INTERNSHIP REPORT

ON

“YOUTUBE CLONE WEBSITE”

BACHELOR OF ENGINEERING IN CSE

Submitted by

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Conducted at

INCERD

international centre for engineers Research and Development

AMC ENGINEERING COLLEGE

Department of branch CSE

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CERTIFICATE

This is to certify that the Internship titled "YOUTUBE CLONE WEBSITE**"** carried out by **Ms GAMYA SHREE.V,** a bonafide student of AMC Engineering College, in partial fulfillment for the award of **Bachelor of Engineering**, in **CSE** under Visvesvaraya Technological University, Belagavi, during the year 2022-2023. It is certified that all corrections/suggestions indicated have been incorporated in the report.

The project report has been approved as it satisfies the academic requirements in respectof Internship prescribed for the course Internship / Professional Practice

Signature of Guide **Signature of HOD** **Signature of Principal**

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D E C L A R A T I O N

I, GAMYA SHREE.V

USN :1AM21CI026

NAME : Mamatha S

OFFER LETTER PROVIDED BY THE COMPANY

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Date: **23/10/2023**

OFFER FOR INTERNSHIP

Ms. GamyaShree V
Student - Department Of CSE,
AMC Engineering College.
Bangalore - 560083.

Following your application and subsequent interview, we are pleased to inform you that you have been considered for an internship in this company. You will be working with the Department of Webdevelopment as an Intern at our office with effect from 27/10/2023.

You are required to report to the person in charge, Mrs. Devaki for orientation and subsequent placement on this day.

It is my hope that you will work to your level best to improve the efficiency and performance of this company. Congratulations and best wishes.

Sincerely,
Avinash
DIRECTOR - PROJECTS

*INCERD * Bengaluru - 560083

A C K N O W L E D G E M E N T

This Internship is a result of accumulated guidance, direction and support of several important persons. We take this opportunity to express our gratitude to all who have helped us to complete the Internship.

We express our sincere thanks to TAKE IT EASY ENGINEERS, for providing usadequate facilities to undertake this Internship.

We would like to thank VARCONS TECHNOLOGIES, for providing us an opportunity to carry out Internship and for their valuable guidance and support.

We express our deep and profound gratitude to our guide, DHRUVA, for his keen interest and encouragement at every step in completing the Internship.

We would like to thank all the student coordinators for the support extended during the course of Internship.

Last but not the least, we would like to thank our parents and friends without whose constant help, the completion of Internship would have not been possible.

ABSTRACT

The main objective of this internship was WEBSITE DESIGN AND DEVELOPMENT. Several programming languages that are in use to develop a web based application or software. Some of them are only used for the UI and the frontend of the application, some are used for the backend design of the software. For example- HTML3, HTML4, HTML5, CSS, Bootstrap Framework etc. are some programming languages to develop the frontend of an application. PHP, Java etc are used at the backend. Nowadays there are also some framework' s that use vastly. Frameworks are basically structured programming by using Model, View, and Controller. It is also called as MVC. If we develop web based application that is very useful for us because we can access it from anywhere of the 8iworld. It is very helpful for our daily life. That is why I choose subject of my report is "WEBDEVELOPMENT". Working in Bluebird Interactive added huge experiences in my upcoming career. Solving real life problems was another key issue. This report takes us through all the details of WEBDEVELOPMENT knowledge and experience gathered during this internship period.

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CHAPTER 1

INTRODUCTION

Web development is the work involved in developing a website for the Internet (World Wide Web) or an intranet (a private network). Web development can range from developing a simple single static page of plain text to complex web applications, electronic businesses, and social network services. A more comprehensive list of tasks to which Web development commonly refers, may include Web engineering, Web design, Web content development, client liaison, client-side/server-side scripting, Web server and network security configuration, and e-commerce development.

The word Web Development is made up of two words, that is:

Web: It refers to websites, web pages or anything that works over the internet.
Development: It refers to building the application from scratch.

Types of web developers:
There are different types of web developers who focus on different areas. These include:
Frontend developers: Frontend developers implement web page designs using HTML and CSS. They make sure the website looks pretty on different devices, and that the forms and buttons work.

HTML: HTML stands for HyperText Markup Language. It is used to design the front end portion of web pages using markup language. It acts as a skeleton for a website since it is used to make the structure of a website.

CSS: Cascading Style Sheets fondly referred to as CSS is a simply designed language intended to simplify the process of making web pages presentable. It is used to style our website.

JavaScript: JavaScript is a scripting language used to provide a dynamic behavior to our website.
Bootstrap: Bootstrap is a free and open-source tool collection for creating responsive websites and web applications. It is the most popular CSS framework for developing responsive, mobile-first websites. Nowadays, the websites are perfect for all the browsers (IE, Firefox, and Chrome) and for all sizes of screens (Desktop, Tablets, Phablets, and Phones).

Backend Development

Backend is the server side of a website. It is the part of the website that users cannot see and interact. It is the portion of software that does not come in direct contact with the users. It is used to store and arrange data.Backend developers create the backbone of the web application. They write code logic that handles a user's input (for example, what should happen when you click the signup button after filling in a form).

Backend Roadmap:Backend Design roadmap

PHP: PHP is a server-side scripting language designed specifically for web development.

Java: Java is one of the most popular and widely used programming language. It is highly scalable.

Python: Python is a programming language that lets you work quickly and integrate systems more efficiently.

Node.js: Node.js is an open source and cross-platform runtime environment for executing JavaScript code outside a browser.

CHAPTER 2

4.Requirement Analysis

LANGUAGES:

- Python
- Java
- CPP
- Golang
- C#
- SQL
- Kotlin
- Web Development
- Web Tutorials
- Django Tutorial
- HTML
- JavaScript
- Bootstrap
- ReactJS
- NodeJS

CHAPTER 3

3.Design&Analysis

Hypertext Markup Language, or HTML, is a programming language used to describe the structure of information on a webpage. Together, HTML, CSS, and JavaScript make up the essential building blocks of websites worldwide, with CSS controlling a page's appearance and JavaScript programming its functionality. You can think of the HTML document as providing the bones of a webpage, while CSS provides the skin, and JavaScript provides the brains.

The HTML file plays a couple of significant roles in a webpage. First, we use the structure created by our HTML code to reference, enhance, and manipulate elements on a web page using CSS and JavaScript

HTML provides the basic structure of sites, which is enhanced and modified by other technologies like CSS and JavaScript.

CSS is used to control presentation, formatting, and layout.

JavaScript is used to control the behavior of different elements.

CHAPTER 4

4. PROJECT OVERVIEW

Creating a front-end YouTube clone involves HTML for structure and CSS for styling. The key components include:

1. HTML Structure:

- **Header:** Contains the YouTube logo, search bar, and navigation links.
- **Main Content Area:** Divided into sections for video thumbnails, video titles, and other relevant details.
- **Sidebar:** Includes suggested channels, trending videos, and other recommended content.
- **Footer:** Typically consists of links, copyright information, and additional resources.

2. CSS Styling:

- **Layout:** Use CSS to create a responsive and visually appealing layout. Employ flexbox or grid for positioning elements.
- **Colors and Typography:** Match YouTube's color scheme and fonts for a consistent look.
- **Responsive Design:** Ensure your design works well on various screen sizes by using media queries.
- **Thumbnail Styles:** Style video thumbnails to resemble those on YouTube, including hover effects.
- **Buttons and Icons:** Style buttons, icons, and

interactive elements to resemble the YouTube interface.

3. Media Embedding:

- Use HTML to embed videos. You can use the YouTube embed code or explore HTML5 <video> tags if you want to simulate video playback.

4. Navigation:

- Implement navigation menus using HTML lists styled with CSS. Ensure the navigation bar is easily accessible and user-friendly.

5. Forms and Input Fields:

- Create a search bar using HTML <input> and style it to match YouTube's design.
- You can use HTML forms to handle other user interactions, like comments or subscriptions.

6. Responsive Design:

- Make sure your design is responsive to different screen sizes. Use media queries to adjust styles for smaller screens.

7. CSS Frameworks:

- Consider using CSS frameworks like Bootstrap or Tailwind CSS to streamline styling and enhance responsiveness.

8. Testing:

- Regularly test your website in different browsers to

ensure compatibility.

4.1 FEATURES AND FUNCTIONALITIES

1. Header Section:
- YouTube logo.
- Search bar.
- Icons for notifications, user profile, and settings.

2. Main Content Area:
- Thumbnails and titles of related videos.
- Additional information like views and upload date.

3. Comments Section:
- User profile pictures.
- Usernames and timestamps.

4. Footer:
- Links to various sections (Home, Trending, Subscriptions, Library, History, and Your videos).
- Language and country settings.

5. Responsive Design:
- Adjust layout for different screen sizes using media queries.
- Ensure a mobile-friendly experience.

6. Styling:
- Consistent color scheme.
- Font styles resembling YouTube's typography.

- Shadows and borders for depth.

7. Interactivity:
- Hover effects for buttons.
- Transition effects for smooth animations.
- Implement a toggle for the dark mode if desired.

By incorporating these features and functionalities using HTML and CSS, we can create a visually similar YouTube clone in the front end.

CHAPTER 5

5.DESIGN PROCESS

Wireframe and Prototyping:

1. Wireframe:

- **Initial Sketches:** Begin with rough sketches of the YouTube clone's layout, outlining key components such as header, main content area, sidebar, and footer.
- **Basic Structure:** Define the placement of the video player, related videos, and comments section. Consider the positioning of buttons and user interface elements.

2. Prototyping:

- **Digital Prototyping:** Translate the wireframe into a digital format using tools like Figma or Adobe XD. Create interactive prototypes to visualize user flows and navigation.
- **Clickable Elements:** Implement clickable elements for buttons, dropdowns, and interactive sections. This allows for a more realistic user experience during testing.

Design Principles Followed:

1. *Consistency:*
- Maintain a consistent color scheme, typography, and styling across the entire YouTube clone. Consistency fosters a cohesive and user-friendly design.

2. Hierarchy:
- Establish a clear hierarchy of information. For example, prioritize the video player and title to capture the user's attention, followed by supporting details like description and related videos.

3. Contrast:
- Use contrast effectively to highlight important elements. Ensure buttons, icons, and interactive components stand out against the background to guide user actions.

4. Balance:
- Achieve a balanced layout by distributing visual elements evenly. Balance the weight of the header, main content, and sidebar for a harmonious design.

5. Unity:
- Create unity by aligning elements and maintaining a logical flow. Consistent spacing and alignment contribute to a visually pleasing and organized interface.

Iterations and Improvement:

1. User Feedback:
- Gather feedback from potential users or stakeholders. Identify pain points and areas of improvement based on their experiences with the prototype.

2. Testing:
- Conduct usability testing to assess the effectiveness of the design. Pay attention to user interactions, navigation issues, and overall user satisfaction.

3. Iterative Changes:
- Implement iterative changes based on feedback and testing results. Address any identified issues with the layout, styling, or functionality.

4. Responsive Design Refinement:
- Fine-tune the responsive design for various screen sizes. Ensure that the YouTube clone looks and functions well on desktops, tablets, and mobile devices.

5. Accessibility Considerations:
- Evaluate the design for accessibility. Confirm that the interface is navigable for users with disabilities and that the color contrast is suitable for all users.

6. Performance Optimization:
- Optimize the performance of the prototype, considering loading times and resource usage. A smooth and responsive experience contributes to user satisfaction.

7. Documentation:

- Maintain thorough documentation of design decisions, iterations, and improvements. This documentation serves as a reference for future updates or collaborations with other team members.

CHAPTER 6

6.IMPLIMENTATION

We have designed front end part of the website using HTML and CSS. A figma model has been implemented.

HTML is at the core of every web page, regardless the complexity of a site or number of technologies involved. It's an essential skill for any web professional. It's the starting point for anyone learning how to create content for the web.

How does HTML work?

HTML stands for HyperText Markup Language. "Markup language" means that, rather than using a programming language to perform functions, HTML uses tags to identify different types of content and the purposes they each serve to the webpage.

Every web page is made up of a bunch of these HTML tags denoting each type of content on the page. Each type of content on the page is "wrapped" in, i.e. surrounded by,

HTML tags.

JavaScript is a programming language that adds interactivity to the website. This happens in games, in the behavior of responses when buttons are pressed or with data entry on forms; with dynamic styling; with animation, etc.

JavaScript is a powerful programming language that can add interactivity to a website

JavaScript is versatile and beginner-friendly. With more experience, you'll be able to create games, animated 2D and 3D graphics, comprehensive database-driven apps, and much more!

JavaScript itself is relatively compact, yet very flexible. Developers have written a variety of tools on top of the core JavaScript language, unlocking a vast amount of functionality with minimum effort. These include:

CSS stands for Cascading Style Sheets
CSS describes how HTML elements are to be displayed on screen, paper, or in other media
CSS saves a lot of work. It can control the layout of multiple web pages all at once

External stylesheets are stored in CSS files
CSS is the language for describing the presentation of Web pages, including colors, layout, and fonts. It allows one to adapt the presentation to different types of devices, such as large screens, small screens, or printers.
CSS is used to define styles for your web pages, including the design, layout and variations in display for different devices and screen sizes.

7.**CONCLUSION**

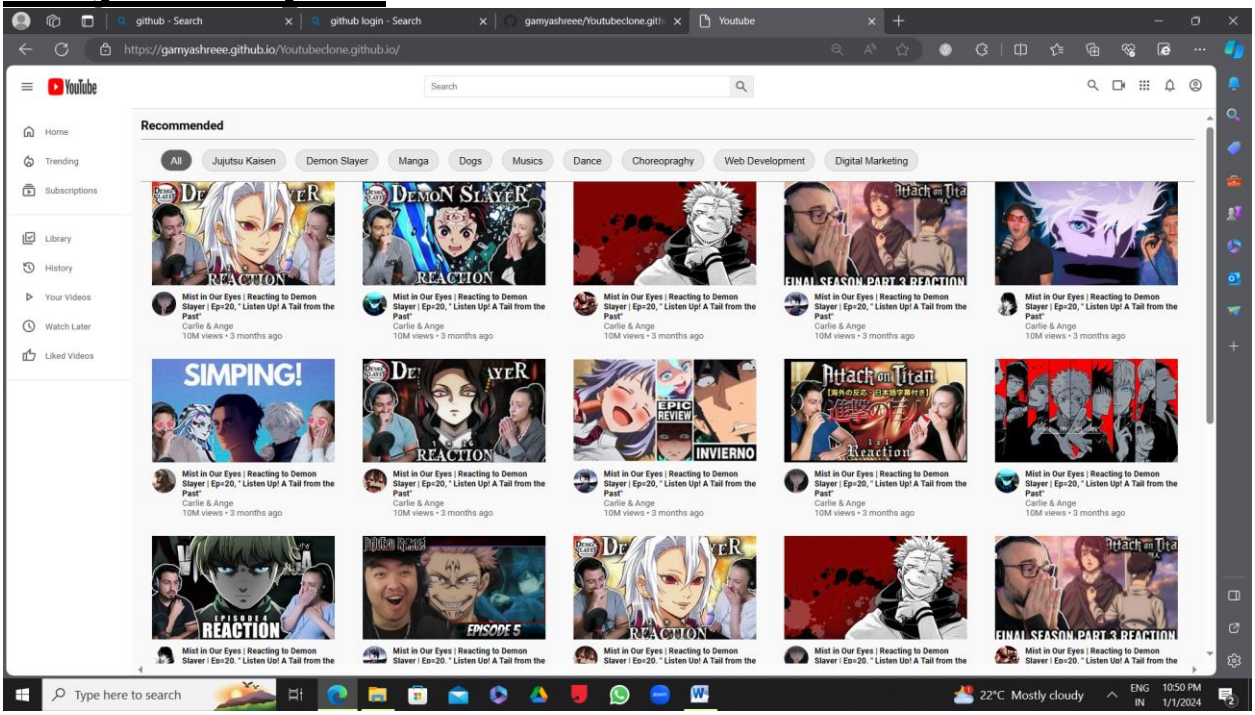
In today's Web development, a good page design is essential. A bad design will lead to the loss of visitors and that can lead to a loss of business. In general, a good page layout has to satisfy the basic elements of a good page design. This includes color contrast, text organization, font selection, style of a page, page size, graphics used, and consistency. In order to create a well-designed page for a specific audience. The developer needs to organized and analyze the users' statistics and the background of the users.

The better the page design, the more hits a page will get. That implies an increase in accessibility and a possible increase in business

The purpose and object of **Youtube Clone Website** Project is achieved. By providing users with a platform to watch, upload, share, and engage with video content in a manner similar to the original YouTube platform. It serves as a learning or development project, allowing individuals to practice building a complex web application and gain insights into front-end and user interface design.

8. Reference

Project output:



Project link:

https://gamyashreee.github.io/Youtubeclone.github.io/