

AUTOMATION OF MOBILE TESTING



WHAT TO EXPECT



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Challenges in Manual Testing

1. Time-Consuming

- Testing on various devices and platforms manually can be time-consuming.
- Limits the speed of development and release cycles.

2. Repetitive Tasks

- Manual execution of repetitive test cases is prone to errors.
- Automation can alleviate the burden of repetitive tasks.

Advantages of Automation in Mobile Testing

1. Speed and Efficiency

- Automated tests can be executed faster than manual testing.
- Accelerates the testing process, allowing for quicker release cycles.

2. Reusability

- Automated test scripts can be reused across different test scenarios.
- Saves time and effort in creating new test cases.

Coverage and Consistency

1. Comprehensive Test Coverage

- Automation allows for testing on a wide range of devices and configurations.
- Ensures comprehensive test coverage across various scenarios.

2. Consistency in Execution

- Automated tests ensure consistent execution, reducing the likelihood of human errors.
- Improves the reliability of testing results.

Types of Mobile Tests Suited for Automation

1. Regression Testing

- Automated testing is ideal for frequent regression tests after code changes.
- Ensures that new updates don't break existing functionality.

2. Performance Testing

- Automating performance tests allows for simulation of diverse scenarios.
- Identifies bottlenecks and performance issues efficiently.

Automated Mobile Test Frameworks

1. Appium

- An open-source framework for automating native, mobile web, and hybrid applications.
- Supports iOS, Android, and Windows platforms.

2. Espresso (Android) and XCTest (iOS)

- Frameworks specifically designed for automated testing on Android and iOS, respectively.
- Integrated with official development tools.

Key Considerations in Mobile Test Automation

1. Device and Platform Coverage

- Ensuring the automation framework supports the necessary devices and platforms.
- Adapting to the dynamic mobile ecosystem.

2. Continuous Integration/Continuous Deployment (CI/CD)

- Integrating automated tests into the CI/CD pipeline.
- Ensures continuous and reliable testing throughout the development lifecycle.

Challenges in Mobile Test Automation

1. Device Fragmentation

- Handling a diverse range of devices and OS versions can be challenging.
- Strategies for maintaining compatibility.

2. Initial Setup and Maintenance

- Setting up automation frameworks initially can be time-consuming.
- Ongoing maintenance is crucial to adapt to changes in the mobile landscape.

Best Practices in Mobile Test Automation

1. Selective Automation

- Identifying test cases that provide the most value when automated.
- Balancing automation with manual testing for optimal results.

2. Parallel Test Execution

- Running tests in parallel across multiple devices to speed up the testing process.
- Utilizing cloud-based testing platforms for scalability.



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See you in Next Video

