SEVA SADAN'S

R. K. TALREJA COLLEGE

OF

ARTS, SCIENCE & COMMERCE

ULHASNAGAR – 421 003

CERTIFICATE

This is to certify that Mr./Ms. <u>Sania Hafiz Shaikh</u> of F.Y. Information Technology (FYIT) Roll No. 2541045 has satisfactorily completed the Web Designing Mini Project entitled <u>Portfolio with Professional Branding UI Design</u> during the academic year 2025 – 2026, as a part of the practical requirement. The project work is found to be satisfactory and is approved for submission.

PROF. INCHARGE   **HEAD OF DEPT**

<u>**Sahil Shukla**</u>   <u>**Laxmi jeswani**</u>

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Portfolio with Professional Branding UI Design

1. INTRODUCTION

The Personal Portfolio Website is a responsive front-end web application designed to present an individual's technical profile, skills, and projects in a clear, organized, and professional format. In today's digital environment, a portfolio website acts as a personal identity platform where developers can demonstrate their capabilities beyond resumes or written descriptions. This project focuses on building such a platform using modern web technologies while emphasizing usability, responsiveness, and interactive design.

The website is developed using HTML for structural layout, CSS for styling and responsive presentation, and JavaScript for interactivity and dynamic behavior. Together, these technologies create a layered system that separates structure, appearance, and functionality. This approach improves maintainability and allows future expansion without redesigning the entire system.

A key objective of this project is to apply real-world front-end development practices. The interface is divided into logical sections such as navigation, profile introduction, skills overview, project showcase, and contact details. Each section is designed to guide the user smoothly through the content. Interactive features like light and dark theme switching, customizable accent colors, smooth scrolling navigation, and responsive mobile behavior enhance the user experience while demonstrating practical JavaScript implementation.

From a design perspective, the system prioritizes readability, visual consistency, and accessibility. CSS variables are used to maintain consistent theming across the website, while responsive layouts ensure compatibility with different screen sizes. This reflects modern web design standards where adaptability and performance are essential.

Beyond presentation, the portfolio serves as a demonstration of programming discipline. Concepts such as modular structure, separation of concerns, event-driven scripting, and browser-based data persistence are incorporated. These elements showcase not only visual

design skills but also logical thinking and software organization.Overall,

this project represents a practical application of front-end web development concepts to create a functional, customizable, and user-friendly portfolio platform. It highlights both technical knowledge and design awareness, making it a strong foundation for future enhancements and professional use.

2. REQUIREMENT SPECIFICATION

Functional Requirements

The system must:

- Display personal information in a structured format
- Provide navigation between sections (Home, About, Skills, Projects, Contact)
- Allow users to toggle between light and dark themes
- Enable color customization through a theme picker
- Display featured projects with GitHub links
- Support smooth scrolling navigation
- Work correctly on desktop and mobile devices

Non-Functional Requirements

- Fast loading and responsive performance
- Clean and modern user interface
- Cross-browser compatibility
- Maintainable and readable code structure

Software Requirements

- Web browser (Chrome, Edge, Firefox, etc.)
- Code editor (VS Code recommended)

Hardware Requirements

- Standard computer or laptop
- Internet connection for GitHub links and fonts

3. SYSTEM DESIGN

The system design of the portfolio website is based on a modular front-end architecture that separates structure, presentation, and behavior. This separation makes the website easier to maintain, scale, and update while ensuring smooth interaction for users. Each part of the system is designed to work independently but integrate seamlessly to deliver a consistent browsing experience.

a. Architectural Design

The system follows a **client-side front-end architecture**, where all processing occurs within the user's browser. The website is built using three core layers:

- **Structure Layer (HTML)**
  Defines the semantic layout of sections such as navigation, hero profile, skills, projects, and contact information.
- **Presentation Layer (CSS)**
  Controls styling, theming, layout responsiveness, animations, and visual consistency using CSS variables.
- **Behavior Layer (JavaScript)**
  Handles interactivity including theme switching, color customization, navigation toggling, and smooth scrolling.

This layered approach ensures separation of concerns, maintainability, and scalability.

b. Module Design

The system is divided into logical modules:

Navigation Module

Provides menu links for smooth section transitions. Includes mobile navigation toggle functionality.

Theme Management Module

Implements light and dark mode switching using CSS variables and browser storage to remember user preference.

Color Customization Module

Allows dynamic theme color selection. Updates UI colors in real time for better personalization.

Content Display Module

Displays structured information including profile details, skills, and featured projects.

Responsive Layout Module

Ensures compatibility across devices using grid and flexbox layouts.

c. User Interface Design

The interface is designed with usability and clarity in mind:

- Clean section separation
- Card-based project display
- Hover animations and visual feedback
- Consistent typography and spacing
- Adaptive layout for desktop and mobile screens

The UI emphasizes readability, accessibility, and modern design principles.

d. Interaction Flow

1. User loads the website
2. Default theme and color preferences are applied
3. Navigation allows smooth scrolling between sections
4. User may toggle theme or customize color
5. Project links redirect to external repositories

This flow ensures intuitive interaction without unnecessary complexity.

e. Data Handling Design

The system does not rely on a database. Instead:

- Static content is embedded in HTML
- User preferences (theme/color) are stored in browser local storage

This reduces overhead while maintaining personalization.

f. Responsiveness Strategy

Media queries and flexible layouts allow:

- Mobile-friendly navigation
- Adaptive content resizing
- Proper spacing and alignment across screen sizes

This guarantees consistent performance across devices.

g. Structural Design

The structural design defines how the content is organized within the webpage. The website is divided into clearly defined sections so users can easily navigate and understand the information layout. Logical separation improves readability and helps maintain clean code organization.

Major sections include:

- Header and navigation bar
- Hero section (profile introduction)
- About section
- Skills section
- Projects section
- Contact section

Example:

When a user clicks the "Projects" link in the navigation bar, the page smoothly scrolls to the projects section. This shows how structural separation supports intuitive navigation.

h. UI Design

The user interface design focuses on visual consistency, responsiveness, and user comfort. CSS styling ensures that elements remain aligned, readable, and visually appealing across different screen sizes. Reusable styling variables maintain theme consistency throughout the interface.

Key UI elements include:

- CSS variables for consistent color theming
- Grid and flex layouts for responsive structure
- Interactive buttons and hover feedback
- Theme customization controls

Example:

Changing the theme color using the color picker instantly updates buttons, highlights, and borders across the website, demonstrating centralized styling control.

i Interaction Design

Interaction design controls how users engage with the website. JavaScript manages dynamic behavior that improves usability and responsiveness. These interactive features allow personalization and smooth navigation without reloading the page.

JavaScript-driven interactions include:

- Light and dark theme switching
- Color picker functionality
- Mobile navigation toggle
- Smooth scrolling between sections
- Header style adjustment on scroll

Example:

When a user switches to dark mode, the background and text colors update immediately and the preference is saved, ensuring the same theme appears during the next visit.

Overall, this system design supports scalability, clean organization, and an engaging user experience by combining structured layout, responsive UI design, and interactive functionality.

4. SYSTEM IMPLEMENTATION

The implementation is divided into three major parts:
HTML Implementation
Defines the website structure including:
- Navigation menu
- Sections for profile, skills, and projects
- Contact information
- External resource linking

HTML ensures semantic structure and accessibility.
CSS Implementation
Handles visual styling:
- Theme variables
- Light/dark mode support
- Responsive layouts
- Animation effects
- Card-based UI styling

CSS makes the interface modern and adaptable to different screen sizes.

JavaScript Implementation
Adds interactivity:
- Theme toggle using local storage
- Color picker with dynamic CSS variable updates
- Mobile menu behavior
- Smooth scrolling navigation
- Scroll-based header effects

JavaScript enhances usability and user engagement.

Code:-

```
<!DOCTYPE html>
<html lang="en">

<head>
   <meta charset="UTF-8">
   <meta name="viewport" content="width=device-width, initial-
scale=1.0">
   <title>Sania Shaikh - Web Developer Portfolio</title>
```

```html
    <!-- Google Fonts -->
    <link
href="https://fonts.googleapis.com/css2?family=Poppins:wght@300;40
0;500;600;700&display=swap"
      rel="stylesheet">
    <!-- External CSS -->
    <link rel="stylesheet" href="style.css">
</head>

<body>

 <!-=================HEADER=================-->
  <header>
    <nav>
      <a href="#" class="logo">Sania Shaikh</a>
      <ul class="nav-links" id="navLinks">
        <li><a href="#home">Home</a></li>
        <li><a href="#about">About</a></li>
        <li><a href="#skills">Skills</a></li>
        <li><a href="#projects">Projects</a></li>
        <li><a href="#contact">Contact</a></li>
      </ul>
      <div class="controls">
        <!-- Theme Toggle -->
        <button class="theme-toggle" id="themeToggle" aria-
label="Toggle theme"></button>
         <!-- Color Picker -->
         <div class="color-picker-container">
           <button class="color-picker-btn" id="colorPickerBtn">
             <span class="color-dot"></span>
             <span>Theme</span>
           </button>
           <div class="color-options" id="colorOptions">
             <div class="color-option active" data-color="#6366f1"
style="background: #6366f1;"></div>
             <div class="color-option" data-color="#8b5cf6"
style="background: #8b5cf6;"></div>
             <div class="color-option" data-color="#ec4899"
style="background: #ec4899;"></div>
```

```html
                <div class="color-option" data-color="#f59e0b"
style="background: #f59e0b;"></div>
                <div class="color-option" data-color="#10b981"
style="background: #10b981;"></div>
                <div class="color-option" data-color="#06b6d4"
style="background: #06b6d4;"></div>
                <div class="color-option" data-color="#ef4444"
style="background: #ef4444;"></div>
                <div class="color-option" data-color="#3b82f6"
style="background: #3b82f6;"></div>
                <div class="color-option" data-color="#a855f7"
style="background: #a855f7;"></div>
            </div>
          </div>

          <!-- Mobile Menu Toggle -->
          <button class="mobile-toggle"
id="mobileToggle">☰</button>
        </div>
      </nav>
    </header>

    <!-- ==================== HERO SECTION
==================== -->
    <section class="hero" id="home">
      <div class="hero-content">
        <img src="profile.jpg.jpeg" alt="Sania Shaikh Profile"
class="profile-image">

        <h1>Sania Shaikh</h1>
        <p class="role">Web Developer / OOPS Programmer</p>
        <div class="hero-buttons">
          <a href="#projects" class="btn btn-primary">View
Projects</a>
          <a href="https://github.com/SANIA682" target="_blank"
class="btn btn-secondary">
            <svg width="20" height="20" viewBox="0 0 24 24"
fill="currentColor">
```

```html
<path d="M12 0c-6.626 0-12 5.373-12 12 0 5.302 3.438 9.8 8.207
11.387.599.111.793-.261.793-.577v-2.234c-3.338.726-4.033-1.416-
4.033-1.416-.546-1.387-1.333-1.756-1.333-1.756-1.089-.745.083-
.729.083-.729 1.205.084 1.839 1.237 1.839 1.237 1.07 1.834 2.807
1.304 3.492.997.107-.775.418-1.305.762-1.604-2.665-.305-5.467-
1.334-5.467-5.931 0-1.311.469-2.381 1.236-3.221-.124-.303-.535-
1.524.117-3.176 0 0 1.008-.322 3.301 1.23.957-.266 1.983-.399 3.003-
.404 1.02.005 2.047.138 3.006.404 2.291-1.552 3.297-1.23 3.297-
1.23.653 1.653.242 2.874.118 3.176.77.84 1.235 1.911 1.235 3.221 0
4.609-2.807 5.624-5.479 5.921.43.372.823 1.102.823 2.222v3.293c0
.319.192.694.801.576 4.765-1.589 8.199-6.086 8.199-11.386 0-6.627-
5.373-12-12-12z" />
            </svg>
            GitHub
          </a>
        </div>
      </div>
    </section>

    <!-- ==================== ABOUT SECTION
==================== -->
    <section class="about" id="about">
      <h2 class="section-title">About Me</h2>
      <div class="about-content">
        <p>
          Hello! I'm Sania Shaikh, a passionate first-year Information
Technology student with a strong foundation
          in
          Object-Oriented Programming and web development. I enjoy
building practical, user-friendly applications
          that solve real-world problems.
        </p>
        <p>
          My journey in programming started with a curiosity about
how software works, and has evolved into a deep
          interest in creating efficient, well-structured systems. I'm
```

```html
            constantly learning new technologies and
                applying best practices in software development.
            </p>


            <p>
                When I'm not coding, I enjoy exploring new programming
paradigms, contributing to open-source projects,
                and staying updated with the latest trends in technology.
            </p>
        </div>
    </section>


    <!-- ==================== SKILLS SECTION
==================== -->
    <section class="skills" id="skills">
        <h2 class="section-title">Skills & Technologies</h2>
        <div class="skills-grid">
            <div class="skill-card">
                <h3>Programming Languages</h3>
                <div class="skill-pills">
                    <span class="pill">C</span>
                    <span class="pill">C++</span>
                    <span class="pill">JavaScript</span>
                </div>
            </div>


            <div class="skill-card">
                <h3>Web Development</h3>
                <div class="skill-pills">
                    <span class="pill">HTML5</span>
                    <span class="pill">CSS3</span>
                    <span class="pill">JavaScript</span>
                </div>
            </div>
            <div class="skill-card">
                <h3>Database & SQL</h3>
                <div class="skill-pills">
                    <span class="pill">SQL</span>
                    <span class="pill">PL/SQL</span>
```

```html
            <span class="pill">MySQL</span>

            <span class="pill">Database Design</span>
          </div>
        </div>
        <div class="skill-card">
          <h3>Object-Oriented Programming</h3>
          <div class="skill-pills">
            <span class="pill">OOP Concepts</span>
            <span class="pill">Encapsulation</span>
            <span class="pill">Inheritance</span>
            <span class="pill">Polymorphism</span>
            <span class="pill">Abstraction</span>
          </div>
        </div>
        <div class="skill-card">
          <h3>Tools & Technologies</h3>
          <div class="skill-pills">
            <span class="pill">Git</span>
            <span class="pill">GitHub</span>
            <span class="pill">VS Code</span>
          </div>
        </div>
      </div>
    </section>
    <!-- ===================== PROJECTS SECTION
===================== -->
    <section class="projects" id="projects">
      <h2 class="section-title">Featured Projects</h2>
      <div class="projects-grid">
        <!-- Project 1 -->
        <div class="project-card">
          <div class="project-header">
            <h3>Travel Reservation System</h3>
            <p>OOP-based Booking Platform</p>
          </div>
          <div class="project-body">
            <p style="text-align: justify;">
                A comprehensive travel reservation system built using
Object-Oriented Programming principles.
```

```html
                    Features include flight booking, hotel reservations, and
itinerary management with inheritance
                    and polymorphism implementation.
                </p>
                <div class="project-tech">
                    <span class="tech-tag">C++</span>
                    <span class="tech-tag">OOP</span>
                    <span class="tech-tag">Collections</span>
                    <span class="tech-tag">File I/O</span>
                </div>
                <div class="project-footer">
                    <a class="project-link"
                        href="https://github.com/SANIA682/oops_with_c-
/tree/main/travel%20reservation%20system"
                        target="_blank" rel="noopener noreferrer">◎ View
on GitHub</a>
                </div>
            </div>
        </div>

        <!-- Project 2 -->
        <div class="project-card">
            <div class="project-header">
                <h3>Gym Management System</h3>
                <p>Efficient Fitness Center Management</p>
            </div>
            <div class="project-body">
                <p style="text-align: justify;">
                    An efficient gym management system that handles
member registration,
                    workout plans, and equipment tracking. , and database
management concepts.
                </p>
                <div class="project-tech">
                    <span class="tech-tag">C++</span>
                    <span class="tech-tag">OOP</span>
                    <span class="tech-tag">Collections</span>
                    <span class="tech-tag">File I/O</span>
                </div>
```

```html
            <div class="project-footer">
                <a class="project-link"
                    href="https://github.com/SANIA682/sania/tree/main/
gym%20mange/gym%20manageme%2Cent"
                    target="_blank" rel="noopener noreferrer">⦻ View
on GitHub</a>
            </div>
        </div>
    </div>
    <!-- Project 3 -->
    <div class="project-card">
        <div class="project-header">
            <h3>Web Development Projects</h3>
            <p>Interactive Web Projects</p>
        </div>
        <div class="project-body">
            <p style="text-align: justify;">
                HTML and CSS create the structure and visual design of
web pages, ensuring responsive and
                user-friendly interfaces.
                JavaScript and jQuery add interactivity, while JSON
enables efficient data handling for dynamic
                web applications.
            </p>
            <div class="project-tech">
                <span class="tech-tag">HTML</span>
                <span class="tech-tag">CSS</span>
                <span class="tech-tag">JavaScript</span>
                <span class="tech-tag">JQuery</span>
                <span class="tech-tag">JSON</span>
            </div>
            <div class="project-footer">
                <a class="project-link"
href="https://github.com/SANIA682/WEB_PRACTICALS"
target="_blank"   rel="noopener noreferrer">⦻ View on GitHub</a>
            </div>
        </div>
    </div>
    </div>
</section>
```

```html
<!-- ==================== CONTACT SECTION
==================== -->
<section class="contact" id="contact">
    <h2 class="section-title">Get In Touch</h2>
    <div class="contact-content">
        <p style="color: var(--text-secondary); margin-bottom: var(--spacing-md); font-size: 1.1rem;">
            I'm always open to new opportunities, collaborations, and conversations about technology. Feel free to
            reach out!
        </p>
        <div class="contact-info">
            <div class="contact-item">
                <h3>Email</h3>
                <a href="mailto:hayatshk0110@gmail.com">hayatshk0110@gmail.com</a>
            </div>
            <div class="contact-item">
                <h3>GitHub</h3>
                <a href="https://github.com/SANIA682" target="_blank">github.com/SANIA682</a>
            </div>
        </div>
    </div>
</section>
<!-- ==================== FOOTER
==================== -->
<footer>
    <p>&copy; 2025 Sania Shaikh. All rights reserved. Built with passion and code.</p>
</footer>
<!-- External JavaScript -->
<script src="script.js"></script>
</body>
</html>
```

```css
/* ==================== CSS VARIABLES
==================== */
:root {
  /* Light Mode Colors */
  --primary-color: #6366f1;
  --secondary-color: #8b5cf6;
  --accent-color: #ec4899;
  --bg-primary: #ffffff;
  --bg-secondary: #f9fafb;
  --bg-card: #ffffff;
  --text-primary: #1f2937;
  --text-secondary: #6b7280;
  --border-color: #e5e7eb;
  --shadow: rgba(0, 0, 0, 0.1);
  --shadow-lg: rgba(0, 0, 0, 0.15);

  /* Spacing */
  --spacing-xs: 0.5rem;
  --spacing-sm: 1rem;
  --spacing-md: 2rem;
  --spacing-lg: 4rem;
  --spacing-xl: 6rem;

  /* Border Radius */
  --radius-sm: 0.5rem;
  --radius-md: 1rem;
  --radius-lg: 1.5rem;
  --radius-full: 9999px;

  /* Transitions */
  --transition: all 0.3s ease;
}
/* Dark Mode Colors */
[data-theme="dark"] {
  --bg-primary: #0f172a;
  --bg-secondary: #1e293b;
  --bg-card: #1e293b;
  --text-primary: #f1f5f9;
  --text-secondary: #cbd5e1;
  --border-color: #334155;
```

```css
    --shadow: rgba(0, 0, 0, 0.3);
    --shadow-lg: rgba(0, 0, 0, 0.5);
}

/* ==================== KEYFRAME ANIMATIONS
==================== */
@keyframes blink {
    0%,
    100% {
        background-color: var(--bg-secondary);
        box-shadow: 0 0 0 0 var(--primary-color);
    }

    50% {
        background-color: var(--primary-color);
        color: var(--bg-card);
        box-shadow: 0 0 8px 2px var(--primary-color);
    }
}
/* ==================== GLOBAL STYLES
==================== */
* {
    margin: 0;
    padding: 0;
    box-sizing: border-box;
}
html {
    scroll-behavior: smooth;
}
body {
    font-family: 'Poppins', sans-serif;
    background-color: var(--bg-primary);
    color: var(--text-primary);
    line-height: 1.6;
    transition: background-color 0.3s ease, color 0.3s ease;
}
/* ==================== HEADER & NAVIGATION
==================== */
header {
    position: fixed;
```

```css
    top: 0;
    left: 0;
    right: 0;
    background-color: var(--bg-card);
    border-bottom: 1px solid var(--border-color);
    padding: 1rem 0;
    z-index: 1000;
    transition: var(--transition);
    box-shadow: 0 2px 10px var(--shadow);
}
nav {
    max-width: 1200px;
    margin: 0 auto;
    padding: 0 var(--spacing-md);
    display: flex;
    justify-content: space-between;
    align-items: center;
}
.logo {
    font-size: 1.5rem;
    font-weight: 700;
    color: var(--primary-color);
    text-decoration: none;
    transition: var(--transition);
}
.logo:hover {
    color: var(--accent-color);
}
.nav-links {
    display: flex;
    gap: var(--spacing-md);
    list-style: none;
    align-items: center;
}
nav-links a {
    color: var(--text-primary);
    text-decoration: none;
    font-weight: 500;
    transition: var(--transition);
    padding: 0.5rem 1rem;
```

```css
    border-radius: var(--radius-sm);
}
.nav-links a:hover {
    color: var(--primary-color);
    background-color: var(--bg-secondary);
}
/* Controls Container */
.controls {
    display: flex;
    gap: var(--spacing-sm);
    align-items: center;
}
/* Theme Toggle Button */
.theme-toggle {
    background: var(--bg-secondary);
    border: 2px solid var(--border-color);
    border-radius: var(--radius-full);
    width: 50px;
    height: 28px;
    cursor: pointer;
    position: relative;
    transition: var(--transition);
}
.theme-toggle:hover {
    border-color: var(--primary-color);
}
theme-toggle::before {
    content: '';
    position: absolute;
    top: 2px;
    left: 2px;
    width: 20px;
    height: 20px;
    background: var(--primary-color);
    border-radius: 50%;
    transition: var(--transition);
}
[data-theme="dark"] .theme-toggle::before {
    transform: translateX(22px);
    background: var(--accent-color);
```

```css
}
/* Color Picker */
.color-picker-container {
    position: relative;
}
.color-picker-btn {
    background: var(--bg-secondary);
    border: 2px solid var(--border-color);
    border-radius: var(--radius-sm);
    padding: 0.5rem 1rem;
    cursor: pointer;
    font-family: 'Poppins', sans-serif;
    font-weight: 500;
    color: var(--text-primary);
    transition: var(--transition);
    display: flex;
    align-items: center;
    gap: 0.5rem;
}
color-picker-btn:hover {
    border-color: var(--primary-color);
    background: var(--primary-color);
    color: white;
}
.color-dot {
    width: 16px;
    height: 16px;
    border-radius: 50%;
    background: var(--primary-color);
    border: 2px solid white;
}
.color-options {
    position: absolute;
    top: 100%;
    right: 0;
    margin-top: 0.5rem;
    background: var(--bg-card);
    border: 1px solid var(--border-color);
    border-radius: var(--radius-md);
    padding: var(--spacing-sm);
```

```css
    display: none;
    gap: var(--spacing-xs);
    box-shadow: 0 10px 30px var(--shadow-lg);
    flex-wrap: wrap;
    width: 200px;
}
color-options.active {
    display: flex;
}
.color-option {
    width: 36px;
    height: 36px;
    border-radius: 50%;
    cursor: pointer;
    border: 3px solid transparent;
    transition: var(--transition);
}
.color-option:hover {
    transform: scale(1.1);
    border-color: var(--text-primary);
}
color-option.active {
    border-color: var(--text-primary);
    box-shadow: 0 0 0 2px var(--bg-card);
}
/* Mobile Menu Toggle */
.mobile-toggle {
    display: none;
    background: none;
    border: none;
    font-size: 1.5rem;
    cursor: pointer;
    color: var(--text-primary);
}
/* ===================== SECTIONS
===================== */
section {
    max-width: 1200px;
    margin: 0 auto;
    padding: var(--spacing-xl) var(--spacing-md);
```

```css
}
.section-title {
    font-size: 2.5rem;
    font-weight: 700;
    text-align: center;
    margin-bottom: var(--spacing-lg);
    color: var(--text-primary);
    position: relative;
}
.section-title::after {
    content: '';
    display: block;
    width: 80px;
    height: 4px;
    background: linear-gradient(90deg, var(--primary-color), var(--accent-color));
    margin: var(--spacing-sm) auto 0;
    border-radius: var(--radius-full);
}
/* ===================== HERO SECTION
===================== */
.hero {
    min-height: 100vh;
    display: flex;
    align-items: center;
    justify-content: center;
    text-align: center;
    padding-top: 80px;
}
profile-image {
    width: 240px;
    height: 240px;
    border-radius: 50%;
    object-fit: cover;
    margin-bottom: var(--spacing-lg);
    border: 4px solid var(--primary-color);
    box-shadow: 0 8px 32px rgba(99, 102, 241, 0.3);
    transition: var(--transition);
}
```

```css
.profile-image:hover {
    transform: scale(1.05);
    box-shadow: 0 12px 48px rgba(99, 102, 241, 0.5);
}
.hero-content h1 {
    font-size: 3.5rem;
    font-weight: 700;
    margin-bottom: var(--spacing-sm);
    background: linear-gradient(135deg, var(--primary-color), var(--accent-color));
    -webkit-background-clip: text;
    -webkit-text-fill-color: transparent;
    background-clip: text;
}

.hero-content .role {
    font-size: 1.5rem;
    color: var(--text-secondary);
    margin-bottom: var(--spacing-md);
    font-weight: 400;
}
hero-buttons {
    display: flex;
    gap: var(--spacing-sm);
    justify-content: center;
    flex-wrap: wrap;
    margin-top: var(--spacing-md);
}
.btn {
    padding: 1rem 2rem;
    border-radius: var(--radius-md);
    text-decoration: none;
    font-weight: 600;
    transition: var(--transition);
    border: 2px solid transparent;
    cursor: pointer;
    display: inline-flex;
    align-items: center;
    gap: 0.5rem;
    font-family: 'Poppins', sans-serif;
```

```css
    font-size: 1rem;
}

.btn-primary {
    background: linear-gradient(135deg, var(--primary-color), var(--accent-color));
    color: white;
}

.btn-primary:hover {
    transform: translateY(-3px);
    box-shadow: 0 10px 25px var(--shadow-lg);
}

.btn-secondary {
    background: transparent;
    color: var(--text-primary);
    border: 2px solid var(--border-color);
}
btn-secondary:hover {
    border-color: var(--primary-color);
    background: var(--primary-color);
    color: white;
}
/* ==================== ABOUT SECTION
==================== */
.about {
    background: var(--bg-secondary);
}
about-content {
    max-width: 800px;
    margin: 0 auto;
    text-align: center;
}
about-content p {
    font-size: 1.1rem;
    color: var(--text-secondary);
    line-height: 1.8;
    margin-bottom: var(--spacing-sm);
}
```

```css
/* ==================== SKILLS SECTION
==================== */
.skills-grid {
    display: grid;
    grid-template-columns: repeat(auto-fit, minmax(250px, 1fr));
    gap: var(--spacing-md);
    margin-top: var(--spacing-lg);
}

.skill-card {
    background: var(--bg-card);
    padding: var(--spacing-md);
    border-radius: var(--radius-lg);
    border: 1px solid var(--border-color);
    transition: var(--transition);
    box-shadow: 0 4px 6px var(--shadow);
}

.skill-card:hover {
    transform: translateY(-5px);
    box-shadow: 0 10px 30px var(--shadow-lg);
    border-color: var(--primary-color);
}

.skill-card h3 {
    color: var(--primary-color);
    margin-bottom: var(--spacing-sm);
    font-size: 1.3rem;
}

.skill-pills {
    display: flex;
    flex-wrap: wrap;
    gap: var(--spacing-xs);
    margin-top: var(--spacing-sm);
}
```

```css
.pill {
    background: var(--bg-secondary);
    color: var(--text-primary);
    padding: 0.5rem 1rem;
    border-radius: var(--radius-full);
    font-size: 0.9rem;
    font-weight: 500;
    border: 1px solid var(--border-color);
    transition: var(--transition);
}

.pill:hover {
    background: var(--primary-color);
    color: white;
    border-color: var(--primary-color);
}

/* ===================== PROJECTS SECTION
===================== */
.projects {
    background: var(--bg-secondary);
}
.projects-grid {
    display: grid;
    grid-template-columns: repeat(auto-fit, minmax(320px, 1fr));
    gap: var(--spacing-md);
    margin-top: var(--spacing-lg);
}
.project-card {
    background: var(--bg-card);
    border-radius: var(--radius-lg);
    overflow: hidden;
    border: 1px solid var(--border-color);
    transition: var(--transition);
    box-shadow: 0 4px 6px var(--shadow);
}
.project-card:hover {
    transform: translateY(-8px);
    box-shadow: 0 15px 40px var(--shadow-lg);
}
```

```css
.project-header {
  background: linear-gradient(135deg, var(--primary-color), var(--accent-color));
  padding: var(--spacing-md);
  color: white;
}
.project-header h3 {
  font-size: 1.4rem;
  margin-bottom: 0.5rem;
}
.project-body {
  padding: var(--spacing-md);
}
.project-body p {
  color: var(--text-secondary);
  margin-bottom: var(--spacing-sm);
  line-height: 1.7;
}
.project-tech {
  display: flex;
  flex-wrap: wrap;
  gap: var(--spacing-xs);
  margin-top: var(--spacing-sm);
}
.tech-tag {
  background: var(--bg-secondary);
  color: var(--primary-color);
  padding: 0.4rem 0.8rem;
  border-radius: var(--radius-sm);
  font-size: 0.85rem;

  font-weight: 600;
  border: 1px solid var(--border-color);
  cursor: pointer;
  transition: var(--transition);
}
.tech-tag:hover {
  animation: blink 0.8s ease-in-out infinite;
}
```

```css
/* Project card footer link */
.project-footer {
  padding: 0 var(--spacing-md) var(--spacing-md) var(--spacing-sm);
  display: flex;
  justify-content: flex-start;
  align-items: center;
  border-top: 1px solid var(--border-color);
  margin-top: var(--spacing-sm);
}
.project-footer .project-link {
  color: #2563eb;
  text-decoration: none;
  font-weight: 600;
  display: inline-flex;
  align-items: center;
  gap: 0.5rem;
}
.project-footer .project-link:hover {
  color: #1e40af;
  text-decoration: underline;
}
/* ===================== CONTACT SECTION
===================== */
.contact-content {
  max-width: 600px;
  margin: 0 auto;
  text-align: center;
}
.contact-info {
  display: flex;
  flex-direction: column;
  gap: var(--spacing-md);

  margin-top: var(--spacing-lg);
}

.contact-item {
  background: var(--bg-card);
  padding: var(--spacing-md);
  border-radius: var(--radius-lg);
```

```css
   border: 1px solid var(--border-color);
   transition: var(--transition);
   box-shadow: 0 4px 6px var(--shadow);
}

.contact-item:hover {
   transform: translateY(-3px);
   box-shadow: 0 10px 25px var(--shadow-lg);
   border-color: var(--primary-color);
}
.contact-item h3 {
   color: var(--primary-color);
   margin-bottom: var(--spacing-xs);
   font-size: 1.2rem;
}
.contact-item a {
   color: var(--text-secondary);
   text-decoration: none;
   font-size: 1.1rem;
   transition: var(--transition);
}
contact-item a:hover {
   color: var(--primary-color);
}


/* ==================== FOOTER ====================
*/
footer {
   background: var(--bg-card);
   border-top: 1px solid var(--border-color);
   padding: var(--spacing-md);
   text-align: center;
   color: var(--text-secondary);
}
footer p {
   font-size: 0.95rem;
}
```

```css
/* ==================== RESPONSIVE DESIGN
==================== */
@media (max-width: 768px) {
    .nav-links {
        position: fixed;
        top: 70px;
        left: -100%;
        width: 100%;
        height: calc(100vh - 70px);
        background: var(--bg-card);
        flex-direction: column;
        justify-content: flex-start;
        padding: var(--spacing-md);
        transition: left 0.3s ease;
        border-top: 1px solid var(--border-color);
    }
    .nav-links.active {
        left: 0;
    }
    .nav-links a {
        width: 100%;
        text-align: center;
        padding: 1rem;
    }
    .mobile-toggle {
        display: block;
    }
    .controls {
        gap: var(--spacing-xs);
    }
    .color-picker-btn {
        padding: 0.5rem;
    }
    .color-picker-btn span {
        display: none;
    }
    .hero-content h1 {
        font-size: 2.5rem;
```

```css
    }
    .hero-content .role {
       font-size: 1.2rem;
    }
    .section-title {
       font-size: 2rem;
    }
    section {
       padding: var(--spacing-lg) var(--spacing-sm);
    }

    .skills-grid,
    .projects-grid {
       grid-template-columns: 1fr;
    }
}

@media (max-width: 480px) {
    .hero-content h1 {
       font-size: 2rem;
    }
    .hero-buttons {
       flex-direction: column;
    }

    .btn {
       width: 100%;
       justify-content: center;
    }
}
```

```javascript
// ==================== THEME TOGGLE
====================
const themeToggle = document.getElementById('themeToggle');
const htmlElement = document.documentElement;

// Check for saved theme preference or default to 'light'
const currentTheme = localStorage.getItem('theme') || 'light';
htmlElement.setAttribute('data-theme', currentTheme);
```

```javascript
themeToggle.addEventListener('click', () => {
  const theme = htmlElement.getAttribute('data-theme');
  const newTheme = theme === 'light' ? 'dark' : 'light';

  htmlElement.setAttribute('data-theme', newTheme);

  localStorage.setItem('theme', newTheme);
});

// ===================== COLOR PICKER
=====================
const colorPickerBtn = document.getElementById('colorPickerBtn');
const colorOptions = document.getElementById('colorOptions');
const colorOptionElements = document.querySelectorAll('.color-option');
const root = document.documentElement;

// Toggle color options dropdown
colorPickerBtn.addEventListener('click', (e) => {
  e.stopPropagation();
  colorOptions.classList.toggle('active');
});

// Close dropdown when clicking outside
document.addEventListener('click', (e) => {
  if (!colorOptions.contains(e.target) && e.target !== colorPickerBtn)
{
    colorOptions.classList.remove('active');
  }
});
// Load saved color preference
const savedColor = localStorage.getItem('primaryColor') || '#6366f1';
root.style.setProperty('--primary-color', savedColor);

// Update active color option on load
colorOptionElements.forEach(option => {
  if (option.getAttribute('data-color') === savedColor) {
    option.classList.add('active');
  }
});
```

```javascript
// Handle color option selection
colorOptionElements.forEach(option => {
   option.addEventListener('click', () => {
      const color = option.getAttribute('data-color');

      // Update CSS variable
      root.style.setProperty('--primary-color', color);

      // Update secondary color (slightly different shade)
      const secondaryColor = adjustColor(color, -20);
      root.style.setProperty('--secondary-color', secondaryColor);

      // Update accent color
      const accentColor = adjustColor(color, 20);
      root.style.setProperty('--accent-color', accentColor);

      // Update color dot in button
      document.querySelector('.color-dot').style.background = color;

      // Save preference
      localStorage.setItem('primaryColor', color);

      // Update active state
      colorOptionElements.forEach(opt =>
opt.classList.remove('active'));
      option.classList.add('active');

      // Close dropdown
      colorOptions.classList.remove('active');
   });
});

// Function to adjust color brightness
function adjustColor(color, amount) {
   const num = parseInt(color.replace('#', ''), 16);
   const r = Math.max(0, Math.min(255, (num >> 16) + amount));
   const g = Math.max(0, Math.min(255, ((num >> 8) & 0x00FF) +
amount));
   const b = Math.max(0, Math.min(255, (num & 0x0000FF) +
amount));
```

```javascript
      return '#' + ((r << 16) | (g << 8) | b).toString(16).padStart(6, '0');
}
// ===================== MOBILE MENU
=====================

const mobileToggle = document.getElementById('mobileToggle');


const navLinks = document.getElementById('navLinks');

mobileToggle.addEventListener('click', () => {
   navLinks.classList.toggle('active');
   mobileToggle.textContent = navLinks.classList.contains('active') ?
'✕' : '☰';
});

// Close mobile menu when clicking on a link
document.querySelectorAll('.nav-links a').forEach(link => {
   link.addEventListener('click', () => {
      navLinks.classList.remove('active');
      mobileToggle.textContent = '☰';
   });
});

// ===================== SMOOTH SCROLLING
=====================
document.querySelectorAll('a[href^="#"]').forEach(anchor => {
   anchor.addEventListener('click', function (e) {
      e.preventDefault();
      const target = document.querySelector(this.getAttribute('href'));
      if (target) {
         const headerOffset = 80;
         const elementPosition = target.getBoundingClientRect().top;
         const offsetPosition = elementPosition + window.pageYOffset -
headerOffset;

         window.scrollTo({
            top: offsetPosition,
            behavior: 'smooth'
         });
```

```
        }
    });
});

// ===================== HEADER SCROLL EFFECT
=====================
let lastScroll = 0;
const header = document.querySelector('header');


window.addEventListener('scroll', () => {
    const currentScroll = window.pageYOffset;

    if (currentScroll <= 0) {
        header.style.boxShadow = '0 2px 10px var(--shadow)';
    } else {
        header.style.boxShadow = '0 4px 20px var(--shadow-lg)';
    }

    lastScroll = currentScroll;
});
```

5 SYSTEM TESTING AND RESULTS

Testing Performed
- Navigation link testing
- Theme switching verification
- Color picker functionality
- Mobile responsiveness testing
- GitHub link redirection
- Cross-browser compatibility testing

Results
- All sections load correctly
- Theme switching works without refresh
- Custom color themes apply instantly
- Navigation behaves smoothly
- Layout adapts properly on mobile devices

Result:-
https://sania682.github.io/Project_Portfolio/

6. FUTURE SCOPE AND CONCLUSION

Future Scope

- Integration of backend for dynamic content management
- Contact form with email functionality
- Project filtering and search features
- Animation enhancements
- Portfolio analytics dashboard
- Blog or learning section
- Advanced animations and transitions
- Project filtering and search system
- Portfolio analytics for visitor tracking
- Cloud hosting and performance optimization
- Accessibility improvements for inclusive design
- Multi-language support

Conclusion

The Personal Portfolio Website successfully demonstrates front-end development concepts including responsive design, interactivity, and UI customization. The system provides a professional platform for showcasing skills and projects while maintaining performance and usability. It serves as a strong foundation for future enhancements and real-world application.

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8. GLOSSARY

Architecture
The overall structure of a system showing how different components are organized and interact with each other.

Responsive Design
A design approach that allows a website to automatically adjust its layout to fit different screen sizes such as mobile, tablet, and desktop.

User Interface (UI)
The visual elements of a website that users interact with, including buttons, menus, text, and layouts.

Front-end Development
The part of web development focused on what users see and interact with in a browser.

HTML (HyperText Markup Language)
The standard language used to structure content on a webpage.

CSS (Cascading Style Sheets)
A styling language used to control the appearance, layout, and visual design of web pages.

JavaScript
A scripting language used to add interactivity and dynamic behavior to web applications.

CSS Variables
Reusable style values that allow consistent theming and easier design updates across a website.

Theme Toggle
A feature that allows switching between visual modes, such as light and dark themes.

Local Storage
A browser feature used to store small amounts of data, such as user preferences, without needing a server.

Navigation Bar
A menu system that helps users move between different sections of a website.

Smooth Scrolling
An animated scrolling effect that provides a visually pleasant transition between webpage sections.

Hover Effect
A visual change that occurs when a user places the cursor over an interactive element.

Flexbox
A CSS layout model that helps align and distribute elements efficiently within a container.

Interactive Element
A component such as a button or toggle that responds to user actions.

Client-side Processing

Operations performed directly in the user's browser rather than on a server.

Viewport

The visible area of a webpage on a device screen.

Animation

Visual movement or transitions applied to elements to enhance user experience.