

B.M.S. COLLEGE OF ENGINEERING BENGALURU
Autonomous Institute, Affiliated to VTU



An Internship Report

FRONTEND DEVELOPMENT INTERNSHIP

Submitted in partial fulfillment for the award of degree of

Bachelor of Engineering
in
Computer Science and Engineering

Submitted by:
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1BM22CS104

Internship Carried Out

at



Internal Guide

Seema Patil
Assistant Professor
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External Guide

Name of the Guide
Designation
CodAlpha

Department of Computer Science and Engineering
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Bull Temple Road, Basavanagudi, Bangalore 560 019
2023-2024

B.M.S. COLLEGE OF ENGINEERING
DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING



DECLARATION

I, Manoj Patil (1BM22CS104) student of 6th Semester, B.E, Department of Computer Science and Engineering, BMS College of Engineering, Bangalore, hereby declare that, this Internship entitled "**FRONTEND DEVELOPMENT INTERNSHIP**", has been carried out under the guidance of **Seema Patil**, Assistant Professor, Department of CSE, BMS College of Engineering, Bangalore during the academic semester March - June 2024. I also declare that to the best of my knowledge and belief, the Internship report is not a part of any other report by any other student.

Signature of the Candidate

B.M.S. COLLEGE OF ENGINEERING
DEPARTMENT OF COMPUTER SCIENCE AND
ENGINEERING



CERTIFICATE

This is to certify that the Internship titled **FRONTEND DEVELOPMENT INTERNSHIP**” has been carried out by **MANOJ PATIL (1BM21CS104)** during the academic year 2023-2024.

Signature of the Guide

Signature of the Head of the Department

Signature of Examiners with date

1. Internal Examiner

2. External Examiner

Abstract

CodAlpha is a software company based in Lucknow, Uttar Pradesh, India. Their primary focus seems to be on nurturing the next generation of IT professionals through internship programs. While details about their software products or services are limited, their website emphasizes building a vibrant tech community and fostering career development.

CodSoft's internship programs target individuals seeking to enter the IT field. Their offerings appear to equip interns with a strong foundation in web development, potentially including exposure to Python-based web applications. The emphasis on collaboration suggests interns work together on projects, fostering peer learning and problem-solving skills. This collaborative environment likely benefits interns by providing opportunities to exchange knowledge and brainstorm innovative solutions.

CodSoft's internship program isn't solely focused on technical skills development. By offering certificates upon completion, CodSoft equips interns with tangible proof of their accomplishments. These certificates can potentially enhance an intern's resume and improve their chances of landing IT jobs after the program.

Beyond technical skills and career development, CodSoft appears to place a high value on fostering a supportive community. Descriptions of their internship program highlight a "vibrant and diverse community" where interns can connect with like-minded individuals who share similar goals. This focus on community building can provide a valuable network of peers and potential future colleagues for interns as they navigate their IT careers.

While information about CodSoft's software products or services is currently limited, their website offers a glimpse into a company dedicated to empowering the next generation of IT professionals in India. Their internship programs appear to combine technical skill development with a focus on collaboration, community building, and career advancement, potentially providing interns with a strong foundation for success in the ever-evolving tech industry.

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Chapter 1

About the Company/Organization

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

At **CodAlpha**, 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. Their team consists of industry experts who are dedicated to equipping interns with the knowledge and skills needed to succeed in their careers. CodSoft 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 the latest technologies, tools, and industry trends.

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.

Chapter 2

About the Company's Department

2.1 E-Commerce Development

Our talented web development team has years of experience building websites from small to large. We deliver projects with 100% user satisfaction. Whatever functionality you need for the web, we will implement it.

2.2 Web Development

web development internship that provides practical work experience and an introduction to crafting and enhancing web-based systems. This opportunity offers engaging challenges and real-world projects, allowing you to gain hands-on experience in the dynamic fields of web and app development. Join our award-winning innovation team and kickstart your journey to success in a supportive and enriching environment.

2.3 Android Development

Android, the user-friendly open-source operating system, has transformed the way we access internet applications and carry out important tasks on our mobile devices. At CODSOFT, we understand the growing preference for mobile usage and offer the ideal starting point for your app development journey. Discover the simplicity of creating your first app with us and unlock a world of endless possibilities in the realm of mobile innovation.

2.4 Data Science

Remote Data Science Internships Are a Unique Chance To Gain Experience In The Midst Of The Virtual Workforce While Remaining Immersed In One Of The Top Organizations In The Field. Data Analysis Internships Are Some of The Most Competitive and Popular Within the Broader Data Science Field.

2.5 Java Programming

Become a Java programming master from the convenience of your own home and unlock incredible job prospects with our certification program. Join our comprehensive 4-week internship program, where you'll learn everything from web application development to deployment using Java Build a solid foundation for your career with hands-on training and real-world application in a supportive and collaborative environment.

2.6 C++ Programming

Gain mastery in C++ programming from the comfort of your home and open doors to amazing job opportunities with our certification program. Enroll in our intensive 4-week internship, where you'll acquire knowledge in web application development and deployment using C++. Establish a strong base for your career and real-world implementation within a supportive and collaborative setting.

2.7 Python Programming

Join our 4-week comprehensive internship program and master the fundamentals of programming in Python from the comfort of your own home. Gain the skills and knowledge to apply for exciting job opportunities in the field. In this program, you will learn everything from web development to the deployment of Python-based web applications. Get certified and enhance your career prospects. Don't miss this opportunity to excel in Python programming!

2.8 UI/UX Design

Gain mastery in UI/UX Design from the comfort of your home and open doors to amazing job opportunities with our certification program. Enroll in our intensive 4-week internship, where you'll acquire knowledge in web application development and deployment . Establish a strong base for your career and real-world implementation within a supportive and collaborative setting.

2.9 Artificial intelligence

Gain mastery in Artificial intelligence from the comfort of your home and open doors to amazing job opportunities with our certification program. Enroll in our intensive 4-week internship, where you'll acquire knowledge in web application development and deployment . Establish a strong base for your career and real-world implementation within a supportive and collaborative setting.

2.10 Machine learning

Gain mastery in Machine learning from the comfort of your home and open doors to amazing job opportunities with our certification program. Enroll in our intensive 4-week internship, where you'll acquire knowledge in web application development and deployment . Establish a strong base for your career and real-world implementation within a supportive and collaborative setting.

Chapter 3

Tasks Performed

Task 1: PORTFOLIO

Creating a personal portfolio using CSS and HTML is a popular beginner web development project. Header Section: Add your name or a logo at the top. Optionally, include a brief introduction or tagline. About Section: Insert an image of yourself. Write a short bio highlighting your skills and experience. Skills Section: List your key skills or areas of expertise. Projects Section: Showcase samples of your work or projects. Include project titles, descriptions, and images. Resume Section: Provide a link to download your resume in PDF format. Contact Section: Include your contact information, such as email address and phone number. Footer: Add a copyright notice and any additional links or information.

Task 2: TO DO LIST

Build a simple to-do list application that allows users to add, edit, and delete tasks. You can use HTML, CSS, and JavaScript for the front-end and store the tasks in local storage or a simple backend server using technologies like Node.js.

Task 3: CALCULATOR

To create a basic calculator using CSS, HTML, and JavaScript, you'll need to implement an interactive interface with buttons for addition, subtraction, multiplication, and division operations. The calculator should have a display screen to show user input and results. Utilize CSS grid system for button alignments. Use event listeners, if-else statements, operators, and loops to handle user input and perform calculations. This project requires some skill but can be done with basic knowledge of these technologies.

Chapter 4

Reflection Notes

These projects provide a great introduction to web development concepts and allow you to build practical skills.

Task 1: Portfolio

Learnings:

- Basic HTML structure and elements.
- Applying CSS styles for layout and design.
- Showcasing your skills and experience.

Reflection:

The portfolio effectively represented my brand by showcasing my skills and experience through clear and concise information presented in a visually appealing manner.

Information was structured in a way that was easy to find, with sections clearly labeled and navigation intuitive.

Exploring more advanced layout techniques with CSS frameworks like Bootstrap could enhance the portfolio's responsiveness and streamline the design process, allowing for more focus on content creation

Task 2: To-Do List

Learnings:

- User interaction with forms and event listeners (JavaScript).
- Data storage using Local Storage or a backend server.
- Building a dynamic and interactive web application.

Reflection:

The application was user-friendly and intuitive, with clear instructions and easy-to-use features.

Implementing task prioritization or due dates could further enhance the application's

utility and help users manage their tasks more effectively.

Exploring alternative data storage options, such as using a backend server or cloud-based solutions, could provide scalability and reliability for the application, especially in collaborative settings.

Task 3: Calculator

Learnings:

- Building an interactive interface with buttons and a display.
- Using JavaScript for user input handling and calculations.
- Implementing logic with conditional statements and loops.

Reflection:

The calculator accurately handled various mathematical operations, ensuring precise calculations for users.

Improving the user interface with visual cues or error handling could enhance the user experience by providing feedback and guidance during interactions.

Exploring more advanced calculator features like memory functions or scientific notation could expand the calculator's functionality and cater to a wider range of user needs.

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