#### **Software Development Life Cycle (SDLC) University Event Management Website**

#### **Implementation (Coding the Project)**

The implementation phase involves translating the design blueprint into a functional and interactive web application through clean, maintainable coding practices.

* **Development Steps:**
  + **Phase 1:** Built the static HTML structure and CSS styling for layout components such as the navigation bar, event cards, and search functionality.
  + **Phase 2:** Integrated JavaScript to handle user input, dynamically display event data, and implement interactive features.
  + **Phase 3:** Optimized responsiveness and fine-tuned the user interface to ensure compatibility across desktops, tablets, and mobile devices.
* **Best Practices:**
  + Followed proper indentation and added descriptive comments to improve code readability and maintainability.
  + Modularized JavaScript functionality using functions to enhance reusability.
  + Adopted a mobile-first design approach before scaling layouts to larger screen sizes.
* **Version Control:**
  + Used Git to commit changes regularly after completing modular tasks (e.g., "Implemented dynamic event search").
  + Maintained meaningful commit messages to document the development process clearly.
  + Conducted peer code reviews before merging branches to the main repository.

This phase brings the project to life by building the interactive features and front-end logic of the website, ensuring it functions seamlessly and efficiently for end users.