An Internship Report On

"Web Development Internship at LetsGrowMore"

In Partial Fullfillment of The Requirement For The Award of The Degree of Bachelor Of Engineering In

Third Year Engineering - Computer Engineering

Submitted by:

Vivek Sarade
Enrollment(PRN) no.: 72151711M
Roll No: 62

Under the guidance of

Prof. Shrikant Dhamdhere

DEPARTMENT OF COMPUTER ENGINEERING
PARVATIBAI GENBA MOZE COLLEGE OF ENGINEERING - 412207

Department of Computer Engineering
Parvatibai Genba Moze College of
Engineering, Wagholi, Pune - 412207

DONE: CERTIFICATE

This is to certify that **Vivek Sarade** (PRN No: *72151711M*, Roll No: 62), student of Parvatibai Genba Moze College of Engineering, has done his Internship Work titled **"Web Development"** in our **Computer Department** from 01/04/2023 to 30/04/2023 as part of curriculum.
We have noticed that, during the period, he has shown keen interest in his assignment and was also regular in attendance.

.....	.....
Head of Department	**Internship Mentor**
Prof. Shrikant Dhamdhere	Prof. Shrikant Dhamdhere

ABSTRACT

This internship report details the experiences and learnings gained during the Lets-GrowMore web development internship program. The internship provided an opportunity to develop practical skills in various web development technologies such as HTML, CSS and JavaScript.

The report outlines the various tasks undertaken during the internship including building a responsive web project. The challenges encountered during the internship and the strategies employed to overcome them are also discussed.

Additionally, the internship program fostered a professional development mindset, with an emphasis on continuous learning and improvement.

Overall, the internship program was a valuable learning experience that provided hands-on training in web development, enabling the intern to develop practical skills in various web development technologies and collaborate effectively with team members.

ACKNOWLEDGEMENTS

First of all, I would like to express my sincere and deep gratitude to my supervisor, **Prof. Shrikant Dhamdhere**, Faculty, Department of Computer Engineering, for his kind and constant support. His valuable advice, critical criticism, and active supervision encouraged me to sharpen my methodology and were instrumental in shaping my professional outlook.

I also want to express my gratitude towards **Prof. Shrikant Dhamdhere**, Professor & Head, Dept. of Computer Engineering, PGMCOE, Wagholi for providing such a wonderful environment filled with continuous encouragement and support. I would also like to thank my classmates for their constant encouragement and assistance they have provided me.

Contents

Chapter 1

Introduction

1.1 Objectives

The objective of this internship program is to provide the intern with practical experience and opportunities to develop essential skills in the field of web development. The program aims to equip the intern with a solid understanding of web development technologies such as HTML, CSS, JavaScript, and ReactJS, and enable them to create responsive web pages that are accessible and user-friendly. Additionally, understand the importance of version control using Git and GitHub.

Throughout the internship, the intern will learn to work with databases and backend technologies, as well as gain an understanding of cybersecurity in web development. The program also emphasizes the principles of UI/UX design and their role in web development, while enabling the intern to develop a portfolio of projects that demonstrate practical skills.

Ultimately, the program aims to develop a growth mindset and a commitment to lifelong learning, while contributing to the growth and success of the LetsGrowMore organization through quality work and a positive attitude. Lastly, the intern will gain valuable experience that can be leveraged in future academic and professional pursuits.

1.2 Scope

The future scope of web development is promising, with increased adoption of emerging technologies such as PWAs, IoT, AI/ML, and serverless architecture, along with a growing emphasis on cybersecurity, accessibility, and mobile-first design.

- **Progressive Web Apps (PWAs)** : Combines features of web and mobile apps, Fast, reliable, and engaging.

- **Internet of Things (IoT)** : Requires more interactive and responsive web applications.
- **Artificial Intelligence (AI) and Machine Learning (ML)** : Automation of web development processes.
- **Cybersecurity** : Increased emphasis on cybersecurity in web development.
- **Microservices architecture** : Modular and scalable web application development and deployment.
- **Single Page Applications (SPAs)** : Seamless and responsive user experience.
- **Accessibility** : Focus on accessibility in web development.
- **Web Assembly (WASM)** : Faster and more efficient web applications.
- **E-commerce** : Requires more secure, scalable, and user-friendly e-commerce websites.
- **Mobile-first and responsive web design** : More users access the internet through mobile devices.
- **Cloud-based development and hosting platforms** : AWS, Azure, and other cloud-based platforms increasing in popularity.

Chapter 2

Literature Survey

The field of web development has been rapidly evolving in recent years, with new technologies and frameworks emerging to meet the changing demands of the industry. Some of the popular frameworks for web development include ReactJS, AngularJS, VueJS, Node.js, and Laravel. These frameworks offer features such as modular architecture, seamless integration with other technologies, and streamlined development workflows. Additionally, there is a growing emphasis on creating web applications that are accessible to all users, regardless of their physical or cognitive abilities. This has led to the development of tools and techniques for creating accessible web content, such as WCAG guidelines, screen readers, and keyboard navigation. Finally, the importance of cybersecurity in web development cannot be overstated, as web applications are increasingly targeted by cybercriminals. As a result, web developers must be well-versed in security best practices, such as using HTTPS, implementing user authentication and authorization, and securing sensitive data.

Chapter 3

Problem Statement

Let's Grow More is offering a web development internship, and the problem statement for this internship is to provide a platform for aspiring web developers to gain practical experience and improve their skills by working on real-world projects under the guidance of experienced mentors.

3.1 Problem Statement of Task - 1

Beginner Level Task Create A TO DO LIST WEBAPP

- **Lack of organization: Many individuals struggle to keep track of their daily tasks and appointments, leading to missed deadlines, forgotten commitments, and increased stress levels.**
- **Inefficient task management: Traditional pen-and-paper to-do lists can be time-consuming and prone to error. Additionally, they lack the ability to prioritize tasks or set reminders for important deadlines.**

3.2 Problem Statement of Task - 2

Create a registration form whose data is displayed on the same page using either HTML, CSS, and JavaScript or React JS. system like:

- **Inefficient registration process: Existing registration forms typically redirect the user to a separate page after submitting their information, disrupting their browsing experience and slowing down the registration process.**
- **Lack of real-time feedback: Users are often unaware of errors or incomplete fields until they have already submitted their form. This**

results in a poor user experience and can lead to a decrease in registration completion rates.

Chapter 4

Methodology Analysis

Methodology analysis for a web development report typically involves outlining the specific techniques and processes used to develop the website. This may include discussing the programming languages, frameworks, and tools used, as well as the design and development phases of the project. Additionally, the methodology analysis may cover the testing and deployment phases of the project, outlining how the website was tested for functionality and usability before being launched. Providing a detailed methodology analysis can help readers understand the technical aspects of the web development process and gain insights into the development team's approach to creating the website. It can also provide valuable information for future web development projects by highlighting successful practices and areas for improvement.

4.1 User Characteristics

User characteristics for web development refer to the traits and behaviors of the target audience that influence the design, functionality, and content of the website. Understanding the user's technical proficiency, accessibility requirements, demographics, and goals can help create a user-friendly and effective website. Identifying user characteristics is an essential step in developing web development requirements and ensuring that the website meets the needs of its intended audience.

- **Technical proficiency: The user's technical proficiency level can play a significant role in the web development requirements.**
- **Accessibility requirements: The website's target audience may include users with visual, hearing, or physical impairments, requiring the site to be accessible and meet accessibility standards.**
- **User goals and objectives: Understanding the goals and objectives of the website's target audience is critical in developing web development requirements.**

- **To implement decentralized system so that data is transferred through multiple systems.**

4.2 Overview of Functional Requirements

- **Content management: The website should allow content creators to easily add, modify, and delete content from the site, including text, images, and multimedia.**
- **Navigation: The website's navigation should be intuitive and user-friendly, allowing users to easily find the content they are looking for.**
- **Forms and data collection: The website should allow users to submit information through forms and collect data as needed.**
- **Responsive design: The website should be designed to be responsive, ensuring that it is easily accessible and functional across a range of devices and screen sizes.**

Chapter 5

Software and Hardware Specifications

5.1 Hardware Specification (Minimum) :

- Processor: Intel Core i5 or higher, or equivalent AMD processor.
- RAM: 8GB or higher.
- Storage: Solid State Drive (SSD) with at least 256GB of storage.
- Graphics Card: Integrated graphics should suffice for web development work.
- Display: A high-resolution display with at least 1920 x 1080 pixels.

5.2 Software specification :

- Text Editors: Visual Studio Code, Sublime Text, Atom, Notepad++, etc.
- Version Control Systems: Git, GitHub, GitLab, Bitbucket, etc.
- Markup and Styling Languages: HTML5, CSS3, etc.
- Programming Languages: JavaScript, Python, PHP, etc.

Chapter 6

System Design

System design for web development involves planning and designing the technical architecture of the website, including its database structure, back-end programming, and front-end design. It involves breaking down the system into smaller components and defining how these components interact with each other to achieve the website's goals. A well-designed system architecture can ensure the website's scalability, maintainability, and reliability and provide a solid foundation for the web development team to build upon.

6.1 System Analysis

- **Define the scope: The first step in system analysis for a web development internship report is to define the project's scope. This involves identifying the website's objectives, target audience, and technical requirements.**
- **Identify user requirements: The next step is to identify the user requirements, including user needs, expectations, and preferences. This involves conducting user research, such as surveys or focus groups, to gain insights into the user's needs.**

6.1.1 User Requirement

User requirements for a web development internship refer to the needs, expectations, and preferences of the target audience that the website aims to serve. Identifying and understanding user requirements is essential to designing and developing a website that meets the needs of its intended audience.

User requirements can be gathered through various means, such as user research, surveys, and feedback. Some common user requirements for web development include

ease of use, accessibility, fast load times, responsiveness, clear and concise content, and intuitive navigation.

6.2 User Of Interface

User interface (UI) design is a critical aspect of web development that involves designing the visual and interactive elements of a website or application. The primary goal of UI design is to create an intuitive and user-friendly interface that allows users to navigate the site easily, find the information they need, and perform actions with minimal effort.

6.2.1 Design Consideration

UI designers consider various elements such as color schemes, typography, iconography, and layout to create an aesthetically pleasing and functional website. They also ensure that the design is consistent across all pages and devices to provide a seamless user experience.

During a web development internship, UI design may involve creating wireframes, prototypes, and mockups to communicate design ideas and collaborate with the development team. It may also involve conducting user testing to validate the design and identify areas for improvement.

In summary, user interface design is a critical aspect of web development that involves creating a visually appealing and intuitive design that allows users to navigate the website easily and achieve their goals.

Chapter 7

Conclusion and Future Scope

7.1 Conclusion

In conclusion, the LetsGrowMore web development internship provided a valuable learning experience and hands-on practice in various web development technologies. Throughout the internship, I gained knowledge in frontend and backend development, web frameworks, databases, and version control systems. This experience helped me develop problem-solving skills and an understanding of best practices in web development. Overall, the internship provided a solid foundation for my future career in web development, and I am grateful for the opportunity to learn and grow as a developer.

7.2 Future Scope

The future of web development is exciting and holds tremendous potential for growth and innovation. As the internet continues to expand and more businesses move their operations online, the demand for skilled web developers is only expected to increase.

Bibliography

[1] MDN Wed Docs. https://developer.mozilla.org/en-US/

[2] Web development resources. https://www.w3schools.com/whatis/

[3] HTML resources https://www.w3schools.com/html/

[4] W3School CSS Resources. https://www.w3schools.com/css/

[5] JavaScript Resources. https://www.w3schools.com/js/