PORTFOLIO PROJECT BASED LEARNING REPORT

Submitted in partial fulfilment of the requirements for the award of the degree of

BACHELOR OF TECHNOLOGY

IN

COMPUTER SCIENCE AND ENGINEERING (INTERNET OF THINGS AND CYBERSECURITY INCLUDING BLOCKCHAIN TECHNOLOGY)

BY

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Under The Supervision

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DEPARTMENT OF COMPUTER SCIENCE AND DATA SCIENCE

MVGR COLLEGE OF ENGINEERING (Autonomous)

VIZIANAGARAM-535005, AP (INDIA)

(Accredited by NBA, NAAC, and Permanently Affiliated to Jawaharlal Nehru Technological University Kakinada)

CERTIFICATE



This is to certify that the project report entitled "Portfolio" being submitted by M. Kusuma Kumar bearing registered numbers 22331A4735 respectively, in partial fulfilment for the award of the degree of "Bachelor of Technology" in **Computer Science with IOT and Cybersecurity with Blockchain Technology** is a record of bonafide work done by them under my supervision during the academic year 2022-2026.

Mr. Vella Manikanta Assistant Professor Dept. of Data Engineering Dr P. Satheesh Head of the Department Dept. of Data Engineering

ACKNOWLEDGEMENTS	
supervision, time. Mr. V. Manika	cord and warmly acknowledge the continuous encouragement, invaluable ly suggestions and inspired guidance offered by our guide and our coordinator nta Assistant Professor Department of Computer Science with IOT and IVGR College of Engineering in bringing this report to a successful
Department for hi	at privilege to express our deepest gratitude to Dr. P. Satheesh , Head of the is valuable suggestions and constant motivation that greatly helped the project essfully completed.

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ABSTRACT

This project aims to design and develop a personal portfolio website using core web development technologies: HTML, CSS, and JavaScript. A portfolio website is an essential tool in today's professional landscape as it serves as a central hub where individuals can present their skills, projects, education, and contact details. The portfolio is fully responsive, adapting to different screen sizes and devices, and incorporates interactive features for enhanced user experience. This project not only helps in creating a professional online presence but also demonstrates a practical understanding of front-end development concepts.

INTRODUCTION

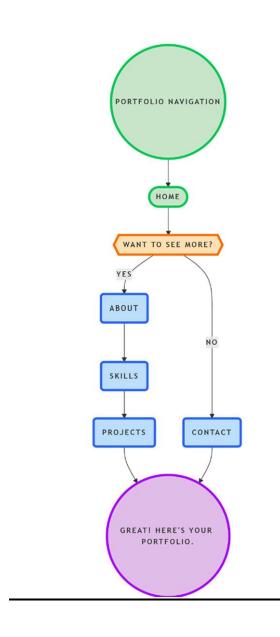
In the modern digital era, having an online presence is crucial for professionals, especially those in tech and creative fields. A personal portfolio serves multiple purposes: • It acts as an online resume. • It allows for showcasing personal and professional projects. • It provides a platform for employers or clients to easily get in touch. This project is focused on developing a personal portfolio website using HTML for structure, CSS for styling, and JavaScript for adding interactivity. The website includes sections like Home, About, Skills, Projects, Resume, and Contact. It's designed with user experience in mind, ensuring ease of navigation, mobile responsiveness, and visually appealing elements. The development process enhances knowledge in layout design, responsive frameworks, DOM manipulation, and basic client-side scripting.

OBJECTIVE

The main objectives of this project include:

- Designing a modern and user-friendly portfolio interface.
- Building a responsive layout that adapts to desktops, tablets, and mobile phones.
- Showcasing skills, projects, and personal information effectively.
- Incorporating visual elements such as animations and hover effects using CSS.
- Adding JavaScript features to improve interactivity (e.g., smooth scrolling, responsive navbar, form validation).
- Creating a professional and aesthetically pleasing platform to demonstrate web development capabilities.

FLOWCHART



IMPLEMENTATION

HTML - Structure

- Semantic HTML5 tags used: , , , , , etc.
- Navigation bar includes links to internal sections using anchor tags
- .• Each section (Home, About, Skills, Projects, Contact) is clearly separated for modular design.

CSS – Styling

- External CSS file for styling and modularity.
- Modern layout techniques like Flexbox and CSS Grid.
- Use of variables for colors and fonts to maintain design consistency.
- Implemented hover effects, transitions, media queries, and animations.
- Design inspired by minimalist principles with emphasis on readability and usability.

JavaScript – Interactivity

- Responsive hamburger menu for mobile navigation.
- Scroll-to-section functionality.
- Scroll-triggered animations for content appearance.
- Dynamic date updates (e.g., footer copyright).
- Form validation to ensure proper input before submission.

SOURCE CODE

Index.html

```
<!Doctype html>
<html lang="en">
 <head>
  <meta charset="UTF-8" />
  <meta http-equiv="X-UA-Compatible" content="IE=edge" />
  <meta name="viewport" content="width=device-width, initial-scale=1.0" />
  <title>My Portfolio</title>
  k rel="stylesheet" href="assets/swiper-bundle.min.css" />
  <link rel="stylesheet" href="assets/newcss.css" />
   rel="stylesheet"
   href="https://unicons.iconscout.com/release/v4.0.8/css/line.css"
  />
 </head>
 <body oncontextmenu="return false">
  <header class="header" id="header">
   <nav class="nav container">
    <a href="#" class="nav logo">Madem Kusuma Kumar</a>
    <div class="nav_menu" id="nav-menu">
     ul class="nav list grid">
      cli class="nav item">
       <a href="#home" class="nav link active-link">
        <i class="uil uil-estate nav icon"></i>Home
       </a>
      class="nav item">
       <a href="#about" class="nav link">
        <i class="uil uil-user nav icon"></i>About
       </a>
      <a href="#skills" class="nav link">
        <i class="uil uil-file-alt nav icon"></i>Skills
       </a>>
      cli class="nav item">
       <a href="#qualification" class="nav link">
        <i class="uil uil-briefcase-alt nav icon"></i>Qualification
       </a>
      cli class="nav item">
       <a href="#portfolio" class="nav link">
         <i class="uil uil-scenery nav icon"></i>Projects
       </a>
      cli class="nav item">
       <a href="#contact" class="nav link">
        <i class="uil uil-message nav icon"></i>Contact-Me
       </a>>
```

```
<i class="uil uil-times nav close" id="nav-close"></i>
  <div class="nav btns">
   <!-- Theme change button -->
   <i class="uil uil-moon change-theme" id="theme-button"></i>
   <div class="nav toggle" id="nav-toggle">
    <i class="uil uil-apps"></i>
   </div>
  </div>
</nav>
</header>
<!-- main-->
<main class="main">
                             ===== Home =======-->
 <section class="home section" id="home">
  <div class="home__container container grid">
   <div class="home__content grid">
    <div class="home social">
      href="https://www.linkedin.com/in/kusumakumar1729/"
      target=" blank"
      class="home social-icon"
      <i class="uil uil-linkedin-alt home icon"></i>
     </a>>
     <a
      href="https://github.com/kusumkumar1729"
      target=" blank"
      class="home social-icon"
      <i class="uil uil-github-alt home icon"></i>
     </a>
    </div>
    <div class="home img">
      class="home blob"
      viewBox="0 0 200 187"
      xmlns="http://www.w3.org/2000/svg"
      xmlns:xlink="http://www.w3.org/1999/xlink"
       <image
         class="home blob-img"
        x="-79"
        y="-46"
        xlink:href="assets/img/Pro.jpg"
       />
      </g>
     </svg>
```

```
</div>
      <div class="home data">
       <h1 class="home title">Hi, I'm Kusuma Kumar</h1>
       <h3 class="home subtitle">
        Computer Science Engineering Student
       </h3>
       A third-year undergraduate engineering student at
        <strong>MVGR College Engineering </strong>, Vizianagaram.
       <a href="#contact" class="button button--flex">
        Contact me<i class="uil uil-message button icon"></i>
       </a>
      </div>
     </div>
     <div class="home scroll">
      <a href="#about" class="home | scroll-button button--flex">
       <i class="uil uil-mouse-alt home scroll-mouse"></i>
       <span class="home scroll-name">Scroll down</span>
       <i class="uil uil-arrow-down home scroll-arrow"></i>
      </a>
     </div>
    </div>
   </section>
           <section class="about section" id="about">
    <h2 class="section title">About Me</h2>
    <span class="section subtitle">My introduction</span>
    <div class="about container container grid">
     <img src="assets\img\about.jpg" alt="" class="about img" />
     <div class="about data">
      I'm a third-year CSE undergraduate, passionate about technology and an enthusiastic learner.
I have a self-motivated and can-do attitude, thriving in challenging and dynamic environments.
Seeking a competitive position to enhance my skills and contribute to a professional organization. I'm
very much passionate to learn new stuff that interests me and can help me to get better.
      <div class="about info">
       <div>
        <span class="about info-title">9.20</span>
        <span class="about info-name">Aggregate <br />CGPA</span>
       </div>
       <div>
        <span class="about info-title">04+</span>
        <span class="about info-name"</pre>
```

Projects</span

```
</div>
    < div >
     <span class="about info-title">01+</span>
     <span class="about info-name">Months <br/> />experience/span>
    </div>
   </div>
   <div class="about buttons">
    <a download="" href="assets\MyCV.pdf" class="button button--flex">
     Download CV<i class="fas fa-download button icon"></i>
    </a>>
   </div>
  </div>
 </div>
</section>
             ----- SKILLS ----->
<section class="skills section" id="skills">
 <h2 class="section__title">Skills</h2>
 <span class="section_ subtitle">My technical level</span>
 <div class="skills container container grid">
  < div >
   <!--===
                ----- Skill 1 ----->
   <div class="skills content skills open">
    <div class="skills" header">
     <i class="fas fa-pencil-ruler skills icon"></i>
     < div>
      <h1 class="skills_title">Programming Languages</h1>
     <i class="uil uil-angle-down skills" arrow"></i>
    </div>
    <div class="skills list grid">
     <div class="skills" data">
      <div class="skills" titles">
       <h3 class="skills" name">C</h3>
      </div>
     </div>
      <div class="skills data">
       <div class="skills" titles">
         <h3 class="skills" name">Python</h3>
       </div>
      </div>
      <div class="skills data">
       <div class="skills" titles">
        <h3 class="skills" name">C++</h3>
```

```
</div>
       </div>
       <div class="skills data">
        <div class="skills titles">
         <h3 class="skills" name">Java</h3>
        </div>
       </div>
       <div class="skills data">
        <div class="skills" titles">
         <h3 class="skills" name">JavaScript</h3>
        </div>
     </div>
    </div>
   </div>
     </div>
     <div class="skills_data">
       <div class="skills titles">
        <h3 class="skills" name">Flask</h3>
       </div>
     </div>
     <div class="skills data">
       <div class="skills titles">
        <h3 class="skills" name">BootStrap</h3>
       </div>
     </div>
    </div>
   </div>
  </div>
 </div>
</section>
                        ===== Qualifications ==
<section
 class="qualification section service section"
 id="qualification"
 <h2 class="section title">Qualification</h2>
 <span class="section subtitle">My personal journey</span>
  class="qualification container container grid services container"
  <div class="qualification tabs">
    class="qualification__button button--flex qualification__ active"
    data-target="#education"
```

```
<i class="uil uil-graduation-cap qualification icon"></i>
       Education
      </div>
     </div>
     <div class="qualification sections">
      <!--=== Qualification Content 1 =====-->
      <div
       class="qualification content qualifiation active services content"
       data-content
       id="education"
             \leq i
              class="uil uil-check-circle services moda-icon"
             ></i>>
             >
              Subjects studied: Science, Maths, English,
              Social Studies, Telugu, Hindi.
             class="uil uil-check-circle services moda-icon"
             ></i>
             Scored 100%
            class="uil uil-check-circle services moda-icon"
             Participated in Various Math Olympiad Competitions & Also in English
Clubs
            </div>
         </div>
        </div>
        <div>
         <span class="qualification rounder"></span>
         <span class="qualification line"></span>
        </div>
       </div>
       <!--=== Qualification 2 ====-->
       <div class="qualification data">
        <div></div>
        < div>
         <span class="qualification rounder"></span>
         <span class="qualification line"></span>
        </div>
        <div>
         <h3 class="qualification title">Class 12th</h3>
```

```
<span class="qualification subtitle"</pre>
  >Sri Chaitanya Junior College</span
  <div class="qualification calender">
   <i class="uil uil-calendar-alt"></i>
   - 2022
  </div>
  <span
   class="button button--flex button--small button--link services" button"
   View More
   <i class="uil uil-arrow-right button icon"></i>
  </span>
  <div class="services modal">
   <div class="services modal-content">
    <h4 class="services modal-title">
     Class 12th Summary:
    </h4>
    <i class="uil uil-times services modal-close"></i>
    ul class="services modal-services grid">
     <ii
       class="uil uil-check-circle services moda-icon"
      ></i>
      >
       Subjects studied: Physics, Chemistry, Maths,
       English, Sanskrit.
      class="uil uil-check-circle services moda-icon"
      Scored 89.3%
     </div>
  </div>
</div>
</div>
<!--=== Oualification 3 =====->
<div class="qualification data">
 < div >
  <h3 class="qualification title">College</h3>
  <span class="qualification subtitle"</pre>
   >Maharaj Vijayram Gajapathi raj College Enginnering, Vizianagaram</span -icon"
      ></i>
      >
       Studying core subjects of CSE including DSA,
       Database Management Systems, Design analysis and algorithm, Operating
       systems, and Computer architecture and organisation, Computer Networks .
```

```
class="uil uil-check-circle services modal-icon"
            Scored an aggregate of 9.20 CGPA till now.
           class="uil uil-check-circle services modal-icon"
            ></i>
            >
             Actively Participated in many Clubs.
            class="uil uil-check-circle services modal-icon"
            ></i>
            >
             Participated in AlgoAscent conducted by JNTU.
            class="uil uil-check-circle services modal-icon"
            ></i>
            >
             Also Completed NPTEL Coures during 6th Semister.
           </div>
        </div>
       </div>
       < div >
        <span class="qualification__rounder"></span>
        <!--<span class="qualification__line"></span>-->
       </div>
      </div>
     </div>
    </div>
   </div>
  </section>
</body>
</html>
Styles.css
:root {
 --header-height: 3rem;
```

<ii

```
/*=======*/
/* Change Favorite color */
--hue-color: 240;
/*====== HSL Color mode ======*/
--first-color: hsl(var(--hue-color), 69%, 61%);
--first-color-second: hsl(var(--hue-color), 69%, 61%);
--first-color-alt: hsl(var(--hue-color), 57%, 53%);
--first-color-lighter: hsl(var(--hue-color), 92%, 85%);
--title-color: hsl(var(--hue-color), 8%, 15%);
--text-color: hsl(var(--hue-color), 8%, 45%);
--text-color-light: hsl(var(--hue-color), 8%, 65%);
--input-color: hsl(var(--hue-color), 70%, 96%);
--body-color: hsl(var(--hue-color), 60%, 99%);
--container-color: #fff;
--scroll-bar-color: hsl(var(--hue-color), 12%, 90%);
--scroll-thumb-color: hsl(var(--hue-color), 12%, 80%);
/*====== Font and typography ======*/
--body-font: "Poppins", sans-serif;
--big-font-size: 2rem;
--h1-font-size: 1.5rem;
--h2-font-size: 1.25rem;
--h3-font-size: 1.125rem;
--normal-font-size: 0.938rem;
--small-font-size: 0.813rem;
--smaller-font-size: 0.75rem;
     =======================*/
--font-medium: 500;
--font-semi-bold: 600;
     ===== Margin Bottom =====
/* .25rem = 4px, .5rem=8px, .75rem = 12px*/
--mb-0-25: 0.25rem;
--mb-0-5: 0.5rem;
--mb-0-75: 0.75rem;
--mb-1: 1rem;
--mb-1-5: 1.5rem;
--mb-2: 2rem;
--mb-2-5: 2.5rem;
--mb-3: 3rem;
/*======= z index ======*/
--z-tooltip: 10;
--z-fixed: 100;
--z-modal: 1000;
```

```
/* Font Size for larger devices */
@media screen and (min-width: 968px) {
 :root {
  --big-font-size: 3rem;
  --h1-font-size: 2.25rem;
  --h2-font-size: 1.5rem;
  --h3-font-size: 1.25rem;
  --normal-font-size: 1rem;
  --small-font-size: 0.875rem;
  --smaller-font-size: 0.813rem;
            ======= Variables Dark Theme =======*/
body.dark-theme {
 /*====== HSL Color mode ======*/
 --first-color-second: hsl(var(--hue-color), 30%, 8%);
 --title-color: hsl(var(--hue-color), 8%, 95%);
 --text-color: hsl(var(--hue-color), 8%, 75%);
 --input-color: hsl(var(--hue-color), 29%, 16%);
 --body-color: hsl(var(--hue-color), 28%, 12%);
 --container-color: hsl(var(--hue-color), 29%, 16%);
 --scroll-bar-color: hsl(var(--hue-color), 12%, 48%);
 --scroll-thumb-color: hsl(var(--hue-color), 12%, 36%);
.nav btns {
display: flex;
align-items: center;
.change-theme {
 font-size: 1.25rem;
 color: var(--title-color);
 margin-right: var(--mb-1);
 cursor: pointer;
.change-theme:hover {
color: var(--first-color);
    ======Base =====*/
box-sizing: border-box;
padding: 0;
margin: 0;
```

```
html {
 scroll-behavior: smooth;
body {
 margin: 0 0 var(--header-height) 0;
 font-family: var(--body-font);
 font-size: var(--normal-font-size);
 background-color: var(--body-color);
 color: var(--text-color);
h1,
h2,
h3,
h4 {
 color: var(--title-color);
 font-weight: var(--font-semi-bold);
ul {
 list-style: none;
 text-decoration: none;
img {
 max-width: 100%;
 height: auto;
.section {
 padding: 2rem 0 4rem;
.section title {
 font-size: var(--h1-font-size);
.section subtitle {
 display: block;
 font-size: var(--small-font-size);
 margin-bottom: var(--mb-3);
.section_title,
.section subtitle {
 text-align: center;
.container {
 max-width: 768px;
 margin-left: var(--mb-1-5);
 margin-right: var(--mb-1-5);
```

```
}
.grid {
 display: grid;
 gap: 1.5rem;
.header {
 width: 100%;
 position: fixed;
 bottom: 0;
 left: 0;
 z-index: var(--z-fixed);
 background-color: var(--body-color);
.nav {
 max-width: 968px;
 height: var(--header-height);
 display: flex;
 justify-content: space-between;
 align-items: center;
.nav logo,
.nav toggle {
 color: var(--title-color);
 font-weight: var(--font-medium);
.nav logo:hover {
 color: var(--first-color);
.nav__toggle {
 font-size: 1.1rem;
 cursor: pointer;
.nav toggle:hover {
 color: var(--first-color);
@media screen and (max-width: 767px) {
 .nav menu {
  position: fixed;
  bottom: -100%;
  left: 0;
  width: 100%;
  background-color: var(--body-color);
  padding: 2rem 1.5rem 4rem;
  box-shadow: 0 -1px 4px rgba(0, 0, 0, 0.15);
  border-radius: 1.5rem 1.5rem 0 0;
  transition: 0.3s;
```

```
.nav list {
 grid-template-columns: repeat(3, 1fr);
 gap: 2rem;
.nav link {
 display: flex;
 flex-direction: column;
 align-items: center;
 font-size: var(--small-font-size);
 color: var(--title-color);
 font-weight: var(--font-medium);
.nav link:hover {
 color: var(--first-color);
.nav icon {
 font-size: 1.2rem;
.nav icon {
 font-size: 1.2rem;
.nav__close {
 position: absolute;
 right: 1.3rem;
 bottom: 0.5rem;
 font-size: 1.5rem;
 cursor: pointer;
 color: var(--first-color);
.nav close:hover {
 color: var(--first-color-alt);
/* Show Menu */
.show-menu {
 bottom: 0;
/* Active Link */
.active-link {
 color: var(--first-color);
/* Change Background header */
```

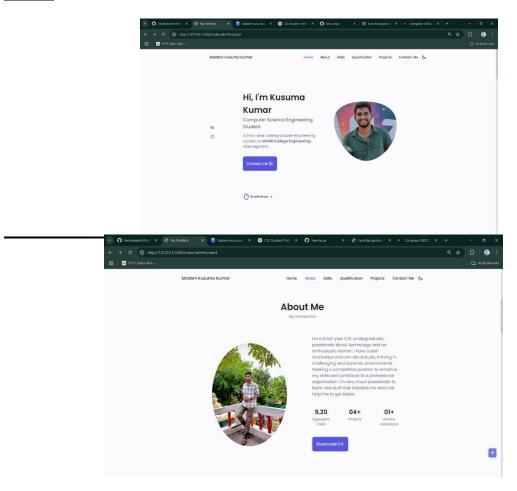
```
.scroll-header {
 box-shadow: 0 -1px 4px rgba(0, 0, 0, 0.15);
/*=====HOME=====*/
.home container {
 gap: 1rem;
.home__content {
 grid-template-columns: 0.5fr 3fr;
 padding-top: 3.5rem;
 align-items: center;
.home social {
 display: grid;
 grid-template-columns: max-content;
 row-gap: 1rem;
.home social-icon {
 font-size: 1.05rem;
 color: var(--first-color);
.home social-icon:hover {
 color: var(--first-color-lighter);
.home blob {
 width: 200px;
 fill: var(--first-color);
 /* fill: hsl(69, 69%, 61%); */
.home blob-img {
 width: 215%;
 height: 115%;
 padding-left: 20px;
 transform: translateY(24px)
.home data {
 grid-column: 1/3;
.home title {
 font-size: var(--big-font-size);
.home subtitle {
 font-size: var(--h3-font-size);
 color: var(--text-color);
 font-weight: var(--font-medium);
```

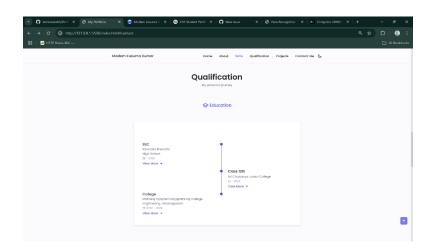
```
margin-bottom: var(--mb-0-75);
.home description {
 margin-bottom: var(--mb-2);
.portfolio scroll {
 display: flex;
 justify-content: center;
 align-items: center;
 margin-top: 15px;
 cursor: pointer;
.home scroll {
 display: none;
.home scroll-button {
 color: var(--first-color);
 transition: 0.3s;
.home scroll-button:hover {
 transform: translateY(0.25rem);
.home scroll-mouse {
 font-size: 2rem;
.home_scroll-name {
 font-size: var(--small-font-size);
 color: var(--title-color);
 font-weight: var(--font-medium);
 margin-right: var(--mb-0-25);
.home scroll-arrow {
 font-size: 1.25rem;
                         == Buttons ==
.button {
 display: inline-block;
 background-color: var(--first-color);
 color: #fff;
 padding: 1rem;
 margin-bottom: 10px;
 border-radius: 0.5rem;
 font-weight: var(--font-medium);
.button:hover {
 background-color: var(--first-color-alt);
```

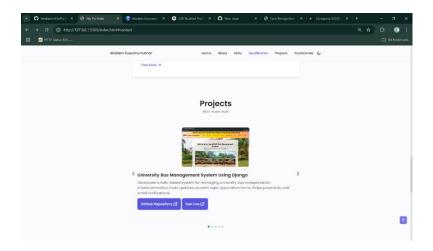
```
.button icon {
 font-size: 1.25rem;
 margin-left: 0.25rem;
 transition: 0.3s;
.button--white {
 background-color: #fff;
 color: var(--first-color);
.button--white:hover {
 background-color: #fff;
.button--flex {
 display: inline-flex;
 align-items: center;
.button--small {
 padding: 0.75rem 1rem;
.button--link {
 padding: 0;
 background-color: transparent;
 color: var(--first-color);
.button--link:hover {
 background-color: transparent;
 color: var(--first-color-alt);
                               = About =
.about img {
 width: 170px;
 border-radius: 500%;
 justify-self: center;
 align-self: center;
 /* border: 1px solid #fff; */
.about description {
 text-align: center;
 margin-bottom: var(--mb-2-5);
.about info {
 display: flex;
```

```
justify-content: space-evenly;
margin-bottom: var(--mb-2-5);
}
```

Output







RESULT

The outcome of this project is a fully functional, visually engaging, and mobile-responsive personal portfolio website. Key results include:

- A clean and professional interface that reflects the developer's personality and skills.
- Smooth navigation with animated transitions enhancing user interaction.
- Responsiveness across various screen sizes (mobile, tablet, desktop).
- A contact form that validates inputs and can be integrated with backend services or tools like EmailJS or Formspree (optional).
- Code quality maintained through consistent naming conventions and organized structure.

Screenshots of the final product (add if needed):

- Home Page View
- Projects Section
- Contact Form Validation
- Mobile Navigation Menu

CONCLUSION

The personal portfolio website project effectively showcases the practical use of HTML, CSS, and JavaScript in building a real-world application. It reinforces the understanding of:

- Structuring web pages using semantic HTML.
- Designing attractive and responsive layouts using CSS techniques.
- Enhancing user experience with JavaScript-driven interactivity.

Additionally, this project encourages good coding practices such as separation of concerns (HTML/CSS/JS), responsive design strategies, and attention to user experience. It serves as a strong foundation for future web development work and can be extended with features such as blog integration, dark mode, or CMS integration.

REFERENCES

• Mozilla Developer Network (MDN)

https://developer.mozilla.org

• W3Schools

https://www.w3schools.com

• CSS Tricks

https://css-tricks.com