**Mobile Testing:**

**Native App: mobile application is downloaded on mobile device apple store or play store.**

**[ application which do not run on browser]**

**Mobile Web: mobile version of website not mobile application(.m)**

**Hybrid: combination of native and mobile Web**

**Different types of mobile testing:**

UI Testing

Functional Testing

Performance Testing

Network Performance Testing

Installation

Interruption

We can test mobile application on Real Mobile Devices, Emulator, Simulator.

Emulator: real device environment where we can see actual device interface.

Simulator: is not connected to real device interface it not mimic actual device.

Native Mobile App Testing Automation Tools:

Android Driver ( Android Website) – cannot test mobile application.

Robotium – android app

Appium

Ranorex – mobile apps

Monkey

Keynotes > DeviceAnyWhere.com

Appium is an open source tool for automating native apps, web and hybrid applications. It supports Android and IOS devices.

Appium is cross-platform. It allows us to write tests against multiple [ IOS Android] using the same API. This enables code reuse between IOS and Android test suites.

Supports multi languages.

Setting up Appium:

Required software:

Java

Appium

Eclipse -IDE

Selenium jars

Java Client – library [ to handle advanced activities on mobile devices]

NodeJS [ optional but increase performance of Appium]

Android SDK [ to interact with Android libraries]

Microsoft .NET [backend support for Appium requires]

GenyMotion [ optional tool used to create multiple simulators with different configuration]

APK file [ purpose is to we can download the apps same as downloading from apple store or play store].

Android.

PDA.NET [ used to connect mobile device with USB]

* Download Android SDK -Studio and SDK tool.