**SDLC Alignment for Portfolio Website**

1. Planning

* Define website objectives: Showcase personal projects, blogs, and contact options.
* Identify features: Blog section, portfolio projects, and contact form.
* Create a project roadmap with milestones for development and testing.

2. Design

* Develop wireframes to layout the website structure and user interface.
* Create Class and Sequence Diagrams to represent architecture and interaction flows.
* Plan navigation and responsive design.

3. Development

* Set up the project environment using HTML, CSS, JavaScript (frontend), and a backend framework like Node.js or PHP.
* Build modular components for blog, portfolio, and contact form for easier maintenance.
* Integrate a database for blog posts, projects, and user contact messages.

4. Testing

* Perform unit testing for individual components like form validation and blog rendering.
* Conduct integration testing to ensure smooth interaction between frontend and backend.
* Carry out user testing to refine usability and design.

5. Maintenance

* Regularly update content, such as adding new blogs or projects.
* Monitor the website for performance and fix bugs as they arise.
* Implement feature enhancements and security updates.