

CERTIFICATION IN MOBILE TESTING



Course Code : OCIT0005

The course Mobile Testing helps the students to know about a variety of Mobile app testing techniques. This course gives students detailed information on Mobile apps testing that helps in developing own mobile apps and can fix the errors by themselves. This course provides the skills that are needed for a professional, who plans to build his career on Mobile Testing. Through this course, the students will be able to test the mobile apps, explain about the MonkeyTalk tool, Junit test framework, Robotium, Software Development Life Cycle, etc. They will also be able to analyse the features and challenges that are faced during the mobile app testing. The students will be also able to analyse the tools that are used for Mobile Testing.

Curriculum

Module 1: Testing Fundamentals

SDLC, SDLC Phases, Need of Testing, Methods of Testing: Functional, Black Box, White Box, Regression, Stress, Monkey etc., TestCase, Rules to write TestCase, Testsuite and Test Runner

Module 2: Introduction To Android Testing Framework

Junit: Junit Test Framework, Features of Junit Test Framework, Testing Fundamentals-TestCase, TestSuite, TestRunners, JUnit classes, Junit in Android, Android Testing Framework, Test Projects-Directory Structure, Android Testing API, Mock Objects, Activity Testing, what to Test, Content Provider Testing, service Testing, choosing devices to test, Testing tools

Module 3: Mobile Apps Testing

Need of testing, Mobile applications testing landscape, Common types of testing, UI and functional testing strategies of mobile applications, Compatibility testing need and methods, Non-functional testing methods of mobile applications - Performance, security, Types of operations testing for mobile applications - Installation, un-installation, Upgrade, methods of testing the mobile application integration with phone features, Challenges in testing, difference between testing mobile web and testing native app

Module 4: Mobile Testing Tools

Testing lifecycle of mobile applications, Alternatives of testing environments for mobile apps testing, Differentiate between testing on physical devices, cloud devices and emulators, Different test automation tools for mobile applications, Key features of monkey talk tool, Installation and use of monkeytalk tool for a mobile application on emulator, Installation and use of monkeytalk tool for a mobile application on PC connected device, installation and use of monkeytalk tool for a mobile web, Installation and use of monkeytalk tool for a mobile application for cloud device.

Module 5: Ui And Functional Testing

Using monkey talk - creation of test project, Test suite and test script, Record and playback feature, Different verification techniques, Data driven testing methods, Synchronization, Script parameterization, Reporting features. Using Robotium - creation of test project, Test suite, Robotium Framework, Data driven testing methods

Learning Outcomes

- Identify activities associated with each software development phase
- Identify and Summarize the working and features of JUnit
- Interpret the various testing options and consider a best testing strategy to find the best result that fit your mobile application
- Process the various operations from installing to upgrading the App used for testing
- Identify the right test automation tool for mobile application
- Outline the various frameworks available for iOS platforms
- Process testing an App using Data driven testing method in Robotium