**Main Topics: Mobile Testing for Android & iOS devices**

**Topics to cover: [Basic]**

Introduction to Mobile Testing:

* Basics of mobile application testing
* Native, web, and hybrid mobile apps
* Differences and considerations for testing each type

Overview of Mobile Platforms:

* Introduction to Android and iOS
* Understanding their differences in architecture and functionalities

Testing Environments:

* Emulators vs. real devices
* Setting up test environments for Android and iOS

Testing Fundamentals:

* Mobile Testing methodologies (Manual vs. Automated)
* Testing user interfaces, navigation, and basic functionalities
* Mobile testing approaches and strategies
* Differences between mobile and web testing
* Understanding mobile testing challenges

Introduction to Mobile App Usability Testing:

* Basic principles of usability in mobile apps
* Accessibility testing for diverse user groups

Mobile App Localization Testing:

* Testing for multiple languages and regions
* How to handle the String Truncation, Overlapping & Alignment issues

Mobile App Compatibility Testing:

* Testing across various devices, OS versions, and screen sizes
* Responsive design testing

Mobile App Installation & Upgrade Testing:

* Installation from different sources and uninstallation
* Verifying app upgrades

Best Practices and Tips for Beginners:

* Introduction to industry best practices in mobile testing
* Tips for efficient and effective mobile testing as a beginner

Hands-on Exercises and Practice:

* Practical sessions to apply concepts learned
* Creating and executing basic test scenarios on real devices or emulators

**Topics to cover: [Intermediate and Advanced Level]**

Overview on Mobile Testing Tools:

* Introduction to basic testing tools

Test Automation (Appium):

* Introduction to test automation concepts and overview on Appium tool
* Test script creation for Android and iOS
* Handling gestures, multi-touch, and sensors
* Frameworks for mobile test automation (e.g., Selenium, Robotium)

Mobile App Security Testing:

* Techniques for securing mobile apps

Mobile App Performance Testing:

* Performance metrics for mobile apps
* Load testing and stress testing
* Memory and battery consumption testing

Integration Testing:

* Connecting app with other systems

NFC reader testing

Wi-Fi Direct

Network packets capturing in WiFi (with example tools)