INTERNSHIP REPORT

A report submitted in partial fulfillment of the requirements for 3ʳᵈ Year

BACHELOR OF ENGINEERING
in
INFORMATION TECHNOLOGY
by
Abhishek Shelar

Exam Seat No: T190358574

Under Supervision of
Mr. Raj Singh
at
CODSOFT

(Duration: 17/12/2023 to 20/04/2024)

VPKBIET

Vidya Pratishthan's Institute of Engineering and Technology
Baramati

DEPARTMENT OF INFORMATION TECHNOLOGY

Academic Year: 2023-24

Vidya Pratishthan's Institute of Engineering and Technology
Baramati
DEPARTMENT OF INFORMATION TECHNOLOGY

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CERTIFICATE

This is to certify that the "**Internship report"** submitted by **Abhishek Shelar (Exam seat No: T190358574)** is work done by him and submitted during 2023 – 2024 academic year, in partial fulfillment of the requirements for the 3rd Year of **BACHELOR OF ENGINEERING in INFORMATION TECHNOLOGY,** at **CODSOFT.**

Mr. Kare S. S   **Dr. S. A. Takale**
Dept Internship Coordinator   **HOD IT**

Dr. R.S. Bichkar
Principal

INTERNSHIP COMPLETION CERTIFICATE

C.ID: a8688e9

CodSoft

CERTIFICATE

OF COMPLETION
PROUDLY PRESENTED TO

Abhishek Shelar

has successfully completed 4 weeks of a virtual internship program in

Web Development

with wonderful remarks at **CODSOFT** from 20/01/2024 to 20/02/2024.

We were truly amazed by his/her showcased skills and invaluable contributions to the tasks and projects throughout the internship.

Founder

ISO 9001-2015 CERTIFIED COMPANY

MICRO, SMALL & MEDIUM ENTERPRISES
सूक्ष्म, लघु एवं मध्यम उद्यम

contact@codsoft.in   www.codsoft.in   Date: 23/02/2024

ACKNOWLEDGEMENT

First I would like to thank **Mr. Raj Singh, CODSOFT**, for giving me the opportunity to do an internship within the organization.

I also would like all the people that worked along with me **CODSOFT** with their patience and openness they created an enjoyable working environment.

It is indeed with a great sense of pleasure and immense sense of gratitude that acknowledge the help of these individuals.

I am highly indebted to Principal **Dr. R.S.Bichkar**, for the facilities provided to accomplish this internship.

I would like to thank my Head of the Department **Dr. S.A.Takale** for his constructive encouragement throughout my internship.

I would like to thank **Mr. S.S Kare,** internship coordinator Department of Information Technology for their support andadvices to get and complete internship in above said organization.

I am extremely great full to my department staff members and friends who helped me in successful completion of this internship.

Abhishek Shelar

(T190358574)

ABSTRACT

This report provides an overview of my internship experience as a Web Development Intern at CodSoft. Over the course of One Month, I had the opportunity to immerse myself in various aspects of web development, gaining valuable insights into modern web technologies and industry practices.

The report begins by introducing CodSoft, outlining its mission, core values, and role within the tech industry. It then delves into the objectives and scope of my internship, detailing the specific areas of web development I focused on during my time at CodSoft.

One of the key highlights of my internship was the hands-on experience I gained in frontend development. I had the chance to work with popular frontend frameworks and libraries such as Angular and React.js, learning to build responsive and interactive user interfaces for web applications. Additionally, I honed my skills in HTML, CSS, and JavaScript, mastering the fundamentals of web design and development.

Throughout my internship, I actively participated in team projects at CodSoft. This collaborative environment fostered my growth as a developer, allowing me to learn from my peers and contribute to real-world projects. I also had the chance to work on independent projects, where I could apply my skills and creativity to solve unique challenges.

Overall, my internship at CodSoft was a rewarding and enriching experience that provided me with valuable insights into the field of web development. I am grateful for the mentorship and support I received from the team at CodSoft.

INTERNSHIP OBJECTIVES

- Emphasize skill development in web development technologies by actively engaging in hands-on coding exercises, workshops, and collaborative projects. Explore the latest trends and advancements in frontend and backend development, honing your expertise in HTML, CSS, JavaScript.

- Provide hands-on experience through real-world projects, allowing interns to apply theoretical knowledge to practical scenarios and gain valuable insights into industry best practices and cultivate a deep understanding of project development methodologies. Through active participation in project planning, execution, and evaluation, interns will emerge with a comprehensive skill set and a portfolio of impactful projects demonstrating their expertise.

- Encourage professionalism and accountability in task performance, fostering a culture of integrity and excellence within the team.

- Promote adaptability and problem-solving abilities in project challenges,empowering interns to embrace uncertainty and navigate through obstacles withconfidence. By fostering a supportive environment that encourages experimentation and innovation. Through collaborative problem-solving and creative thinking, interns develop a mindset that enables them to thrive in dynamic and rapidly evolving work environments.

- Internships is a great way to build your resume and develop skills that can be emphasized in your resume for future jobs. When you are applying for a job post, make sure to highlight any special skills or interships that can make you stand apart from the rest of the applicants so that you have an improved chance of landing the position.

WEEKLY OVERVIEW OF INTERNSHIP ACTIVITIES

	DATE	DAY	NAME OF THE TOPIC/MODULE COMPLETED
1st WEEK	January, 21th	Sunday	Designed wireframes for portfolio layout.
	January, 22th	Monday	Set up development environment and initialized project repository and Created HTML structure for portfolio pages.
	January, 23th	Tuesday	Styled portfolio pages using CSS to achieve desired layout and aesthetics.
	January, 24th	Wednesday	Implemented responsive design for portfolio to ensure compatibility across devices.
	January, 25th	Thursday	Added interactive elements and working logic using JavaScript.
	January, 26th	Friday	Added animations using JavaScript to enhance user experience.
	January, 27th	Saturday	Conducted thorough testing and debugging to identify and resolve any issues.

	DATE	DAY	NAME OF THE TOPIC/MODULE COMPLETED
2nd WEEK	January, 28th	Sunday	Brainstormed concepts and ideas for the Landing page design for a Coffee Website.
	January, 29th	Monday	Created mockups and prototypes to visualize the layout and content of the landing page.
	January, 30th	Tuesday	Developed HTML structure for landing page sections and elements.
	January, 31st	Wednesday	Styled landing page components using CSS to achieve desired visual aesthetics.
	February, 1st	Thursday	Implemented responsive design techniques to ensure compatibility across various devices and screen sizes.
	February, 2nd	Friday	Added interactive features and animations to enhance user engagement.
	February, 3rd	Saturday	Conduct additional testing and refine user engagement features.

	DATE	DAY	NAME OF THE TOPIC/MODULE COMPLETED
3rd WEEK	February, 4th	Sunday	Researched various calculator designs and functionalities for inspiration.
	February, 5th	Monday	Implemented basic HTML structure for calculator interface.
	February, 6th	Tuesday	Added CSS styles to improve the visual appearance of the calculator.
	February, 7th	Wednesday	Developed JavaScript functions to handle basic arithmetic operations.
	February, 8th	Thursday	Conducted extensive testing to ensure accuracy and functionality of calculator across different scenarios.
	February, 9th	Friday	Refactored code and optimized performance based on testing feedback.
	February, 10th	Saturday	Finalize the calculator implementation and final debugging for errors.

	DATE	DAY	NAME OF THE TOPIC/MODULE COMPLETED
4th WEEK	February, 11th	Sunday	Review and refine portfolio, landing page, and calculator implementations.
	February, 12th	Monday	Address any remaining issues and make necessary adjustments.
	February, 13th	Tuesday	Conduct cross-browser testing and ensure compatibility.
	February, 14th	Wednesday	Prepare documentation and finalize project assets.
	February, 15th	Thursday	Perform user acceptance testing and gather feedback.
	February, 16th	Friday	Make final revisions based on user feedback.
	February, 17th	Saturday	Complete projects and wrap up any remaining tasks.

1. INTRODUCTION

During the One month period from 17,December 2023 to 20,April 2024, I had the privilege of interning at CodSoft, a dynamic and innovative software development company, as the Web Development Intern. Over the course of my internship, I had the opportunity to immerse myself in various projects, honing my skills and gaining invaluable practical experience in the field of Web development.

One of the primary projects I undertook during my internship was the development of a portfoliowebsite, which served as a showcase of my skills, experiences, and projects. This project not only allowed me to demonstrate my proficiency in web design and development but also provided me with a platform to highlight my accomplishments and aspirations in the field.

In addition to portfolio website, I also had the opportunity to work on a calculator application, which involved implementing complex algorithms and user-friendly interfaces.Through this project, I enhanced my problem-solving abilities and gained insights into importance of user experiencein software development.

Furthermore, I collaborated with team at CodSoft to create a landing page for a coffee website. This project challenged me to incorporate branding elements, captivating visuals, and compelling content to effectively engage the target audience and drive conversions.

Throughout these projects, I had the privilege of working alongside talented professionals who provided guidance, mentorship, and constructive feedback, enabling me to grow both personally and professionally. I am immensely grateful for the hands-on experience and the opportunity to contribute to real-world projects that will undoubtedly shape my future endeavors in the field of web development.

In this report, I will provide an overview of the projects I worked on, the methodologies and Technologies employed, the challenges encountered, and lessons learned during my internship at CodSoft.

2. ABOUT CODSOFT

CodSoft provides IT services and IT consultancy that specializes in creating innovative solutions for businesses. We are passionate about technology and believe in powerof software to transform the world. Our internship program is just one of the ways in whichwe are investing in the future of the industry.

At **CodSoft**, we believe practical knowledge is the key to success in the tech industry. Our aim is to help students lacking basic skills by offering hands-on learning through live projects and real world examples. Our team consists of industry experts who are dedicated to equipping interns with knowledge and skills needed to succeed in their careers. We foster an inclusive and supportive environment that encourages learning, growth, and creativity.

Software development is an iterative process, and the mission includes continually improving software solutions. This entails gathering feedback, identifying areas for enhancement, and implementing updates to make the software more efficient, user-friendly, and reliable. Continuous improvement also involves staying up to date with latest technologies, tools, and industry trends.

Driven by a mission to continually improve software solutions, CodSoft embraces an iterative approach to development. By soliciting feedback, identifying areas for enhancement, and staying abreast of the latest technologies and trends, CodSoft remains at forefront of innovation, ensuring its solutions are always efficient, user-friendly, and reliable.

The vision of software development is to create innovative solutions that push the boundaries of technology. This involves leveraging emerging technologies, exploring new ideas, and developing software that brings novel approaches to solving problems and improving the lives of users.

3. SYSTEM REQUIREMENTS SPECIFICATION

Software Requirements:

1. Operating System Compatibility: The projects developed during the internship is compatible with various operating systems including Windows, macOS, and popular Linux distributions such as Ubuntu or CentOS.

2. Programming Language: The projects are developed using HTML5, CSS3, and JavaScript ES6, ensuring cross-platform compatibility and a rich user experience across different devices and browsers.

Hardware Requirements:

1. Processor: A minimum of Intel Core i3 or AMD Ryzen 3 processor, or equivalent, is recommended for smooth development and testing of the projects.

2. Memory (RAM): Minimum 4GB of RAM is required to support the development environment and ensure optimal performance during testing.

3. Storage: Adequate storage space must be available to store project files, dependencies, and assets required for the projects. The use of SSD storage is recommended for improved performance.

4. Network Connectivity: Access to a reliable internet connection is essential for tasks such as downloading dependencies, accessing resources, and deploying the projects. A stable network connection ensures uninterrupted workflow and collaboration during development.

4. TECHNOLOGY

During my internship at CodSoft, I utilized a variety of technologies to develop and enhance web-based projects. These technologies played a crucial role in the creation of responsive and interactive websites and applications. The main technologies used include:
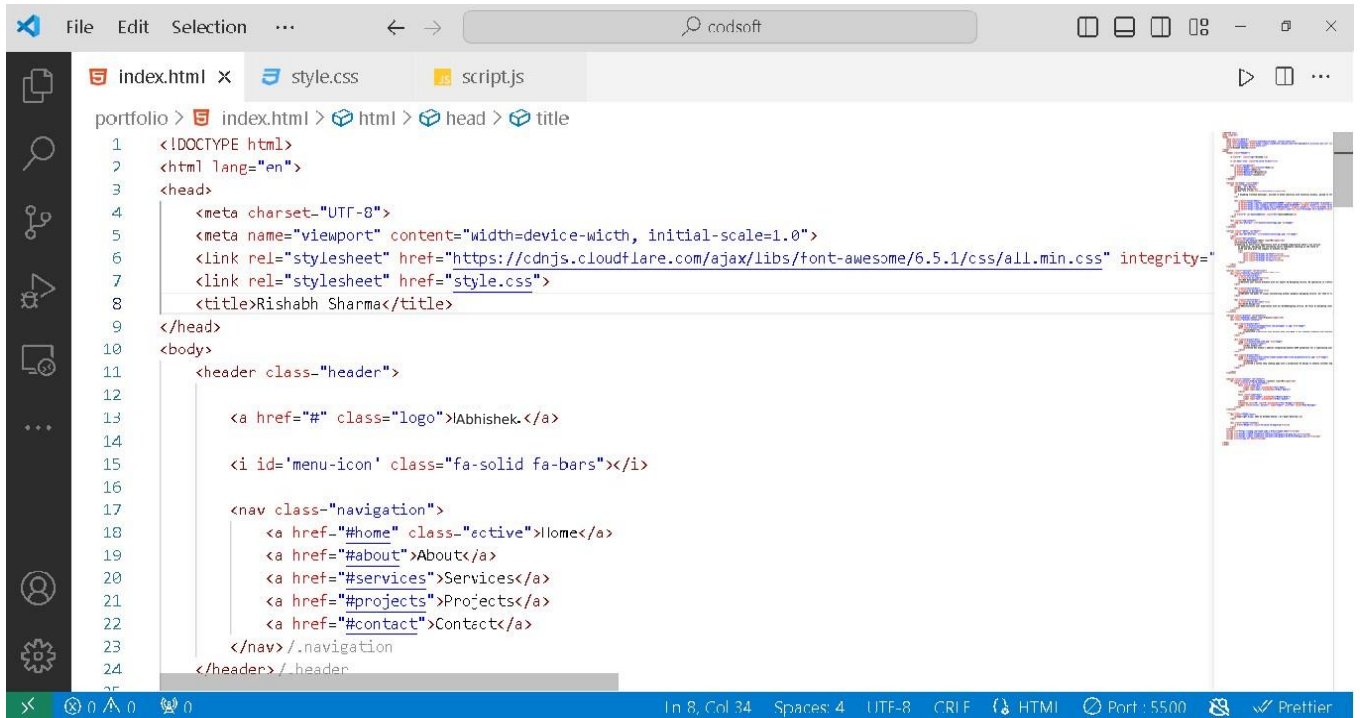
1. **HTML (Hypertext Markup Language):** HTML served as the foundation for structuring the content of web pages, allowing for the creation of semantic and well-organized documents.

2. **CSS (Cascading Style Sheets):** CSS was employed to style and design the layout of web pages, including aspects such as colors, fonts, and spacing, thereby enhancing the visual appeal and user experience.

3. **JavaScript:** JavaScript was utilized for adding interactivity and dynamic behavior to web pages, enabling features such as form validation, animations, calculations and responsive design.

4. **Version Control (Git):** Git was employed for version control, allowing for collaborative development, tracking changes, and managing project versions efficiently.

5. **Wireframing Tools (MockFlow):** MockFlow was utilized for wireframing and prototyping user interface designs, facilitating the visualization and planning of project layouts and functionalities.

These technologies collectively contributed to the successful implementation of various web development projects, empowering me to create engaging and functional solutions tailored to meet the needs of clients and users.
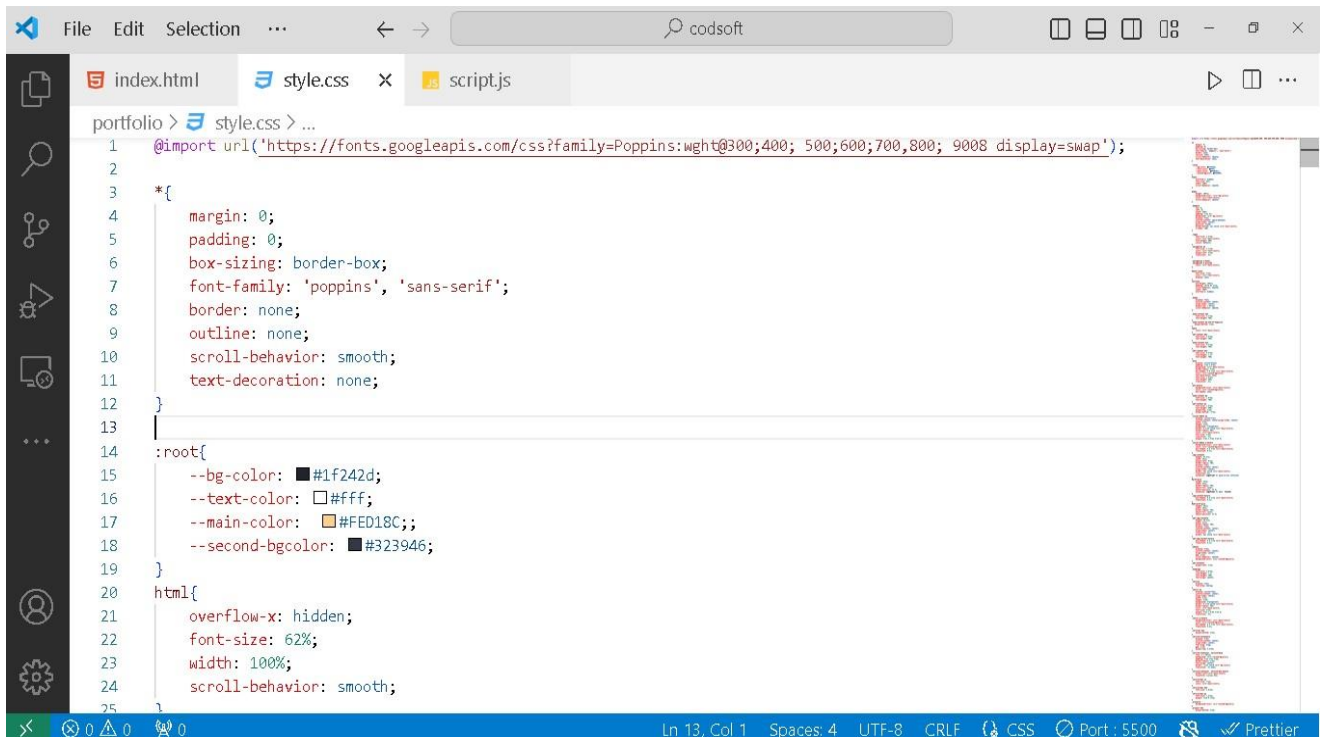
5. SCREENSHOTS

TASK 1: PORTFOLIO WEBSITE

CODE FOR PORTFOLIO WEBSITE:

```javascript
 2   let sections = document.querySelectorAll('section');
 3   let navlinks = document.querySelectorAll('header nav a');
 4   //toggle icon navbar
 5   let menuicon = document.querySelector('#menu-icon');
 6   let navbar = document.querySelector('.navigation');
 7
 8   menuicon.onclick = ()=>{
 9       menuicon.classList.toggle('fa-x');
10       navbar.classList.toggle('active');
11   }
12
13
14   window.onscroll = () => {
15       sections.forEach(sec => {
16           let top = window.scrollY;
17           let offset = sec.offsetTop - 350;
18           let height = sec.offsetHeight;
19           let id = sec.getAttribute('id');
20
21           if(top>=offset && top<offset+height){
22               navlinks.forEach(links=>{
23                   links.classList.remove('active')
24                   document.querySelector('header nav a[href*=' + id + ']').classList.add('active')
25               })
```

```javascript
32
33   // download CV code
34   document.getElementById('downloadButton').addEventListener('click', function() {
35       // Replace 'path/to/your/cv.pdf' with the actual path to your CV PDF file
36       let url = 'assests/Abhishek_shelar__Resume.pdf';
37       // Create a temporary link element
38       let link = document.createElement('a');
39       link.href = url;
40       // Set the download attribute and filename for the link
41       link.download = 'Abhishek_shelar_Resume.pdf';
42       // Append the link to the body
43       document.body.appendChild(link);
44       // Trigger the click event on the link
45       link.click();
46       // Remove the link from the body
47       document.body.removeChild(link);
48   });
49
50   //gsap
51   document.addEventListener("DOMContentLoaded", function() {
52       // Smooth scrolling for navigation links
53       const navigationLinks = document.querySelectorAll('.navigation a');
54
55       navigationLinks.forEach(link => {
56           link.addEventListener('click', (event) => {
```

TASK 2: LANDING PAGE

CODE FOR LANDING PAGE:

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <link rel="stylesheet" href="style.css">
    <title>Koffe</title>
</head>
<body>
    <nav>
        <h1 class="logo">Logo</h1>
        <ul>
            <li><a href="#section-1">Home</a></li>
            <li><a href="#section-2">Explore</a></li>
            <li><a href="#section-3">Menu</a></li>
            <li><a href="#section-4">About</a></li>
            <li><a href="#section-5">Contact</a></li>
        </ul>
    </nav>

    <header id='section-1' class="header">
        <h1 class="main-heading">START YOUR DAY</h1>
        <h1 class="primary-heading">WITH OUR COFFEE</h1>
        <button class="main-btn">Shop Now</button>
```
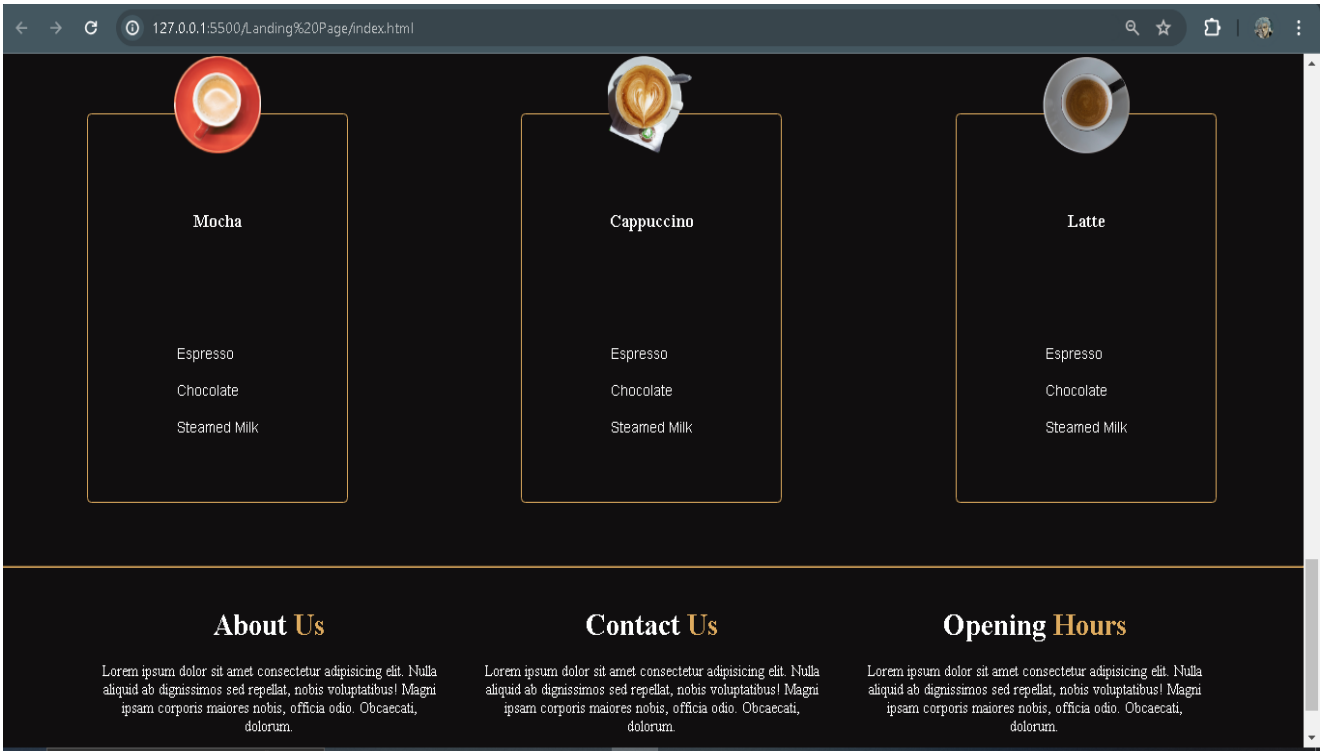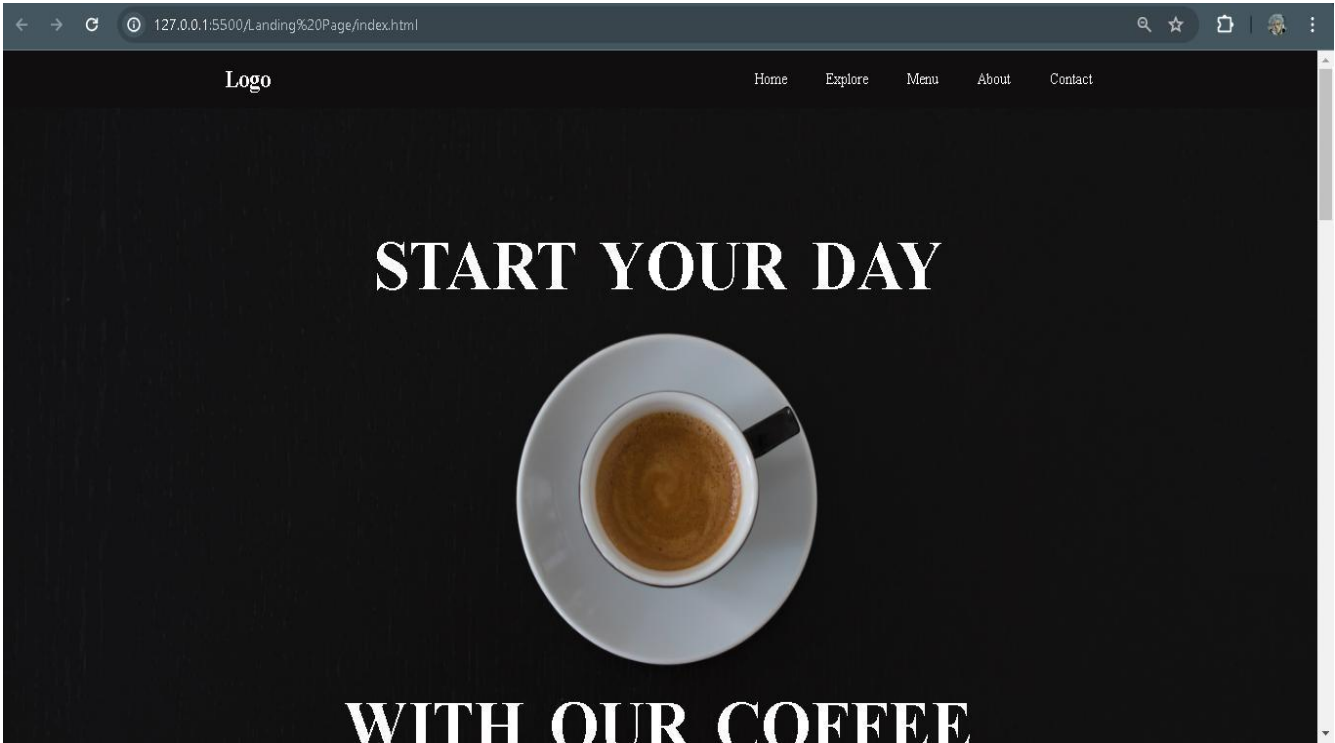
```css
@import url('https://fonts.cdnfonts.com/css/gilroy-bold');
*{
    margin: 0;
    padding: 0;
    box-sizing: border-box;
}
:root{
    --main-color: #deab5f;
    --primary-color: #312e2e;
}
button{
    padding: 10px 30px;
    background: var(--main-color);
    bottom: none;
    cursor: pointer;
    border-radius: 5px;
}
body{
    background-color: #100e0f;
}
nav{
    display: flex;
    justify-content: space-around;
    align-items: center;
```

xvi

OUTPUT OF THE CODE:

TASK 3: CALCULATOR APPLICATION

CODE FOR CALCULATOR APPLICATION:

index.html — caculator > index.html > html > head

```html
<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
    <meta name="viewport" content="width=device-width, initial-scale=1.0">
    <link rel="stylesheet" href="style.css">
    <title>Document</title>
</head>
<body>
    <div class="container">
        <input id="display" readonly>
        <div class="buttons">
            <button onclick="addToDisplay('+')" class="operator-btn">+</button>
            <button onclick="addToDisplay('1')">1</button>
            <button onclick="addToDisplay('2')">2</button>
            <button onclick="addToDisplay('3')">3</button>
            <button onclick="addToDisplay('-')" class="operator-btn">-</button>
            <button onclick="addToDisplay('4')">4</button>
            <button onclick="addToDisplay('5')">5</button>
            <button onclick="addToDisplay('6')">6</button>
            <button onclick="addToDisplay('*')" class="operator-btn">x</button>
            <button onclick="addToDisplay('7')">7</button>
            <button onclick="addToDisplay('8')">8</button>
            <button onclick="addToDisplay('9')">9</button>
```

script.js — caculator > script.js > calculate

```javascript
const display = document.getElementById('display')

const addToDisplay = (input) => {
    display.value += input
}

const clearDisplay = () => {
    display.value = null
}

const calculate = () => {
    try {
        display.value = eval(display.value)
    }
    catch (error) {
        display.value = "ERROR"
    }
}
```

OUTPUT OF THE CODE:
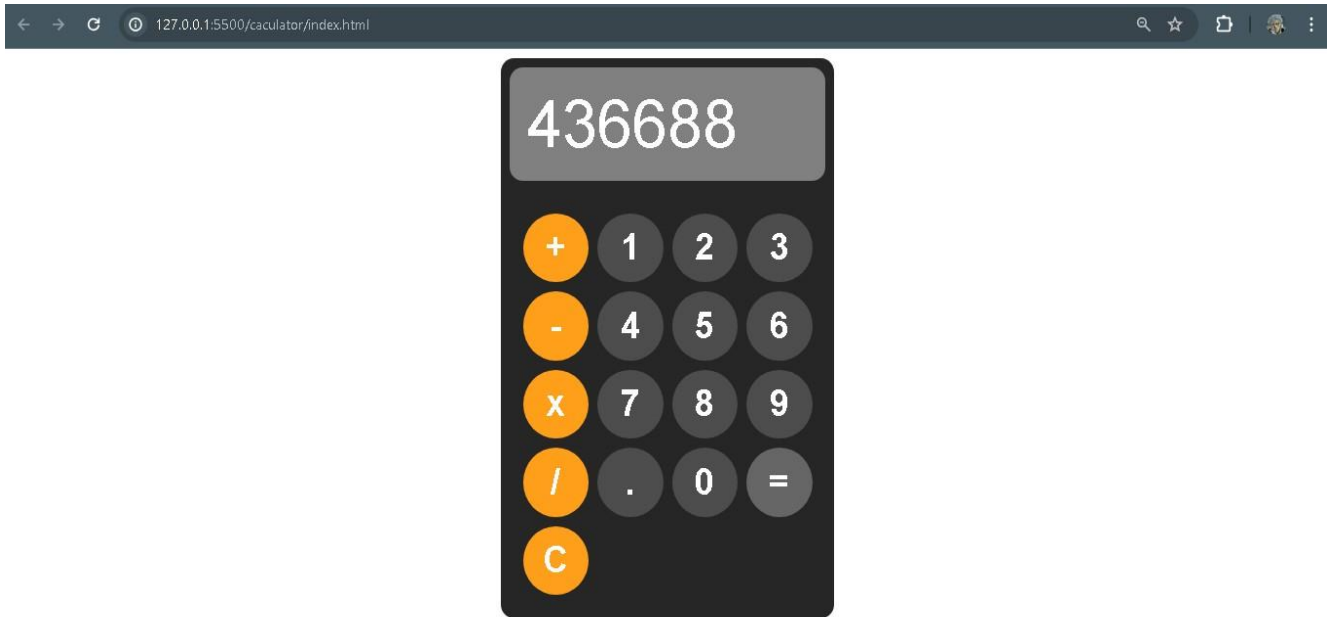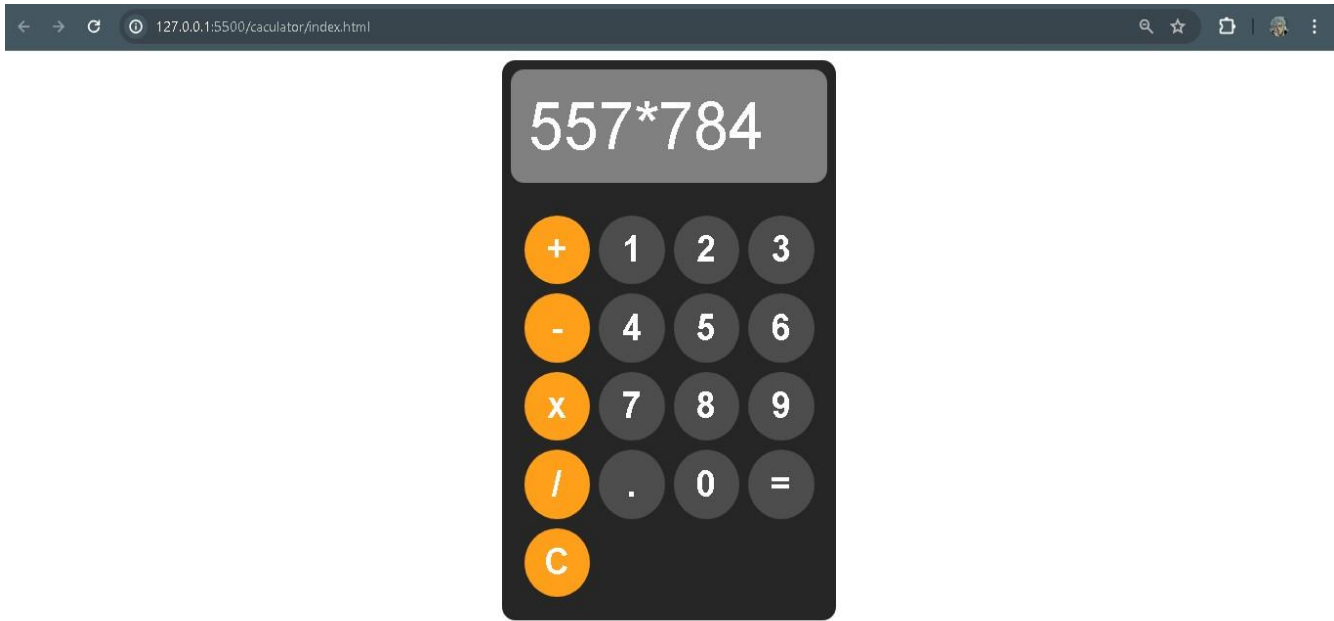
6. CONCLUSION

During my time at CodSoft, I embarked on a thrilling journey into the realm of web development, where every project felt like a new adventure waiting to be explored. From crafting my own website to developing a dynamic calculator app and designing a captivating landing page for a coffee brand, I gained hands-on experience that made learning both exciting and rewarding. Supported by a fantastic team and guided by experienced professionals, I honed my coding skills and learned the importance of effective collaboration. Attention to detail emerged as a superpower, and I discovered firsthand how crucial it is to prioritize user experience in every project. As I have completed my internship at CodSoft, I am filled with gratitude for the opportunities it provided and am eager to apply my newfound knowledge and skills to future challenges in the ever-evolving world of web development.

7. BIBLIOGRAPHY

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