

Continuous Quality

- **Unit Testing:**
It ensures to catch bugs early and provides quick feedback. Moreover, it integrates well with CI/CD pipelines.
- **Integration Testing:**
It captures if there were errors during the communication between different modules or services early. Because of that, issues in complex systems are detected quickly.
- **Regression Testing:**
This helps by ensuring that existing functionality doesn't break if new changes are added. In that way, System sustainability is maintained.
- **Smoke Testing:**
Ensures that critical features work after building so that deeper testing can be done with less worries about the core functionality.
- **Linting and Static Code Analysis:**
Helps developers to maintain coding standards and improves code quality by catching potential errors.
- **API Testing:**
Backed services run correctly across different scenarios before the user is impacted by that.
- **Cross-Browser and Cross-Device Testing:**
Catches compatibility issues that are triggered by different browsers or devices. Developers can run comprehensive tests quickly.
- **Performance and Load Testing:**
It helps to simulate user traffic and measure application behavior under various conditions. Because of that, scalability and optimal performance are maintained.
- **Security Testing:**
It ensures to regularly identify vulnerabilities, so that potential threats are caught early. This is not only a risk reduction for security breaches but also helps maintain compliance with industry standards and regulations.
- **Database Testing:**
Ensures the accuracy and integrity of the data during database modifications. This encapsulates schema migrations and data consistency. Because of that, it enhances the reliability of data-driven applications.