

PROJECT-I REPORT

ON

Personal Portfolio Website

Submitted In Partial Fulfillment of the Requirements for the Degree of

Bachelor of TechnologyIn
INFORMATION TECHNOLOGY

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PREFACE

This project, called "Personal Portfolio Website," was part of our B.Tech. IT curriculum, where we utilized frontend web development skills and knowledge.

This Personal Portfolio Website Project is developed using HTML5, CSS3 and JS. It displays the professional background of an individual. It displays brief information about work experience till date, education, skills, projects.

We followed a structured development approach throughout the project, incorporating contemporary design elements and ensuring compatibility across different web browsers. We are thankful for the guidance provided buy our faculty advisors and the support from our peers. This project demonstrates our dedication to delivering high-quality work and serves as a stepping stone for our future endeavors in the field of technology.

ACKNOWLEDGMENT

I student of INFORMATION TECHNOLOGY, in Seth Jai Parkash Mukand lal Institute of Engineering& Technology. I feel glad and believe that I am very lucky for getting an opportunity to develop a project under the supervision Mr.Vipul Gupta (Associate Professor IT).I express my heartly gratitude for providing me all the facilities to complete my project very easily and successfully.

I am also thankful for providing their valuable help without which it will be difficult to develop this project I apologize for all mistakes made on the form part and I will try that they will not occur again in Future.

CANDIDATE DECLARATION				
I, Itika Lamba hereby declares that the Project Report Entitled has not been presented as a partof any other academics work to get degree or any certificate except JMIT, Radaur for the partial fulfillment of degree of B.Tech in Information Technology.				
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CHAPTER-1

WEB DEVELOPMENT

1.1 INTRODUCTION:-

It is a collection of related web pages, including multimedia content, typically identified with Website a common domain name, and published on at least one web server. A website may Be accessible via a public Internet Protocol (IP) network, such as the Internet, or a private Local area network (LAN), by referencing a uniform resource locator (URL.) that identifies the site.

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:** Building the application from scratch.

Web Development can be classified into two ways:

- Frontend Development
- Backend Development

Frontend Development:

The part of a website that the user interacts directly is termed as front end. It is also referred to as the 'client side' of the application.

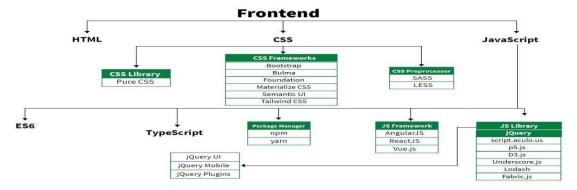


Fig 1.1 Frontend Development

• **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 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).

Frontend Frameworks and Libraries:

- AngularJS
- React.js
- VueJS
- iQuery
- <u>Bootstrap</u>
- Material UI
- <u>Tailwind CSS</u>
- <u>iQuery UI</u>
- Some other libraries and frameworks are: Handlebar.js Backbone.js, Ember.js etc.

1.2 HTML

HTML stands for Hyper Text Markup Language. It is used to design web pages using a markup

language. HTML is the combination of Hypertext and Markup language. Hypertext defines the

link between the web pages. A markup language is used to define the text document within tag

which defines the structure of web pages.

HTML is a markup language that is used by the browser to manipulate text, images, and other

content to display in the required format.

Why to use HTML?

HTML helps to structure our website well. The way a skeleton system gives a structure to the

human body in a similar manner HTML acts as a skeleton for a website, without it a website cannot

be made. If you want to work as a Software Developer especially in the Web Developmentdomain,

then learning HTML is a must, because without knowledge of it you cannot build a website.

Base for creating websites: HTML is the basic necessity a developer should know while

building a website from scratch.

• Learn web development: HTML is the first step towards learning Web Development.

Once you learn HTML, you can build simple, static websites very easily.

Can become freelancer: Since web development has the best scope in freelancing,

therefore learning HTML will surely help you to get the best deals of website

development in the market.

Basic Format: It is the basic format of create a simple web page.

<! Html>

<html>

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```
<head>
<!—Head section of website→

<title></title>
</head>
<body>

<!—DOCTYPE Body section of website →

</body>
```

Example: Let's see a small example of simple HTML page that display the heading and paragraph content.

```
<!DOCTYPE html>
<html>
<head>
    <title>Simple HTML Page</title>
</head>
<body>
    <h1>Welcome</h1>
A computer science portal for STUDENTS
</body>
```

</html>

Most commonly used tags in HTML

HTML contains lots of predefined tag. Some of them are described below:

Document structure tag:

HTML tag: It is the root of the html document which is used to specify that the document is html.

Syntax

```
<html> Statements... </html>
```

CODE:

Head tag: Head tag is used to contain all the head element in the html file. It contains the title, style, meta, ... etc tag.

Syntax:

```
<head> Statements... </head>
```

Body tag: It is used to define the body of html document. It contains image, tables, lists, ... etc.

Syntax:-

```
<body> Statements... </body>
```

Heading tag: It is used to define the heading of html document.

Syntax:-

```
<h1> Statements... </h>
```

<h2> Statements... </h2>

<h3> Statements... </h3>

<h4> Statements... </h4>

<h5> Statements... </h5>

<h6> Statements... </h6>

\1.3 CSS

CSS (Cascading Style Sheets) is a stylesheet language used to design the webpage to make it attractive. The reason of using CSS is to simplify the process of making web pages presentable. CSS allows you to apply styles to web pages. More importantly, CSS enables you to do this independent of the HTML that makes up each web page.

There are three types of CSS which are given below:

- Inline CSS
- Internal or Embedded CSS
- External CSS

Why we learn CSS?

Styling has been an essential property for any website since many decades. It increases the standards and overall look of the website which makes it easier for the user to interact with it. A website cannot be made without CSS, as styling is MUST since no user would want to interact with a dull and shabby website. So for knowing Web Development, learning CSS is must

- **Base for web development:** HTML and CSS is the basic skill that every web developer should know. It is the basic skill that is required for building a website.
- Makes your website look attractive: A website that's dull and plain will not attract the
 user most probably, so adding some style would surely make your website presentable to
 the user.
- Makes the design come live: A web developer is responsible in making the design given to him as a live product. CSS is used for styling to develop the design of the website.

- **Increases user experience of website:** A website with a simple yet beautiful UI would help the users to go through the website easily. CSS is used to make the user interface better.
- More career opportunities: Since CSS is a basic requirement while learning Web Development, therefor there are abundant career opportunities for it. As a freelancer too you can land up to many projects.

Basic Format: It is the basic structure of HTML webpage and we use CSS style inside webpage. In a web page, we use internal CSS (i.e. adding CSS code inside <head> tag of HTML code).

```
<!DOCTYPE html>
<html>
<head>
<!—Head section of web page →
  <title></title>

<!—Stylesheet of web page →
  <style></style>
</head>

<body>
  <!—Body section of web page →
  </body>
</html>
```

Example: Let's see a small example of HTML webpage with CSS styles. Here, we use CSS styles to set the alignment and text color in a webpage.

```
<!DOCTYPE html>
<html>
<head>
    <title>
    Simple HTML webpage with CSS style
  </title>
  <!—Stylesheet of web page \rightarrow
  <style>
    body {
      text-align: center;
    }
    h1 {
       color: green;
  </style>
</head>
<body>
  <h1>Welcome </h1>
  A computer science portal for students
</body>
</html>
```

1.4 JavaScript

JavaScript is the world most popular lightweight, interpreted compiled programming language. It is also known as scripting language for web pages. It is well-known for the development of web pages, many non-browser environments also use it. JavaScript can be used for **Client-side** developments as well as **Server-side** developments.

JavaScript can be added to your HTML file in two ways:

- **Internal JS:** We can add JavaScript directly to our HTML file by writing the code inside the <script> tag. The <script> tag can either be placed inside the <head> or the <body> tag according to the requirement.
- External JS: We can write JavaScript code in other file having an extension .js and then link this file inside the <head> tag of the HTML file in which we want to add this code.

Syntax:

```
<script>
// JavaScript Code
</script>
```

Example: It is the basic example of JavaScript code embedded in HTML code.

```
<br/>
<br/>
<!—JavaScript code can be embedded inside<br/>
head section or body section →<br/>
<script><br/>
console.log("Welcome");<br/>
</script></body></html>
```

What can we build using JavaScript?

JavaScript is a widely-used programming language. Given below are some domains/products that can be built using JavaScript:

- **Websites:** JavaScript helps us to add behavior of our website. It helps users to interact with the website. For eg. Clicking on buttons, saving details, uploading details on the website, etc.
- **Web Servers:** We can make robust server applications using JavaScript. To be precise we use JavaScript frameworks like Node.js and Express.js to build these servers.
- Game Development: In Game Development industry, JavaScript is used widely. With the addition of HTML5 Canvas, it's now possible to make 2D and 3D games in JavaScriptvery efficiently.
- **3D Drawings:** JavaScript in addition with HTML Canvas is used to make three-dimensional graphics.

- Mobile Apps: Mobile applications are the most popular modes of communicating these
 days. JavaScript also used to design mobile applications. There are many JavaScript
 frameworks using which we can make android, IOS, and hybrid apps.
- Smartwatch Apps: The popular smartwatch maker Pebble has created Pebble.js, a small JavaScript framework that allows a developer to create an application for the Pebble line of watches in JavaScript.

Why to learn JavaScript?

JavaScript is the most popular and hence the most loved language around the globe. Apart from this, there are abundant reasons to learn it. Below are a listing of few important points:

- **No need of compilers:** Since JavaScript is an interpreted language, therefore it does not need any compiler for compilations.
- Used both Client and Server-side: Earlier JavaScript was used to build client-side applications only, but with the evolution of its frameworks namely Node.js and Express.js, it is now widely used for building server-side applications too.
- **Helps to build a complete solution:** As we saw, JavaScript is widely used in both client and server-side applications, therefore it helps us to build an end-to-end solution to a given problem.
- **Used everywhere:** JavaScript is so loved because it can be used anywhere. It can be used to develop websites, games or mobile apps, etc.
- **Huge community support:** JavaScript has a huge community of users and mentors who

love this language and take it's legacy forward

1.5 Bootstrap

Bootstrap is a free and open-source tool collection for creating responsive websites and web applications. It is the most popular HTML, CSS, and JavaScript 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). All thanks to Bootstrap developers – Mark Otto and Jacob Thornton of Twitter, though it was later declared to be an open-source project.

Why we use Bootstrap?

- It is Faster and Easier way for Web-Development.
- It creates Platform-independent web-pages.
- It creates Responsive Web-pages.
- It designs the responsive web pages for mobile devices too.
- It is Free and open-source framework available on www.getbootstrap.com

How to use Bootstrap in webpage: There are two ways to include Bootstrap in the website.

```
<!-Bootstrap CSS library →
    <link rel="stylesheet" href=</pre>
"https://stackpath.bootstrapcdn.com/bootstrap/4.3.1/css/bootstrap.min.css"
        integrity=
"sha384-ggOyR0iXCbMQv3Xipma34MD+dH/1fQ784/j6cY/iJTQUOhcWr7x9JvoRxT2MZw1T"
        crossorigin="anonymous">
    <!-jQuery library →
    <script src="https://code.jquery.com/jquery-3.3.1.slim.min.js"</pre>
        integrity=
"sha384-q8i/X+965Dz00rT7abK41JStQIAqVgRVzpbzo5smXKp4YfRvH+8abtTE1Pi6jizo"
        crossorigin="anonymous">
    </script>
    <!-JavaScript library →
    <script src=</pre>
"https://cdnjs.cloudflare.com/ajax/libs/popper.js/1.14.7/umd/popper.min.js"
        integrity=
"sha384-U02eT0CpHqdSJQ6hJty5KVphtPhzWj9W01clHTMGa3JDZwrnQq4sF86dIHNDz0W1"
        crossorigin="anonymous">
    </script>
    <!-Latest compiled JavaScript library →
    <script src=</pre>
"https://stackpath.bootstrapcdn.com/bootstrap/4.3.1/js/bootstrap.min.js"
        integrity=
"sha384-JjSmVgyd0p3pXB1rRibZUAYoIIy60rQ6VrjIEaFf/nJGzIxFDsf4x0xIM+B07jRM"
        crossorigin="anonymous">
    </script>
</head>
```

Download Bootstrap from getbootstrap.com and use it:

Goto www.getbootstrap.com and click Getting Started. Click on the Download Bootstrap button.

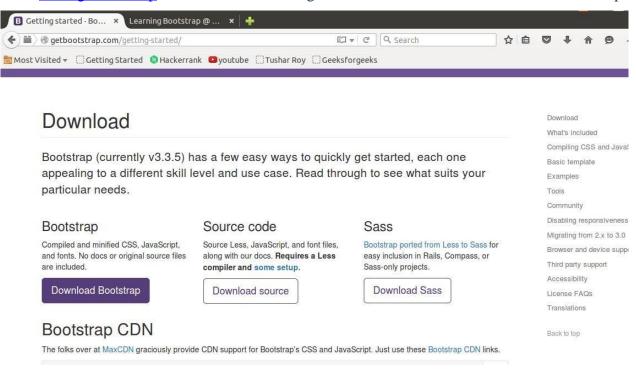


Fig 1.2 Download Bootstrap

• A.zip file would get downloaded. Extract the zip file and go in the distribution folder. It contains two folders named as CSS and JS.

 Add the file link to the HTML document and then open the web page using web browsers.

Example:

```
<!DOCTYPE html>
<html lang="en">
<head>
    <title>Bootstrap Example</title>
    <meta charset="utf-8">
    <meta name="viewport" content=</pre>
        "width=device-width, initial-scale=1">
    <link rel="stylesheet" type="text/css"</pre>
        href="css/bootstrap.min.css">
    <script src="js/bootstrap.min.js"></script>
</head>
<body>
    <div class="container text-center">
        <h1 class="text-success">Welcome</h1>
        A computer science portal for students
    </div>
</body>
</html>
```

CHAPTER-2

Introduction to Project

2.1 Project overview

Project: Personal Portfolio Website **Front End:** HTML/CSS/JavaScript

Technology: Web Technology

Platform: Web Browser

IDE: Visual Studio Code

Personal Portfolio Website provides brief information about the professional background of an individual . This project comprises of three files . First in an HTML file for creating markup of the application on the web . Then CSS file is used to provide more styles to the website . Then JS file is used to give a proper functionality to the application through javascript .

In this portfolio, you will find a collection of my most noteworthy projects, highlighting my abilities in [insert specific skills or competencies]. Each project has been carefully crafted to demonstrate my problem-solving approach, attention to detail, and creative thinking. Whether it's designing user-friendly interfaces, developing robust software solutions, or crafting compelling marketing campaigns, I strive to deliver exceptional results that exceed expectations.

2.2 Objective and Goals

Objective: The objective of creating my personal portfolio website is to establish a professional online presence and showcase my skills, experiences, and achievements to potential clients, employers, and collaborators.

Goals:

- 1. <u>Demonstrate my Expertise</u>: By presenting a carefully curated collection of my best work, I want to highlight my proficiency in my field and showcase the value I can bring to projects. I aim to exhibit my skills, knowledge, and capabilities to attract the attention of potential clients or employers
- 2. <u>Build Credibility and Trust</u>: A well-designed and informative portfolio website helps to establish credibility and build trust with visitors. By showcasing my past projects, testimonials, and relevant qualifications, I aim to provide evidence of my abilities and professionalism, thereby instilling confidence in those who may be considering working with me
- 3. Stand Out from the Competition: In a competitive market, having a personal portfolio website can give me a distinct advantage. It allows me to differentiate myself from others in my field by showcasing my unique style, creativity, and accomplishments. By presenting a polished and professional online presence, I strive to make a memorable impression on visitors
- 4. <u>Expand Professional Network</u>: A portfolio website provides an opportunity to connect with likeminded professionals, potential clients, and collaborators. Through the contact information and networking features on my website, I hope to foster meaningful connections and expand my professional network, opening doors to new opportunities and collaborations.

2.3 Problem Description

The Problem I encountered when creating my personal portfolio website was the need to effectively showcase my skills, experiences, and achievements in a visually appealing and organized manner. Specifically, I faced the following challenges:

- 1. <u>Limited Visibility:</u> Without a dedicated platform to showcase my work, potential clients, employers, or collaborators may have difficulty discovering the full extent of my capabilities. Relying solely on resumes or traditional networking methods may not provide a comprehensive picture of my skills and achievements.
- 2. <u>Lack of Credibility</u>: In a competitive landscape, establishing credibility is crucial. Without a professional portfolio website, it becomes challenging to present a cohesive and well-documented body of work that demonstrates my expertise. This can potentially hinder my ability to stand out from the competition and secure new opportunities.
- 3. <u>Inefficient Communication</u>: Traditional methods of sharing my work, such as email attachments or physical portfolios, can be time-consuming and inefficient. These methods may not effectively convey the dynamic nature of my projects or allow for interactive engagement with the content.
- 4. <u>Limited Reach and Network opportunity</u>: Without an online platform, it can be difficult to connect with like-minded professionals, potential clients, or collaborators on a broader scale. Networking events and inperson meetings may not provide sufficient opportunities to showcase my work or establish connections with individuals outside my immediate circle.

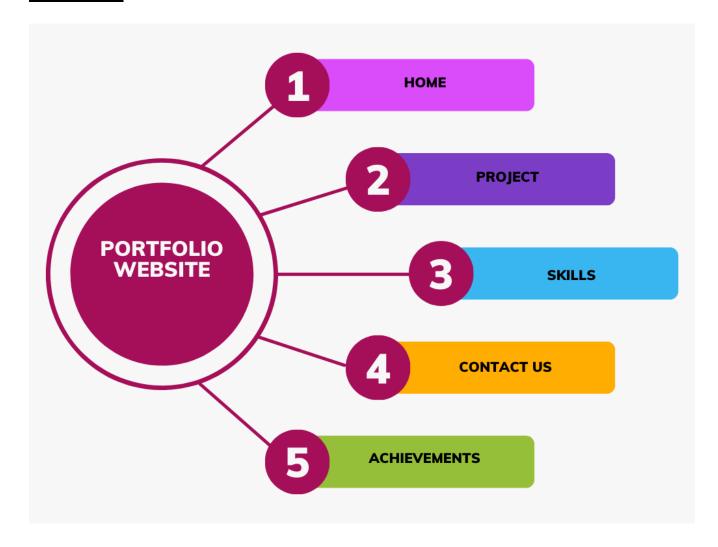
2.4 Project Modules

Modules:

- **1. Home:** This module provides a brief overview of who you are, your professional background, and a captivating introduction that grabs the visitor's attention.
- **2. Project :** This module is the heart of your portfolio website. It showcases your past projects and work samples, highlighting your skills and achievements. You can organize projects into categories or use a grid layout for easy navigation .

3.	Skills : This module provides a visual representation or list of your skills and competencies. It can include both technical and soft skills relevant to your profession.
4.	Contact Us : A dedicated contact module allows visitors to get in touch with you. Include a conform, your email address, social media links, and any other preferred methods of communication

MODULES



2.5 Software Specification

2.5.1 Software requirements

- Operating system- Windows 7 is used as the operating system as it is stable and supports more features and is more user friendly
- Development Tools and Programming Language- HTML is used to write the whole code and develop webpages with HTML, CSS for styling and JavaScript for functioning.
- API stands for Application Programming Interface. A Web API is an application
 programming interface for the Web. A Browser API is used to extend the functionality of
 a web browser. A Server API extend the functionality of a web server.

2.5.2 Hardware Requirements

- Intel Core i5 2nd generation is used as a processor because it is faster than other processors a provide reliable and stable and we can run our pc for long time. By using this processor we can keep on developing our project without any worries.
- Ram 1 gb is used as it will provide fast reading and writing capabilities and will in turn support in processing.

2.6 Tools Used

2.6.1 Visual Studio Code

Visual Studio Code, also commonly referred to as VS Code, is a <u>source-code editor</u> madeby <u>Microsoft</u> for <u>Windows</u>, <u>Linux</u> and <u>macOS</u>. Features include support for <u>debugging</u>, <u>syntax</u> <u>highlighting</u>, <u>intelligent code completion</u>, <u>snippets</u>, <u>code refactoring</u>, and embedded <u>Git</u>. Users can change the <u>theme</u>, <u>keyboard shortcuts</u>, preferences, and install <u>extensions</u> that add additional functionality.



Fig 2.4 VS Code

Developer(s)	Microsoft
Initial Release	April 29, 2015; 7 years ago
Stable release	1.68 / 9 June 2022
Written in	TypeScript, JavaScript, HTML, and CSS
Operating System	Windows 7 or later, OS X 10.10 or later, Linux
Available in	14 languages
Type	Source Code Editor
License	Source code: MIT License[5]Binaries built by Microsoft: Proprietary software
Website	code.visualstudio.com

Table 2.1 VS code

Key Features:-

- Support for multiple programming languages: Supports multiple programming languages. So earlier, programmers needed Web-Support: a different editor for different languages, but it has built-in multi-language support. This also means it easily detects if there's any fault or cross-language reference, it'll be able to detect it easily.
- Intelli-Sense: It can detect if any snippet of code is left incomplete. Also, common variable syntaxes and variable declarations are made automatically. Ex: If a certainvariable is being used in the program and the user has forgotten to declare, intelli-sense will declare it for the user.
- Cross-Platform Support: Traditionally, editors used to support either Windows or Linux or Mac Systems. But Visual Studio Code is cross-platform. So it can work on all three platforms. Also, the code works on all three platforms; else, the open-source and proprietary software codes used to be different.
- Extensions and Support: Usually supports all the programming languages but, if the user/programmer wants to use the programming language which is not supported then, he can download the extension and use it. And performance-wise, the extension doesn'tslow down the editor as it rums as a different process.
- **Repository:** With the ever-increasing demand for the code, secure and timely storage is equally important. It is <u>connected with Git</u> or can be connected with any other repository for pulling or saving the instances.
- **Web-Support:** Comes with built-in support for Web applications. So web applications can be built and supported in VSC.
- Hierarchy Structure: The code files are located in files and folders. The required code
 files also have some files, which may be required for other complex projects. These files
 can be deleted as per convenience.

- **Improving Code:** Some code snippets can be declared a bit differently, which might help the user in the code. This function prompts the user, wherever necessary, to change it to the suggested option.
- **Terminal Support:** Many of the times, the user needs to start from the root of the directory to start with a particular action, in-built terminal or console provides user support to not to switch in-between two screens for the same.
- **Multi-Projects:** Multiple projects containing multiple files/folders can be opened simultaneously. These projects/folders might or might not be related to each other.
- **Git Support:** Resources can be pulled from Git Hub Repo online and vice-versa; saving can be done too. Resource pulling also means cloning the code which is made available on the internet. This code can later be changed and saved.
- **Commenting:** A common feature, but some of the languages do not support it. Commenting on the code helps the user to recall or track according to the sequence he wants.

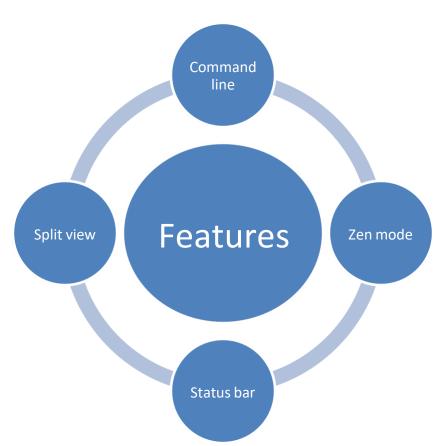


Fig 2.5 VS Code Features

CHAPTER -3 RESULTS AND DISCUSSION

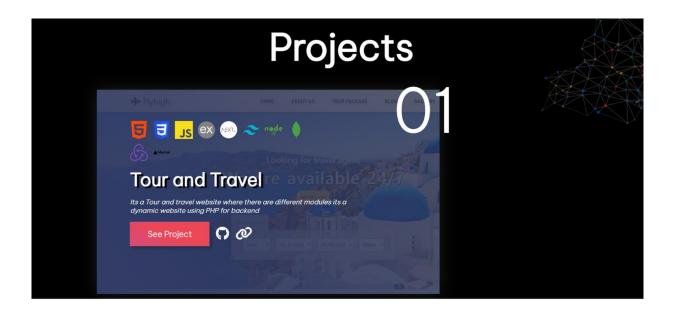
3.1 Welcome page:



3.2 Navigation to Modules:

Projects Skills Contact Me

3.3 Projects:





3.4 Skills:



3.5 Contact Me:





3.6 Footer:



CHAPTER-4

Future Scope and Conclusion

The future scope of a portfolio website can be quite vast and dynamic depending on your goals and the direction you want to take. Here are some potential areas to consider for the future development and expansion of your portfolio project website:

- Enhanced User Experience: Continuously improving the user experience on your website is crucial.
 You can focus on optimizing the design, navigation, and responsiveness of the site across different devices. Implementing smooth transitions, intuitive interfaces, and interactive elements can also enhance the overall user experience.
- Expanded Content: Regularly updating and expanding the content on your website is important to keep visitors engaged. Consider adding new projects, case studies, blog articles, and testimonials to showcase your skills and expertise. Providing valuable and relevant content will help attract more visitors and establish your credibility.
- Integration of Multimedia: Incorporating multimedia elements like videos, animations, and interactive features can make your portfolio more engaging. You can showcase your projects through video walkthroughs or incorporate interactive elements to allow visitors to interact with your work.
- Client Portal: If you work with clients, consider building a client portal where they can securely access
 project files, collaborate, and track progress. This can streamline communication, improve client
 satisfaction, and differentiate your portfolio website from others
- Social Media Integration: Integrate social media sharing buttons and links to allow visitors to easily share
 your portfolio projects on various platforms. Additionally, consider embedding feeds from your social
 media accounts to showcase real-time updates and increase your online presence.
- SEO and digital marketing: Implementing search engine optimization (SEO) strategies can help improve the visibility of your portfolio website in search engine results. Additionally, consider investing in digital marketing techniques like content marketing, social media advertising, and email campaigns to attract more traffic and potential clients.

Challenges and Drawbacks:

- o Design Consistency: Ensuring consistent design across different pages and sections of the website was challenge. Maintaining a unified visual style, color palette, and typography throughout the site required careful attention to detail and consistent implementation of design elements.
- o Cross-Browser Compatibility: Achieving consistent rendering and functionality across different web browsers presented challenges. Each browser interprets HTML, CSS, and JavaScript code differently, leading to inconsistencies in appearance and behavior. Extensive testing and adjustments were necessary to ensure compatibility with major browsers.

Future Work:

- Steps will be taken to improve the speed and performance of the application.
- In future, Backend development in the project will be included.
- A more professional GUI must be developed.
- More sections will be added
- More Projects added