Test Strategies for Conventional Software

1. Unit Testing

- **What it is**: Testing individual parts or modules of a program (like functions or methods) to make sure they work correctly.
- **Why it's important**: It helps find bugs early in the development process and ensures each part of the software works as expected.

2. Integration Testing

- **What it is**: Testing how different modules or parts of the software work together.
- **Why it's important**: Even if individual parts work, they might not function correctly when combined, so this testing catches issues in communication between components.

3. System Testing

- **What it is**: Testing the complete software system to ensure it meets all specified requirements.
- **Why it's important**: It checks the entire application to make sure all functions work together and fulfill the needs of the user.

4. Acceptance Testing

- **What it is**: Testing the software from the user's perspective to see if it meets their requirements and expectations.
- **Why it's important**: It ensures that the software is user-friendly and meets the needs of the end-users or clients.

5. Performance Testing

- **What it is**: Checking how well the software performs under various conditions, like heavy load or high stress.
- **Why it's important**: It ensures the software is stable, responsive, and efficient under real-world usage.

6. Security Testing

- **What it is**: Testing for vulnerabilities to ensure that the software is safe from external threats.
- **Why it's important**: Protects the software and users' data from unauthorized access, malware, or attacks.

7. Usability Testing

- **What it is**: Testing how easy and user-friendly the software is for users.
- **Why it's important**: Ensures a good user experience and identifies areas for improvement in design and functionality.

8. Regression Testing

- **What it is**: Re-testing the software after changes (like bug fixes or updates) to make sure existing functions still work.
- **Why it's important**: Ensures that new updates don’t cause problems in already-working parts of the software.