#### **Software Development Life Cycle (SDLC) for SkyCast - A Weather Forecast Website**

#### **Testing (Ensuring the Project Works Correctly)**

Testing ensures SkyCast is functional, reliable, and user-friendly across various scenarios.

* **Types of Testing**:
  + **Unit Testing**: Verify individual components (e.g., search bar accepts input, weather card displays data).
  + **Integration Testing**: Confirm API calls return accurate data and integrate seamlessly with the UI.
  + **Cross-Browser Testing**: Test compatibility on Chrome, Firefox, Safari, and Edge.
  + **Mobile Responsiveness Testing**: Check layout and functionality on mobile devices (e.g., iPhone, Android).
  + **User Testing**: Gather feedback from peers or potential users on usability and design.
* **Issue Tracking**: Log bugs or issues in GitHub Issues (e.g., "Weather data not updating on invalid city") and resolve them before deployment.

This phase guarantees SkyCast performs as intended under diverse conditions.