A Software Project Management Plan shall be created for all projects.

Monitoring and controlling

Project managers shall produce project performance reports at intervals agreed with the project sponsor.

Documenting requirements

All projects shall prepare a Software Requirements Specification describing the functions, performance and the interface requirements of the software product.

Architectural design

All projects shall conduct a Design Input Review to establish that design inputs such as Software

Requirements Specifications are unambiguous, complete and correct and possess sufficient quality to support the development of a design solution.

Coding

Projects shall develop software in compliance with predefined coding standards. Coding standards shall be updated to reflect any project specific practices.

Testing

All projects shall describe the approach to testing in a Software Test Plan. The STP shall describe the project's approach to unit, integration and acceptance testing.

Managing quality

All projects shall plan and perform the software quality management activities required to ensure that the customer's stated and implied needs are met and that the software product is developed in compliance with recognized best practice.

Managing people

Project managers shall be responsible for ensuring that development team members are aware of their quality responsibilities and appropriately trained to perform their assigned tasks.

1.6 PRODUCTS

Company develops android apps, web apps, ERP, Gaming etc. based on the customer requirements. So based on the needs of customer it develops the products.

1.7 SERVICES

App Development

Company develops Custom made Application for Business, if anyone have an idea join with company, it will build wonderful application for them.

Graphics Design

If anyone looking for Logo, Creative Poster, Visiting Cards, brochure etc. services regarding these can be provided.

Web Development

Are you Looking for Website, do you have a Business and you want to make it online, we will build website for you. Design-Host-Maintain.

Aerial Videography

Aerial Photography, Drone Photography/Videography can be provided to required ones.

Digital Marketing

It includes Search Engine Optimization, Translation and quality assurance of texts, Research work and keyword strategies.

Event Management

A-Z services for customer's event from Stage Decoration to Photography can be provided.

1.8 CUSTOMERS

Thaniya technologies served some companies/organizations such as Bhoomi Hardware, MCF, Payana, Redhill Softec, Namaste Online etc. by providing software solution in complete or part.

CHAPTER 2

INTERNSHIP PROGRESS

I learnt about the below-mentioned technologies and tools through my external guide and online resources. Apart from learning these new technologies and tools, I also learned how to effectively manage time and complete the given tasks within the deadline. The internship allowed me to develop my interpersonal skills.

2.1 FIRST WEEK:

At the initial I learned about how HTML documents are structured. They have opening and closing tags that wrap around content. Some key tags include <!DOCTYPE html>, <html>,<head>,<title>,<body> and their closing partners. Understanding the roles of <head> and <body> was crucial. The <head> stores important info like page titles and links to files, while the <body> holds what you actually see on a webpage. HTML has its own language made up of tags. For instance, <h1> to <h6> are for headings, <p> is for paragraphs, <a> makes links, <img> displays images, and <ul>/<li> create lists. Each tag helps shape how a webpage looks. Tags can do more with attributes. I found out that adding an attribute like href to the <a> tag makes link work by specifying where they lead. I explored using tags like <header>, <nav>, and <footer> for more than just looks. These tags bring meaning to the structure of a webpage, like saying "this is the header" or "this is the footer". Learning the basics of HTML was a big step in my web development journey. Understanding how to structure content, use tags, and add attributes empowered me to create organized and meaningful web pages. As I continue coding, these HTML basics guide me in making impactful digital experience

Task Performed	Tools/Resources	Outcomes
Learned basic HTML document structure	HTML tutorials, online documentation	Understood the use of <!DOCTYPE html>, <html>, <head>, and <body> tags

Explored role of <head> and <body> tags	W3Schools, MDN Web Docs	Gained clarity on metadata vs. visible content in HTML
Practiced using heading and paragraph tags	Text editor (VS Code), browser preview	Learned how to organize content using <h1> to <h6> and <p> tags
Created hyperlinks using <a> tag and href attribute	MDN Web Docs, sample code	Learned how to make clickable links and direct them to other pages or sites
Displayed images using <img> tag	Online tutorials, image files	Understood how to embed and control images on webpages
Developed sample pages using basic HTML	VS Code, live server extension	Gained confidence in creating structured and meaningful webpages
Understood HTML's role in web development	Internship guide, online courses	Built foundational knowledge for advancing in front-end web development

Table 2.1: First week

2.2 SECOND WEEK :

Starting my journey to understand styling in React, I realized how crucial it is to make apps look good and user-friendly. This report shares my exploration of styling React components using traditional CSS files and the modular approach of CSS Modules. I kicked off by setting up a React project efficiently, using tools like Create React App. This step made the development process smoother and helped me keep things organized. To add styles, I made a separate CSS file named styles.css. In this file, I used standard CSS syntax to define how specific components should look Linking the CSS file to React components was easy. I just added import './styles.css'; at the top of a component file, and the styles were applied to the whole project. For more focused styling, I explored CSS Modules. For example, when working on a Button component, I made a file called

Button.module.css and used the:local selector to keep the styles specific to that component. Bringing CSS Modules into React component. Bringing CSS Modules into React components required a specific import strategy. I used import styles from './Button.module.css';, allowing me to access styles through the styles object without causing conflicts. Putting my knowledge into action, I seamlessly integrated styles into React components. For instance, I styled a button using <button className={styles.button}>Click me</button>, thanks to CSS., I explored theming using CSS variables. I created a file like variables. css to define colors and fonts, and other theme-related properties.

Task Performed	Tools/Resources	Outcomes
Set up a React project	Create React App (CRA)	Enabled smooth project initialization with an organized structure
Styled components using a global CSS file (styles.css)	VS Code, standard CSS syntax	Applied global styles across multiple components easily
Imported global CSS into components	import './styles.css'	Ensured consistent styling throughout the project
Explored componentspecific styling with CSS Modules	Button.module.css, official React docs	Achieved scoped styles, avoiding global style conflicts

Used import styles from'./*.module.css' in components	React component files, online examples	Accessed styles through an object (styles) to apply modular styling
Organized styling files into folders (global & component-based)	styles/, components/ folders	Improved file structure and maintainability
Practiced real-world styling in a React project	Personal project, code editor, browser preview	Developed hands-on styling skills and confidence in React UI development

Table 2.2: Second week

2.3 THIRD WEEK

On the third week of my internship, I immersed myself in the intricate realm of Cascading Style Sheets (CSS), dedicating my efforts to comprehensively explore foundational aspects pivotal to web design. This exploration delved deep into the nuances of color, margin, position, and size behaviors, unraveling their profound impact on the visual aesthetics of web pages. This immersive experience not only solidified my grasp of theoretical underpinnings but also provided practical applications of these fundamental CSS attributes. Expanding my horizons, I delved into the concept of utilizing containers in CSS, a crucial element for structuring and organizing web content. Working with three containers, I navigated through their intricacies, gaining valuable insights into positioning, coloring, and alignment properties. This hands-on experience laid a robust foundation for manipulating the layout and appearance of web elements, essential skills for effective web development. To deepen my understanding, I engaged in a practical exercise, applying my newfound knowledge to design a basic usernamepassword input form within a single container. This hands- on application of CSS properties honed my skills in styling, alignment and overall aesthetic appeal, boosting my confidence in implementing CSS for real-world web design scenarios. Reflecting on the day, it proved exceptionally productive, offering a holistic learning experience. Transitioning seamlessly from theoretical exploration to practical application, I gained valuable insights into leveraging CSS to enhance the visual aspects and layout of web content. This immersive encounter not only elevated my technical proficiency but also instilled a deeper appreciation for the dynamic role CSS plays in shaping the user experience on the web.

Task Performed	**Tools/Resources**	**Outcomes**
Explored foundational CSS aspects like color, margin, position, and size behaviors.	CSS documentation, tutorials	Gained a solid understanding of how these properties impact the visual aesthetics of web pages.
Designed a basic username-password input form within a single container.	Text editor, CSS for styling	Gained hands-on experience in styling, alignment, and aesthetic appeal, boosting confidence in practical CSS use.
Reflecting on CSS's role in web design and its effect on user experience.	Practical exercises, CSS demos	Developed a deeper appreciation for CSS's role in enhancing visual aspects and user interface design.

Table 2.3: Third week

2.4 FOURTH WEEK

During my fourth week of internship, I gained valuable knowledge on incorporating CSS files into HTML using the <link> tag, a fundamental technique for styling web pages. The practical exercises involved manipulating the position and font size of elements, providing a hands-on experience in understanding the intricacies of CSS for web design. As part of the learning process, I successfully added my name and an introduction to the project, enhancing the overall aesthetics of the webpage. Additionally, I honed my skills by inserting images into both the navigation bar and the body of the webpage, gaining insights into the visual aspects of web development. This interactive learning approach significantly contributed to solidifying my comprehension of CSS and its role in shaping the appearance of web content. Undertaking a mini project, which included crafting an introduction and integrating images into the navigation bar and body, proved to be an enjoyable and insightful endeavor.

The practical application of these techniques not only reinforced theoretical concepts but also provided a tangible properties honed my skills in styling, alignment and overall aesthetic appeal, boosting my confidence in implementing CSS for real-world web design scenarios. Reflecting on the day, it proved exceptionally productive, offering a holistic learning experience. Transitioning seamlessly from theoretical exploration to practical application, I gained valuable insights into leveraging CSS to enhance the visual aspects and layout of web content. This immersive encounter not only elevated my technical proficiency but also instilled a deeper appreciation for the dynamic role CSS plays in shaping the user experience on the web.

Task Performed	**Tools/Resources**	**Outcomes**
Incorporated CSS files into HTML using the <link> tag.	HTML, CSS, online tutorials	Gained a fundamental understanding of how to link CSS to HTML for styling web pages.

Manipulated the position and font size of elements.	CSS tutorials, practice exercises	Developed hands-on experience in controlling layout and typography using CSS.
Inserted images into the navigation bar and body of the webpage.	HTML, CSS, image files	Improved the visual appeal of the webpage by integrating images, enhancing design and user interface.
Completed a mini project involving introduction text and image integration.	HTML, CSS, project guidelines	Reinforced theoretical concepts by applying them to a practical task, boosting confidence in real-world web design.
Reflected on CSS’s role in web design and user experience.	Practical exercises, CSS demos	Developed a deeper understanding of how CSS impacts the layout, aesthetic, and functionality of web content.

Table 2.4: Fourth week

2.5 FIFTH WEEK

On the fifth day of our internship, we expanded upon the mini project initiated on day four, focusing on key advancements. I learned to adjust container widths and organize them into columns, refining the layout for a more structured.

The appearance Additionally we explored the use of the display property to selectively remove containers, streamlining the design and enhancing visual appeal. Aligning containers at the center became a significant aspect of my learning, crucial for achieving a balanced and aesthetically pleasing layout. Modifying logo sizes within the navigation bar, transforming them into clickable elements, was another skill acquired, improving user interaction and navigation. A substantial part of the day was dedicated to optimizing screen responsiveness, learning techniques to adapt our project across various screen sizes for a consistent user experience. Overall, these techniques significantly contributed to my understanding of front-end development and user interface design.

Task Performed	**Tools/Resources**	**Outcomes**
Adjusted container widths and organized them into columns.	CSS tutorials, practice exercises	Improved layout structure, creating a more organized and visually appealing design.
Explored the use of the display property to selectively remove containers.	CSS documentation, online resources	Streamlined design by learning to hide or remove containers for enhanced visual appeal.
Aligned containers at the center of the page.	CSS, Flexbox tutorials	Gained proficiency in centering elements, achieving a balanced and aesthetically pleasing layout.

Modified logo sizes and transformed them into clickable elements in the navigation bar.	HTML, CSS	Enhanced user interaction by making logos interactive and improving navigation functionality.
Focused on optimizing screen responsiveness for various screen sizes.	CSS media queries, responsive design resources	Developed skills to make the project adaptable to different screen sizes, ensuring consistent user experience.
Applied new skills to enhance the project's layout and user interface design.	HTML, CSS, project guidelines	Solidified understanding of front-end development and user interface design principles, setting a foundation for future projects.

Table 2.5: Fifth F week

2.6 SIXTH WEEK

During the sixth week of our internship, we delved into the crucial aspects of GitHub, a cornerstone platform for version control and collaborative software development. Our primary objective was to leverage GitHub for hosting and managing our project, which began by initiating a repository dedicated to our mini project from the fourth day. The first step involved setting up the repository, configuring it to accommodate our project files, and laying the groundwork for collaborative development. Recognizing the significance of clear documentation, we meticulously crafted a README file, offering vital insights into project setup, execution instructions, a concise overview of functionalities, and any prerequisites for seamless collaboration.created a comprehensive README file, and uploaded our mini project files control and collaborative development.

Task **Performed**	**Tools/Resources**	**Outcomes**
Set up a GitHub repository for hosting and managing the mini project.	GitHub, online guides	Gained experience in initializing and configuring a repository for collaborative project management.
Created a comprehensive README file for the project.	GitHub, markdown documentation	Developed clear documentation providing insights into project setup, functionalities, and collaboration guidelines.
Added the mini project to the GitHub repository with organized file structure.	GitHub, file management	Ensured efficient file organization and accessibility within the GitHub platform.

Learned Git commands for version control, including committing changes, branching, and pushing modifications.	GitHub, Git documentation	Acquired skills to manage project versions, collaborate effectively, and track changes in the repository.

Table 2.6: Sixth week

2.7 SEVENTH WEEK

During my internship this week, I had the opportunity to learn from a highly skilled trainer. The focus of the training was on utilizing Bootstrap to seamlessly integrate CSS into HTML, significantly saving time. Under the guidance of the trainer, we successfully created a travel website using Visual Studio code One key takeaway was the realization that we could efficiently leverage pre-written Bootstrap code, eliminating the need to manually write extensive CSS code. This streamlined the process, enabling us to effortlessly add elements such as a navigation bar, background images, image transitions, and implement cards on the website. The experience of creating a website was gratifying, emphasizing the ease and efficiency achieved through the use of Bootstrap.

Task Performed	**Tools/Resources**	**Outcomes**
Learned to integrate CSS into HTML using Bootstrap.	Bootstrap framework, trainer guidance	Understood how to use pre-written Bootstrap code to simplify and speed up web development.

Created a travel website using Visual Studio Code.	Visual Studio Code, HTML, Bootstrap	Gained hands-on experience in building a complete website using a modern development environment.
Implemented navigation bar, background images, image transitions, and cards.	Bootstrap components, documentation	Efficiently added professional UI elements, enhancing the website's design and interactivity
Explored the benefits of Bootstrap for reducing manual CSS coding.	Bootstrap classes, live coding examples	Recognized time-saving advantages and ease of use in front-end development with Bootstrap.

Table 2.7: Seventh week

2.8 EIGHTH WEEK

During this week of internship, the trainer guide us through the intricacies of JavaScript. The focus was on implementing CSS in HTML and various approaches to incorporating JavaScript. The trainer adeptly demonstrated key JavaScript properties within HTML, emphasizing essential functions like console.log(). Engaging examples, such as string and number addition, and practical insights into using let, const, and var were elucidated. The session covered functions, their application, calling methods, and methods of retrieving elements. Exploring the Document Object Model (DOM), doctype, and accessing inner HTML were also part of the comprehensive training. Surprisingly, the complexity wasn't overwhelming, and I gained valuable insights into crafting HTML using JavaScript for tasks like hiding and unhiding blocks or counting elements. This experience instilled confidence in my abilities with JavaScript, HTML, and CSS, largely attributed to the excellent guidance from our trainer.

Task Performed	**Tools/Resources**	**Outcomes**
Explored JavaScript basics: console.log(), string/number addition, variables (let, const, var).	Code examples, live demonstrations	Gained foundational knowledge of JavaScript syntax and data types.
Explored the DOM, doctype, and innerHTML access.	JavaScript DOM manipulation, HTML structure	Understood how to interact with and modify HTML elements dynamically.
Practiced using JavaScript for dynamic tasks like hiding/unhiding	Live projects, Visual Studio Code	Acquired practical skills to control page elements and behaviors using JavaScript.

blocks and counting elements.		
Received mentorship on JavaScript fundamentals and best practices.	Trainer guidance, practice tasks	Built confidence in applying JavaScript effectively in web development.

Table 2.8: Eighth week

2.9 NINTH WEEK

On the ninth day of our internship, we delved into practical application by creating a JavaScript project using Visual Studio Code. The project aimed to engage two players in a thrilling dice-rolling competition, where each player's goal was to achieve the highest number possible by clicking a designated button. The integration of JavaScript with the Document Object Model (DOM) was a central aspect of our learning, as we explored the mechanisms of calling functions through the DOM object. To enhance the visual appeal of our project, we skillfully linked Google Fonts to our HTML file, elevating the overall aesthetic of the user interface. This addition not only showcased our proficiency in integrating external resources but also demonstrated an understanding of the importance of design in web development. The event-driven nature of our project was highlighted through the implementation of an event listener, allowing for seamless interaction between the users and the application. The logic governing the game was designed to declare a winner based on the comparison of the dice rolls, with a provision for a draw in the case of equal numbers. Under the guidance of our trainer, this project not only provided a practical application of our JavaScript skills but also underscored the significance of collaboration and effective problem-solving. As we approach the tenth day of our internship, we eagerly anticipate the opportunity to embark on another JavaScript project, further expanding our repertoire of web development techniques.

Task Performed	Tools/Resources	Outcomes
Created a JavaScript-based dice game for two players.	JavaScript, Visual Studio Code	Applied JavaScript concepts in a practical project involving user interaction and game logic.
Integrated JavaScript with the Document Object Model (DOM).	JavaScript DOM methods	Learned how to call functions and manipulate HTML elements through the DOM.
Linked Google Fonts to HTML to enhance UI design.	Google Fonts, HTML	Improved the visual aesthetics of the project and learned to incorporate external resources.

Table 2.9: Ninth week

2.10 TENTH WEEK

On the tenth day of our Full Stack Development internship training, we dived into an enriching JavaScript project guided by our skilled trainer. Our focus for the day was the creation of a dynamic webpage titled 'Drum Kit.' The objective was to design an interactive platform where specific keys, when pressed, triggered corresponding drum sounds. This hands-on project allowed us to not only apply our JavaScript knowledge but also explore the integration of multimedia elements.. The project served as a comprehensive exploration of JavaScript functionalities, reinforcing our understanding of event handling and multimedia integration. The combination of audio, visuals, and interactivity provided a holistic learning experience. As we continue our journey in Full Stack Development, the tenth day's project equipped us with valuable skills and knowledge

Task Performed	**Tools/Resources**	**Outcomes**
Integrated multimedia elements (audio files and images).	Audio files, image assets, HTML/JavaScript	Gained experience in enhancing interactivity and user engagement through multimedia integration.
Styled the webpage using CSS.	CSS	Developed a visually appealing and responsive design for better user experience.
Received guidance and feedback from trainer throughout the project.	Trainer support	Improved project execution and built confidence in integrating design, logic, and interactivity.

Table 2.10: Tenth week

CHAPTER 3

TASK COMPLETED

3.1 CALCULATOR USING HTML AND CSS

The task of designing a calculator using HTML and CSS focuses on creating a visually appealing and structured layout without incorporating functionality. The design includes essential elements such as a display screen to show inputs and outputs and buttons for digits (0–9), operators (+, -, *, /), and special keys like "C" (clear) and "=" (equals). HTML is used to build the structural framework of the calculator, while CSS is applied to enhance its appearance. Styling involves organizing the buttons and display screen, adding appropriate spacing, color schemes, fonts, hover effects, and ensuring a clean, responsive layout. The final result is a static mockup resembling a functional calculator, ideal for presentation or further development.

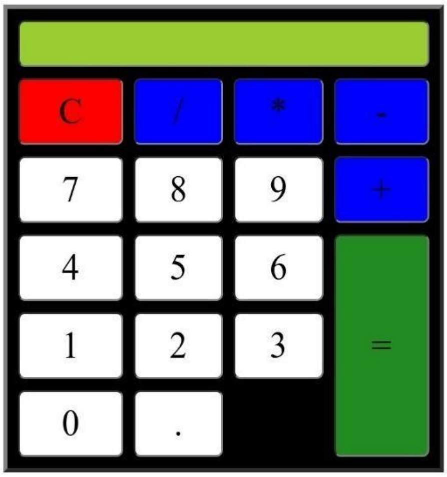
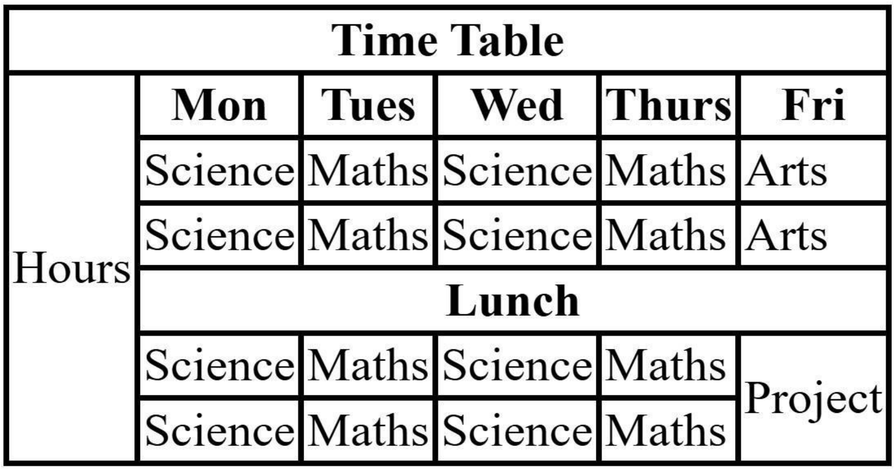


Fig 3.1: Calculator

3.2 TIME TABLE USING HTML AND CSS

The task of designing a timetable using HTML and CSS focuses on creating a structured and visually appealing layout to represent schedules or routines effectively. The design includes rows and columns to display days, time slots, and subjects or activities. HTML is used to build the framework of the table, with headers for days and time slots and cells to input relevant details. CSS is applied to enhance the appearance by adding styles such as borders, background colors, text alignment, padding, and hover effects. Additional styling ensures the timetable is clean, readable, and responsive, making it suitable for various devices. The final output is a static, well-organized timetable ideal for displaying schedules or plans.

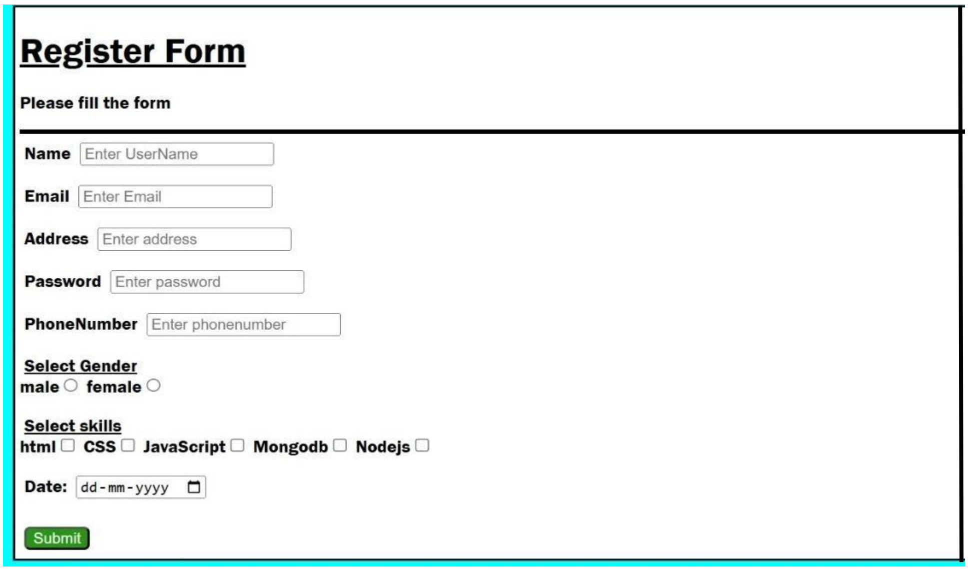


Time Table					
Hours	**Mon**	**Tues**	**Wed**	**Thurs**	**Fri**
	Science	Maths	Science	Maths	Arts
	Science	Maths	Science	Maths	Arts
	Lunch				
	Science	Maths	Science	Maths	Project
	Science	Maths	Science	Maths	

Fig 3.2: Time Table

3.3 REGISTRATION FORM USING HTML AND CSS

The task of designing a registration form using HTML and CSS focuses on creating a userfriendly and visually appealing interface for collecting user information. The form includes essential fields such as name, email, phone number, password, and other inputs like dropdown menus, radio buttons, or checkboxes as needed. HTML is used to structure the form, including input fields, labels, and a submit button. CSS is applied to enhance the form's appearance by adding styles such as padding, margins, background colors, border designs, and responsive layouts. Additional styling features like hover effects, font selection, and error highlighting improve the overall user experience. The final result is a static, well-designed form ready for further development or integration.



Register Form

Please fill the form

Name [Enter UserName]

Email [Enter Email]

Address [Enter address]

Password [Enter password]

PhoneNumber [Enter phonenumber]

Select Gender
male ○ female ○

Select skills
html □ CSS □ JavaScript □ Mongodb □ Nodejs □

Date: [dd-mm-yyyy]

Fig 3.3: Registration Form

3.4 BOUNCING BALL ANIMATION

The task of creating a bouncing ball animation using CSS focuses on designing a visually appealing and smooth motion effect to simulate a ball bouncing. HTML is used to structure the basic layout, defining a container and the ball element. CSS is then applied to style the ball, specifying its size, shape, and color. The animation is achieved using CSS keyframes, which define the ball's movement along the vertical axis to create the illusion of bouncing. Additional styles, such as easing effects, shadows, and gradients, enhance the visual appeal. The result is an engaging, dynamic animation showcasing the ball's motion without requiring any JavaScript, highlighting CSS's capabilities for creating interactive designs.

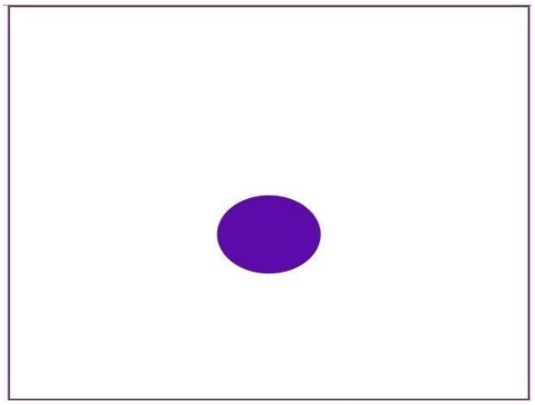


Fig 3.4: Bouncing Ball

3.5 HEATBEAT ANIMATION

The task of creating a heartbeat animation using CSS focuses on designing a visually dynamic effect that simulates the rhythmic pulsing of a heart. HTML is used to structure the layout by defining a container and the heart element, typically created using shapes like a combination of circles and a square with CSS properties. CSS is then applied to style the heart, adding colors, gradients, and rounded corners for a realistic appearance. The animation is achieved using CSS keyframes, which define the heart's scaling effect to mimic the expansion and contraction of a heartbeat. Additional styling, such as smooth transitions and easing functions, enhances the visual effect.

The result is an engaging, responsive animation that replicates a heartbeat, showcasing CSS's ability to create captivating visual designs without requiring JavaScript.

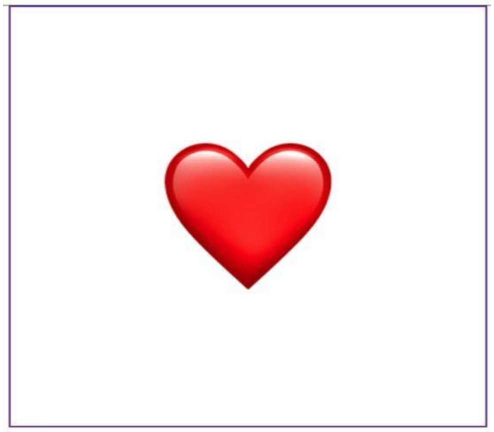


Fig 3.5: HeartBeat Animation

3.6 SQUARE BEAT ANIMATION

The task of creating a square beat animation using CSS focuses on designing a visually engaging effect where square elements pulsate rhythmically, simulating a "beating" motion. HTML is used to structure the layout by defining one or more square elements within a container. CSS is then applied to style the squares, specifying their size, color, and positioning. The animation is achieved using CSS keyframes, which define the scaling or opacity changes of the squares over time to create the beat effect. Easing functions and smooth transitions are added to enhance the animation's fluidity. The result is a dynamic and visually appealing animation that demonstrates CSS's capability to create rhythmic and interactive designs without additional scripting.

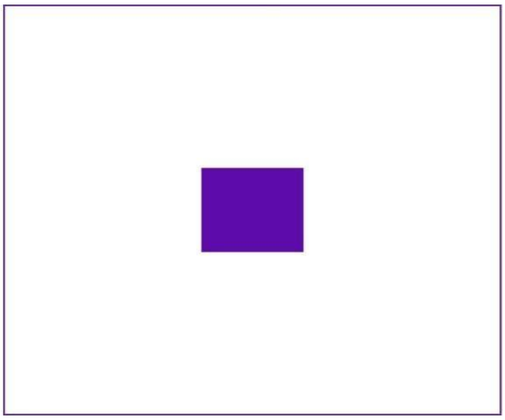
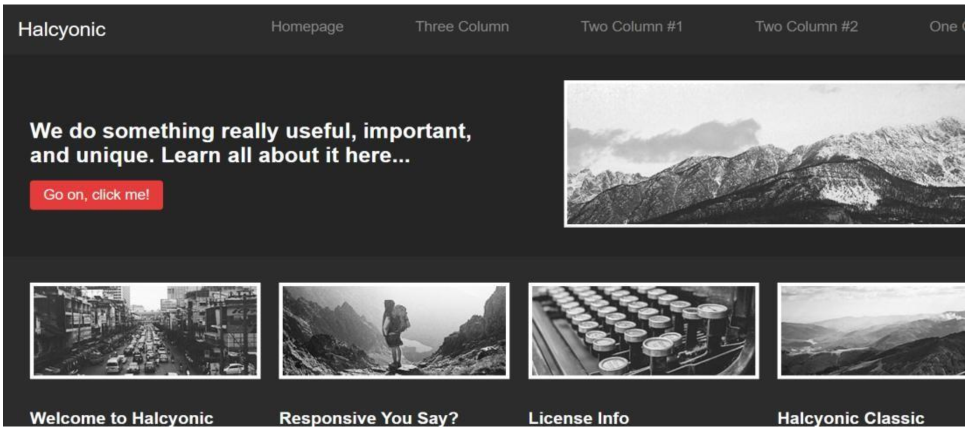


Fig 3.6: SquareBeat Animation

3.7 WEBSITE CLONE

The task of creating a Halcyonic web clone using HTML and CSS involves replicating the design and layout of the Halcyonic website to produce a visually identical static version. HTML is used to structure the website's content, including elements like the header, navigation bar, sections, articles, and footer. CSS is applied to style these elements, ensuring they align with the original design in terms of colors, typography, spacing, and responsiveness. Additional CSS properties, such as flexbox or grid layouts, are used to achieve precise positioning and alignment of components. The focus is on accurately reproducing the visual aesthetics and responsive behavior of the original website without adding dynamic functionality. The result is a high-fidelity static clone showcasing attention to detail and proficiency in HTML and CSS.



Halcyonic

We do something really useful, important, and unique. Learn all about it here...

Fig 3.7: Website Clone

3.8 CHAMPIONS TROPHY

The task of creating the "Champions Trophy" team showcase involves designing an interactive and visually appealing layout to display player profiles using HTML, CSS, and JavaScript. Each player card includes an image, name, role (e.g., Batsman, Bowler, All-rounder), and a brief description of their contributions. HTML is used to structure the content, organizing player details into individual cards, while CSS enhances the appearance with consistent card styling, shadows, borders, typography, and a responsive grid layout. JavaScript adds interactivity, such as hover animations, dynamic filtering of players by roles (e.g., Batsman, Bowler), or pop-ups showing additional information when a card is clicked. The combined use of HTML, CSS, and JavaScript results in a professional, user-friendly design that is both functional and visually engaging, suitable for sports websites or event presentations.

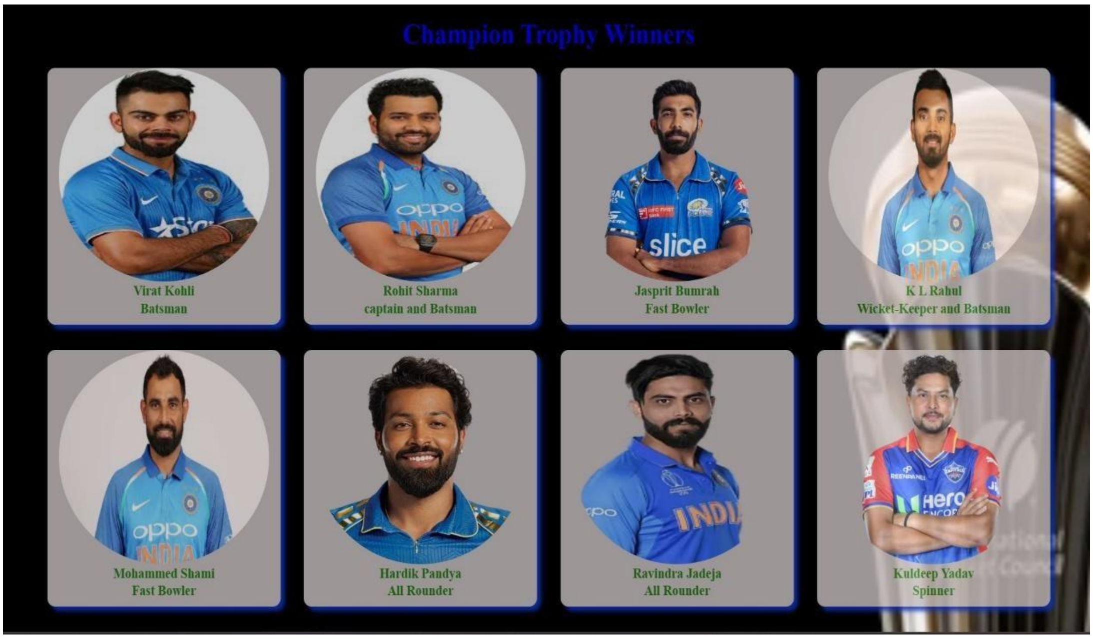
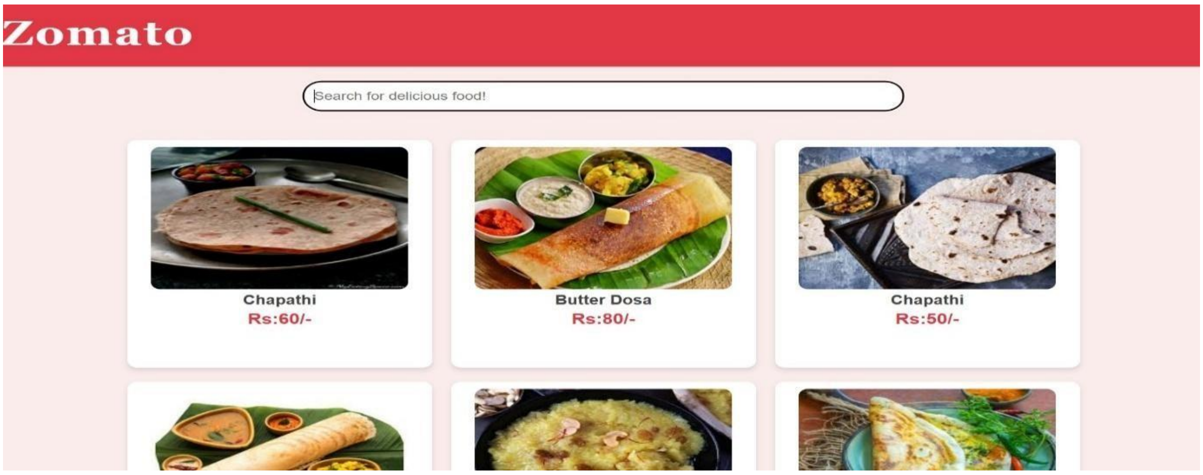


Fig 3.8: Champion Trophy Playcard

3.9 DYNAMIC FOOD MENU DISPLAY WITH SEARCH FUNCTIONALITY

The below images showcases a food menu webpage where users can search for dishes, restaurants, or cuisine types using the search bar. The task involves dynamically fetching food details such as names, images, descriptions, and sources (e.g., restaurants) from a database or an API and displaying them as cards. Each card contains an image, name, description, and the source of the dish. The search functionality filters the displayed items in real time based on user input, improving user experience. The layout is designed using HTML for structure, CSS for styling, and JavaScript for functionality, ensuring responsiveness and ease of use. This feature can be integrated into restaurant or food delivery websites for enhanced customer interaction.

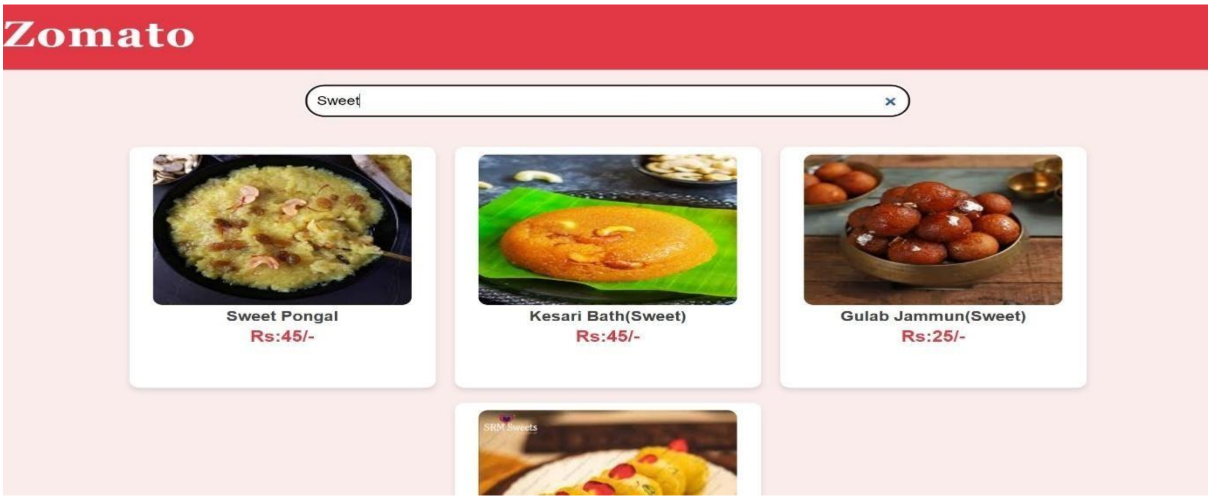


Chapathi
Rs:60/-

Butter Dosa
Rs:80/-

Chapathi
Rs:50/-

Fig 4.9: Dynamic Search Bar



Sweet Pongal
Rs:45/-

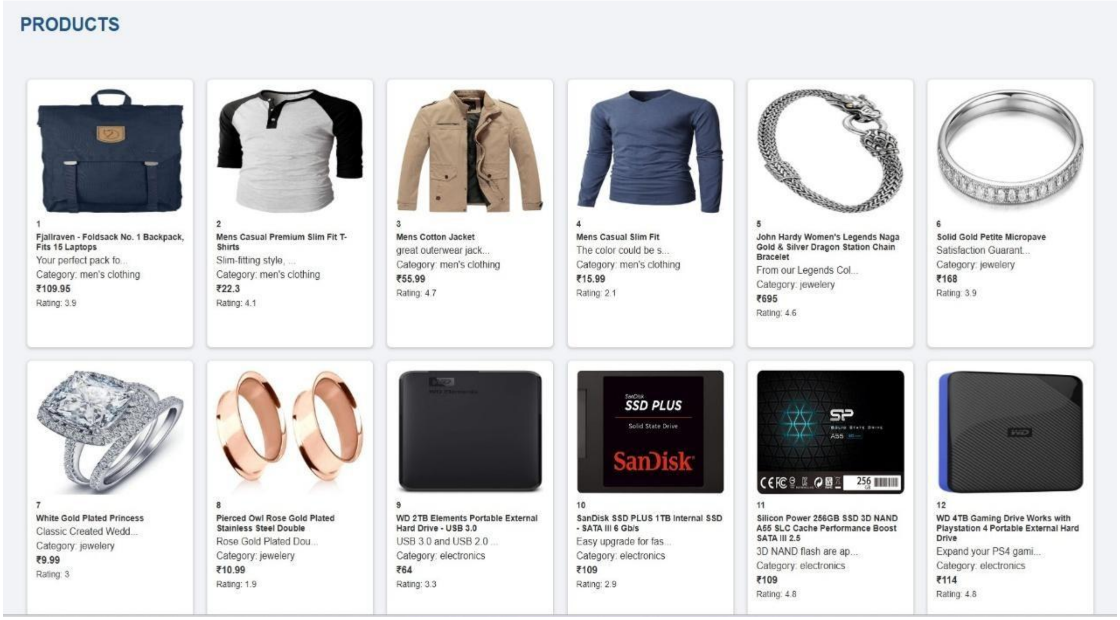
Kesari Bath(Sweet)
Rs:45/-

Gulab Jammun(Sweet)
Rs:25/-

Fig 3.10: Result After Search

3.10 DYNAMIC PRODUCT SHOWCASE WITH FETCH API

The above image represents an online store webpage showcasing a collection of products dynamically displayed in a grid layout. The task involves fetching product details such as names, images, prices, descriptions, and categories from a database or an API and presenting them in a visually appealing and organized format. The webpage is built using HTML for structure, CSS for styling, and JavaScript for dynamic functionality. Each product card includes essential details like an image, title, price, description, and category. The layout is responsive, ensuring a user-friendly experience across devices. This approach allows real-time updates, enabling seamless integration of new products or modifications in the inventory.



PRODUCTS

1
Fjallraven - Foldsack No. 1 Backpack, Fits 15 Laptops
Your perfect pack fo...
Category: men's clothing
₹109.95
Rating: 3.9

2
Mens Casual Premium Slim Fit T-Shirts
Slim-fitting style, ...
Category: men's clothing
₹22.3
Rating: 4.1

3
Mens Cotton Jacket
great outerwear jack...
Category: men's clothing
₹55.99
Rating: 4.7

4
Mens Casual Slim Fit
The color could be s...
Category: men's clothing
₹15.99
Rating: 2.1

5
John Hardy Women's Legends Naga Gold & Silver Dragon Station Chain Bracelet
From our Legends Col...
Category: jewelery
₹695
Rating: 4.6

6
Solid Gold Petite Micropave
Satisfaction Guarant...
Category: jewelery
₹168
Rating: 3.9

7
White Gold Plated Princess
Classic Created Wedd...
Category: jewelery
₹9.99
Rating: 3

8
Pierced Owl Rose Gold Plated Stainless Steel Double
Rose Gold Plated Dou...
Category: jewelery
₹10.99
Rating: 1.9

9
WD 2TB Elements Portable External Hard Drive - USB 3.0
USB 3.0 and USB 2.0 ...
Category: electronics
₹64
Rating: 3.3

10
SanDisk SSD PLUS 1TB Internal SSD - SATA III 6 Gb/s
Easy upgrade for fas...
Category: electronics
₹109
Rating: 2.9

11
Silicon Power 256GB SSD 3D NAND A55 SLC Cache Performance Boost SATA III 2.5
3D NAND flash are ap...
Category: electronics
₹109
Rating: 4.8

12
WD 4TB Gaming Drive Works with Playstation 4 Portable External Hard Drive
Expand your PS4 gami...
Category: electronics
₹114
Rating: 4.8

Fig 3.11: Dynamic Products Showcase

3.11 DEVELOPING A GYM TRIBE(APPLICATION)

The task of creating the Gym Application involves designing an interactive and visually appealing layout to display trainer profiles, workout plans, and membership packages using HTML, CSS, and JavaScript. Each trainer card includes an image, name, specialization (such as Fitness Trainer, Yoga Expert, or Nutritionist), and a brief description of their services or expertise. HTML is used to structure the content, organizing the trainer details, workout plans, and packages into neatly arranged individual cards. CSS enhances the appearance with consistent card designs, soft shadows, rounded borders, attractive typography, and a responsive grid layout that adjusts seamlessly across different screen sizes and devices. JavaScript adds interactivity to the application by enabling features such as hover animations on the cards, dynamic filtering of profiles based on specialization (for example, displaying only Yoga Trainers or Nutritionists), and pop-up windows or modals that show additional information like the trainer's full profile, experience, or available workout schedules when a card is clicked. Optional enhancements like a search bar can allow users to quickly find a trainer or workout plan by name or category. The combined use of HTML, CSS, and JavaScript results in a clean, professional, and user-friendly gym application design that is both functional and visually engaging, making it ideal for fitness websites, gym management systems, or event presentations.

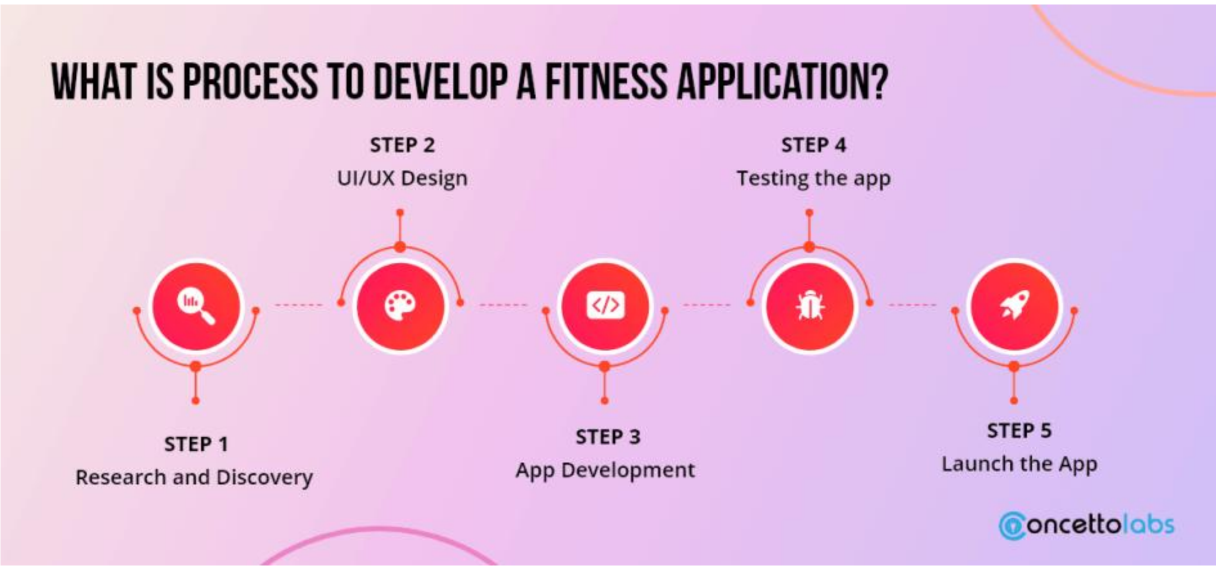


Fig 3.11: Application phases

CHAPTER 4

CONCLUSION

This internship report delves into the multifaceted realm of full stack development, offering a pivotal experience that has provided valuable insights into both front-end and back-end technologies. Over the course of the internship, the application of diverse skills in designing user interfaces, implementing features, and managing databases has been paramount to the overall learning experience. The report aims to chronicle the journey of acquiring hands-on experience in the dynamic field of full stack development, highlighting the challenges faced and the lessons learned. It serves as a comprehensive documentation of the skills honed and the projects undertaken during this immersive internship, shedding light on the practical aspects of working with both front-end and back-end technologies. Through this report, the reader will gain a nuanced understanding of the intricacies involved in navigating the diverse landscape of full stack development and the valuable insights derived from this enriching experience.

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