

Project Title: Personal Portfolio Website

1. Project Goal

To create a professional, single-page personal portfolio website to showcase your skills, projects, and services. The site will serve as a central online presence for potential employers, clients, or collaborators.

2. Core Technologies

- **HTML5:** For the structure and content of the website. We will use semantic tags (<header>, <section>, etc.) for better SEO and accessibility.
- **CSS3:** For all styling, layout, and animations. We will use modern layout techniques like Flexbox and CSS Grid to create a fully responsive design.
- **JavaScript (Vanilla):** For all interactive features. We will not use any libraries or frameworks like jQuery or React, focusing on fundamental JavaScript.

3. Feature Breakdown

This is a detailed list of the features you requested, along with how we will implement them.

- **Global Feature: Light & Dark Mode**
 - **Functionality:** A toggle button in the header will switch the website's color scheme between a light theme and a dark theme.
 - **Implementation:** We will use a CSS class on the <body> tag to control the theme. JavaScript will toggle this class and save the user's preference in their browser's localStorage so it's remembered on their next visit.
- **Section 1: Header & Navigation**
 - **Layout:** A "sticky" header that remains fixed at the top of the page as the user scrolls.
 - **Content:**
 - A logo (your name) on the left.
 - Navigation links (Home, Services, Projects, Blog, Contact) on the right.
 - The theme toggle button.
 - **Functionality:** Clicking a navigation link will smoothly scroll the page to the corresponding section.
- **Section 2: Hero Section (#home)**
 - **Layout:** A two-column layout.
 - **Content (Left Column):** A main headline (<h1>), a subtitle with your professional title, a short paragraph describing your skills and focus (mentioning AI and Cyber Security), and a primary "Call to Action" button (e.g., "View My Work").
 - **Content (Right Column):** A professional-looking profile image.
- **Section 3: Services Section (#services)**
 - **Layout:** A grid of "service cards".
 - **Content:** Each card will represent a service you offer (e.g., "Web Development", "Responsive Design"). A card will contain a small icon, a title, and a brief description.
- **Section 4: Project Showcase (#projects)**

- **Layout:** A grid of "project cards".
- **Content:** Each card will showcase a project. It will include a project image, title, short description, and technology tags (e.g., "HTML", "CSS", "JavaScript"). There will be a link to view the project live or see its code.
- **Section 5: Blog Posts (#blog)**
 - **Layout:** A grid of "blog post cards", similar to the projects section.
 - **Content:** Each card will summarize a blog post, containing a feature image, publication date, title, and a short excerpt. A "Read More" link will be included.
- **Section 6: Footer & Contact (#contact)**
 - **Layout:** A centered block at the bottom of the page.
 - **Content:** A clear call to action to get in touch, your email address (styled as a button), links to your social/professional profiles (like GitHub, LinkedIn), and a copyright notice.
- **Floating Feature: Live Chat Widget**
 - **Layout:** A circular icon fixed to the bottom-right corner of the screen.
 - **Functionality:**
 - Clicking the icon will open a small chat window.
 - The user can type a message into an input field and send it.
 - This will be a **simulation**. JavaScript will automatically provide a pre-written response (e.g., "Thanks for your message! I'll get back to you soon.") to demonstrate the functionality without needing a real backend server.

4. Design and Layout

- **Responsiveness:** The layout will be mobile-first, meaning it will look great on small screens and then adapt for tablets and desktops.
- **Typography:** We will use the 'Inter' font from Google Fonts for a clean, modern, and readable look.
- **Color Scheme:** We will define a clear color palette with a primary accent color (blue), and specific background/text colors for both the light and dark themes.

5. File Structure

We will keep our project organized with the following structure:

```
portfolio-project/
├── index.html
├── style.css
├── script.js
├── assets/
│   └── hero_image.jpg
```