

Appium Mobile Testing

Introduction to Mobile Testing

- Download Java, Android Studio, and Node Software for Appium Setup
- Set Environment Variable Paths of All Software in Windows
- Set Environment Variable Paths of All Software in MAC
- Configure Android Virtual Device/Emulator and Install Appium Server
- Setting Up Appium Maven Project with Java Client Dependencies
- Started with Mobile Testing Using Appium Code

What are Capabilities and the First Program to Invoke the App

- What is UIAutomatorViewer and How it Helps Inspect Objects in Android Apps
- In-Depth Understanding of Android Native Apps Automation with Appium

Automating app UI Using Xpaths and Text Attributes

- Appium APIs for UI Interaction with IDs and classNames
- Handling Multiple Similar Objects of Apps with Indexes
- AndroidUIAutomator Usage in Identifying Objects of Apps
- TouchActions in Appium (Gestures Automation)
- Tapping and Long Press Events (Gestures Automation)
- Touch Actions Sequence Execution

Demo on Swiping the Clock - Practice Exercises

- How to Automate Scrolling? Gestures Automation -5
- Drag and Drop on Native Apps with Appium
- Automation on Real Android Device Apps with Appium and Its Rules

Introduction to App Features and Test Cases to Automate

- Test Case in Filling the Form Details for Shopping
- Verifying Toast Messages for Error Validations
- Test Case - Scrolling in Product List Example with Appium Android Scroll
- Test Case - Dynamically Selecting Product by Scanning List Based on Text
- Test Case - Validating the Orders in Checkout Page
- Test Case- Validating Total Amount Generated Functionality
- Code Optimization with User-Defined Functions
- Hybrid App Automation with Appium to Switch from Apps to Web Browser

Test Case - Validating Mobile Gestures of App (Tap, Long Press)

- How to Handle Objects When Rendered in Web View
- Test Case -Automate Hybrid App with Context Switch
- Mobile Chrome Browsers Automation with Appium – Real-Time Examples

- Desired Capabilities to Run Appium Tests on Mobile Browser
- How to Inspect Chrome Mobile Browser Locators - Tips and Tricks
- How to Scroll and Put Assertions on Browser Tests with Appium
- Getting Started with iOS Automation Using Appium on MAC

Install Xcode and Iphone 12 Simulator

- Define iOS Desired Capabilities and Invoke the App Through Code
- Inspect iOS Objects with Appium Inspector
- Automate iOS Advance Gestures Functionalities with Appium

Automate Scrolling on IOS Apps

- Appium iOS Automation Part 5 - Automate Picker Wheels (Dropdowns)
- Appium iOS Automation -Automate Sliders with IOS Element Class
- Strategy in Working with IOS Gestures and App Download
- Performing Long Press Events with IOS Touch Action Class
- Performing Tapping Events with IOS Touch Action Class
- iOS Real Device Automation Testing Guidelines with an Example

Install Software for Real Device Automation

- UDID, XcodeOrgId Generation for Real Device Testing
- Bundle Id Generation and Running the Tests
- Framework Learning Plan

TestNG Installation and Setup in Eclipse

- Run Basic TestNG Tests with Test Annotation
- Testing Xml File Configuration and Its Importance
- Prioritizing the Test Cases with TestNG
- Include and Exclude Mechanism to Control Test Cases
- Executing the Test Cases at Package Level with regex
- TestNG Annotations - Part 1
- TestNG Annotations - Part 2
- Usage of Groups Functionality in TestNG
- Annotation's Helper Attributes with Examples
- Parameterizing from TestNG xml File
- DataProvider Annotation -Parameterizing Test Cases - 1
- DataProvider Annotation -Parameterizing Test Cases - 2
- Listeners Interface in TestNG Framework
- Running Tests in Parallel and Generating Reports
- Framework Part 2 – Maven (Build Management Tool)

Understanding POM.xml File and Its Dependencies

- Importance of surefirePlugin in Executing Tests
- Integration of TestNG with Maven
- Switching the Tests with Maven Profiling
- Framework Part 3 – Jenkins – Continuous Integration Tool

Importance of Jenkins in Test Frameworks

- Install and Configure Jenkins
- Configuring Jenkin Settings and Workspace
- Pageobject Pattern and Page Factory

What is POM?

- Page Factory Annotations FindBy
- Appium Hybrid Framework Design Part – 1 (Design Patterns)
- Maven Project Template Creation with Workspace Setup
- Configuring Dependencies of the Project in Pom.xml
- Creating Driver Base class for Framework
- Initializing Smart Global Properties from Config Properties File
- Converting Project into TestNG and Eliminating Hardcoded Paths
- Implementing Page Objects for Tests in Framework
- Appium Hybrid Framework Design Part – 2 (Building Utilities)

Make Tests Objects Independent to Drive from Object Classes

- Start and Stop Appium Server Programmatically Through Java
- Building Common Utilities for Appium Server Invoke Code
- Starting Emulator on Fly Through Code with User Inputs
- Fixing Framework Bug by Debugging Code
- Reporting and CI/CD Integration for the Appium Framework – Part 3