Internet Programming 2

Learning Mini-Project 1: Personal Portfolio Website Project Specifications - February 2025

Notes

- 1. The project specs provided here is deliberately vague, as it is intended to be a LEARNING example and will be expanded as we progress to future versions.
- 2. The primary intention here is to demonstrate that you are familiar with the underlying technologies (in this case HTML5, CSS3 and JavaScript)
- 3. DO NOT make use of any other technology, except for Pure HTML, CSS and JavaScript.
- 4. Make use of VS Code and the "Live Server" extension as your development environment.

Project Objective

Create a professional personal portfolio website using **HTML**, **CSS**, and **JavaScript** to showcase your skills, projects, personality, and personal brand. The website should reflect your technical proficiency, aesthetic sense, and ability to build a user-friendly and engaging web experience.

Project Requirements

1. Website Structure

Your portfolio must consist of the following mandatory sections:

1. **Home:**

- o A welcoming section with a professional photo and tagline (e.g., "Front-End Developer | Designer | Problem Solver").
- A brief introduction or hero statement.

2. About Me:

- o Include a concise biography, career goals, or key achievements.
- o Optionally, display a list of key skills or proficiencies (e.g., programming languages or tools).

3. My Projects:

- o Highlight at least **three projects** (real, fictional, or coursework) with:
 - A short description of each project.
 - Technologies/tools used (e.g., HTML, CSS, JavaScript).
 - Screenshots or mockups.
 - Optional: Links to live demos or GitHub repositories.

4. Contact:

- o Provide a contact form (with input validation via JavaScript).
- o Include alternative contact details, such as email or social media links.

2. Design & Responsiveness

- Apply **CSS styling** to create a visually consistent and professional theme.
- Ensure **responsive design** so the website displays correctly on desktops, tablets, and mobile devices.
- Incorporate **UI/UX best practices**, including:
 - o Readable fonts and proper color contrast.
 - o Consistent spacing, alignment, and layout.
 - o Intuitive navigation and clear call-to-action elements.

3. Interactivity

Incorporate **JavaScript features** to enhance the user experience:

- 1. **Smooth scrolling** for navigation links between sections.
- 2. **Theme toggle** (light/dark mode).
- 3. **Modal popups** for project details or images.
- 4. **Form validation:** Ensure users enter valid information in the contact form (e.g., a valid email format).

4. Content & Multimedia

Populate your portfolio with original, meaningful content:

- Write authentic descriptions about yourself and your projects.
- Use multimedia elements like:
 - o Videos (e.g., an introduction or project demo).
 - Slideshow or carousel for images.
 - o Optional: Background music with a toggle for play/pause.

5. Optimization & SEO

- Use **semantic HTML** for accessibility and better SEO.
- Optimize performance with:
 - o Compressed images.
 - Minified CSS and JavaScript files.
 - Lazy loading for images.
- Include **meta tags** (title, description, keywords) for SEO.
- Add alt attributes to images for accessibility and improved search engine indexing.

Optional Enhancements

Version 2 of this mini-project will include, among others, the following additional enhancements: [you are advised to "problem-solve" this at this stage and make an attempt to implement some of these in the current version.]

- A **blog section** with at least three sample posts.
- An **interactive skills showcase** (e.g., animated skill bars or charts).
- Testimonials from peers or instructors (real or fictional).
- A multi-language feature (e.g., toggle between two languages).
- Accessibility enhancements, such as ARIA attributes or customizable font sizes.

Project Tips

- Start early to ensure sufficient time for coding, debugging, and refining your work.
- Regularly test your site on multiple devices and browsers.
- Research examples of high-quality portfolio websites for inspiration.

Good Luck!

This project is an opportunity to showcase your creativity and technical skills. Impress with a portfolio that reflects your individuality and potential.

PK Ramdeyal, 14 February 2025.