

# PROJECT REPORT

## Style a basic Webpage

### Introduction

- **Project Name:** Style a basic webpage (Easy Level – project 2)
  - **Developed By:** Gungun Jain
  - **Roll No.:** 2200290120071
  - **Branch:** Computer Science (CS)
  - **Technology Stack:** HTML, CSS, JavaScript
  - **Purpose:** The purpose of this project is to create a visually appealing and well-structured personal webpage by applying CSS (Cascading Style Sheets) to an HTML page. By using CSS, the project aims to improve the webpage's aesthetics, enhance readability, and ensure responsiveness across different screen sizes, making it user-friendly and visually engaging
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### Project Objectives

The objective of this project is to design and style a personal webpage that represents an individual's profile, including sections like About, Skills, and Contact. Key objectives include:

- Applying CSS styling techniques to enhance the layout and appearance.
- Using CSS to ensure that the webpage is responsive, adapting to various screen sizes.
- Improving user experience through intuitive navigation, color schemes, typography, and spacing.

### Project Requirements

#### Tools and Technologies:

1. **HTML (Hypertext Markup Language):** To structure the content of the webpage.
2. **CSS (Cascading Style Sheets):** To style the HTML content and control the layout.
3. **Browser (e.g., Chrome, Firefox):** To view and test the webpage.
4. **Text Editor (Visual Studio Code):** For writing HTML and CSS code.

## **System Design**

The design of the webpage is divided into the following sections to enhance readability and user engagement:

1. Header Section:

- Displays the individual's name and a brief tagline.
- Designed with a larger font for emphasis, providing a welcoming feel.

2. Navigation Bar:

- Horizontal navigation bar positioned at the top.
- Contains links to sections like About, Skills, and Contact.

3. About Section:

- A brief introduction about the individual, presented in a simple, readable format.
- Uses padding and margins to create adequate spacing and a clean appearance.

4. Skills Section:

- Showcases the person's skills in a grid or list format.
- Styled with background colors and hover effects for interactivity.

5. Contact Section:

- Contains links to email or social media platforms.
- Buttons styled with CSS to encourage interaction.

# Code Implementation

## HTML

```
1 <!DOCTYPE html>
2 <html lang="en">
3
4 <head>
5   <meta charset="UTF-8">
6   <meta name="viewport" content="width=device-width, initial-scale=1.0">
7   <title>Gungun's Portfolio</title>
8   <link rel="stylesheet" href="style.css">
9   <link href='https://unpkg.com/boxicons@2.1.4/css/boxicons.min.css' rel='stylesheet'>
10 </head>
11
12 <body>
13   <header class="header">
14     <a href="#" class="logo">Gungun.</a>
15     <i class='bx bx-menu' id="menu-icon"></i>
16     <nav class="navbar">
17       <a href="#home" class="active">Home</a>
18       <a href="#about">About</a>
19       <a href="#education">Education</a>
20       <a href="#skills">Skills</a>
21       <a href="#contact">Contact</a>
22     </nav>
23   </header>
24
25   <section class="home" id="home">
26     <div class="home-content">
27       <h1>Hi, I'm <span>Gungun Jain</span></h1>
28       <h3>Frontend Developer</h3>
29       <p>I'm a web developer enthusiast with a passion for everything front-end. Welcome to my corner of the
30         internet. I'm glad you're here!<br>Working with my hands to make magic happen on the internet.</p>
31
32       <div class="home-social">
33         <a href="https://www.facebook.com/gungun.jain.58367?mibextid=ZbWKwL" target="_blank"><i class='bx bxl-facebook'></i></a>
34         <a href="https://www.linkedin.com/in/gungunjain" target="_blank"><i class="bx bxl-linkedin"></i></a>
35         <a href="https://github.com/gungunjain15" target="_blank"><i class="bx bxl-github"></i></a>
36       </div>
37       <button class="btn"><a href="https://www.linkedin.com/in/gungunjain">Hire Me</a></button>

```

## CSS

```
1 * {
2   margin: 0;
3   padding: 0;
4   box-sizing: border-box;
5   text-decoration: none;
6   /* border:none; */
7   /* outline:none; */
8   scroll-behavior: smooth;
9 }
10
11 :root {
12   --bg-color: #081b29;
13   --second-bg-color: #112e42;
14   --text-color: #ededed;
15   --main-color: rgb(34, 215, 34);
16
17   /* --bg-color:#0d1321;
18   --second-bg-color:#1d2d44;
19   --text-color:#ededed;
20   --main-color:#a9bcd0; */
21 }
22
23 html {
24   font-size: 62.5%;
25   /* overflow-x: hidden; */
26 }
27
28 body {
29   background-color: var(--bg-color);
30   color: var(--text-color);
31 }
32
33 .header {
34   width: 100%;
35   position: fixed;
36   top: 0;
37   left: 0;

```

## JAVASCRIPT

```
1  let menuIcon = document.querySelector('#menu-icon');
2  let navbar = document.querySelector('.navbar');
3  let sections = document.querySelectorAll("section");
4  let navLinks = document.querySelectorAll("header nav a");
5
6  menuIcon.onclick = () => {
7      menuIcon.classList.toggle("bx-x");
8      navbar.classList.toggle("active");
9  }
10
11 window.onscroll = () => {
12     menuIcon.classList.remove("bx-x");
13     navbar.classList.remove("active");
14
15     sections.forEach(sec => {
16         let top = window.scrollY;
17         let offset = sec.offsetTop - 100;
18         let height = sec.offsetHeight;
19         let id = sec.getAttribute("id");
20
21         if(top >= offset && top < offset + height){
22             navLinks.forEach(links => {
23                 links.classList.remove("active");
24                 document.querySelector("header nav a[href*=' + id +']").classList.add("active");
25             })
26         }
27     });
28 }
```

## Output :-



## **Features**

- ✓ **Responsive Layout:** The page layout is optimized for different screen sizes using media queries.
- ✓ **Enhanced Typography:** Google Fonts are used to make the text readable and visually appealing.
- ✓ **Navigation Bar:** Fixed navigation bar for easy access to different sections of the webpage.
- ✓ **Hover Effects:** Interactive elements such as buttons and links change color on hover, enhancing the user experience.
- ✓ **Grid or Flexbox Layout:** Implemented a flexbox layout for a modern, responsive structure.

## **Challenges Addressed**

1. **Balancing Layout and Content:** Ensuring a consistent layout across different devices required fine-tuning CSS properties.
2. **Responsive Design:** Media queries were used to adapt the layout for mobile and tablet views, addressing issues of elements overlapping or appearing misaligned.
3. **Hover and Interaction Effects:** Adjusting button styles to provide visual feedback on hover added depth to the design.

## **Future Enhancements**

1. **Adding JavaScript Interactivity:** Incorporate JavaScript for features like form validation and interactive elements, such as a feedback form.
2. **Animations:** Introduce CSS animations to add visual interest when the user scrolls or hovers over specific sections.
3. **Dark Mode Toggle:** Enable a dark mode option to enhance user experience, especially for night-time viewing.
4. **SEO Optimization:** Improve webpage SEO by using meta tags and accessible, semantic HTML tags.

## **Conclusion**

This project successfully demonstrates how CSS can transform a basic HTML structure into a visually engaging and responsive personal webpage. Through thoughtful styling choices and layout adjustments, the webpage provides a user-friendly and aesthetically pleasing experience. This project highlights essential skills in web design, such as layout management, responsive design, and interactive styling.

## **References:**

1. **Mozilla Developer Network (MDN)** – CSS Documentation: <https://developer.mozilla.org/en-US/docs/Web/CSS>
2. **W3Schools** – HTML & CSS Tutorials: <https://www.w3schools.com>
3. **Google Fonts** – Font Styles: <https://fonts.google.com/>
4. **CSS-Tricks** – Responsive Web Design Tips: <https://css-tricks.com/>