**Personal Portfolio Website**

**Objective**

The goal of this project was to design and develop a **responsive personal portfolio website** that highlights skills, projects, and certificates, while also providing an easy way for visitors to get in touch.

**Features**

**1. Structure (HTML)**

* A well-organized homepage with the following sections:
  + **Header and Navigation Bar** with smooth links.
  + **About Me Section** with a professional bio.
  + **Projects Section** showcasing multiple projects.
  + **Certificates Section** with a modern Swiper carousel effect.
  + **Contact Form** with Captcha validation for security.
  + **Footer** with social media links.

**2. Styling (CSS & Bootstrap)**

* Fully **responsive layout** using **Bootstrap Grid System**.
* Consistent **color palette** and **typography** aligned with my theme.
* **Hover effects** for interactive buttons and links.
* **Background color and spacing** optimized for readability.

**3. Interactivity (JavaScript)**

* **Form validation** (name only letters, email format, required fields, message length, and captcha check).
* **Captcha system** to prevent spam.
* **Message sending limit (max 2 per email)** stored via LocalStorage.
* **Back to Top button** for smooth navigation.
* **Dark/Light theme toggle** with localStorage persistence.
* **AOS (Animate on Scroll)** effects for smooth animations.
* **Swiper carousel** for certificates with autoplay, arrows, and pagination.

**4. Bonus Features**

* **Animations** using AOS for a modern look.
* **Deployed online** for live preview (Vercel/GitHub Pages).
* **Clean and maintainable codebase** with clear comments.

**Deployment**

The website has been deployed for live access:

* **GitHub Repository:** 🔗 [sonia-nazeer/portfolio-task](https://github.com/sonia-nazeer/portfolio-task)
* **Live Link (Vercel):** 🔗 [Portfolio](https://portfolio-task-eta-one.vercel.app/)

### Design Choices

For my portfolio, I selected a **clean and minimal design** with a beige–dark theme color palette to ensure readability and consistency. I used **Bootstrap Grid** for responsive layout and applied **hover effects** to make buttons and links more interactive. To give the site a modern look, I added **AOS animations** for smooth scroll effects and a **Swiper carousel** to display certificates. A **dark/light mode toggle** was included so users can switch themes based on their preference.

### Challenges Faced

* Implementing a **custom Captcha with canvas distortion** for spam protection was a new challenge but gave me deeper insights into JavaScript canvas API.
* Ensuring the website remains **responsive across different devices** required testing and adjustments with CSS and Bootstrap breakpoints.
* Setting up **form validation** with multiple rules (letters-only name, proper email format, message length, captcha check) was slightly complex but improved the site’s reliability.
* Deploying on **GitHub + Vercel** taught me how to manage Git commands (push, pull, rebase) and host a live site properly.