Chapter 4
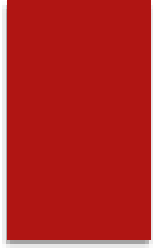# Mobile Application Platforms, Tools and Environment

Development Platforms for Mobile Applications

Development Platforms for Mobile Apps

- **IDEs are available in the market for various mobile app developments.**

- **Android Studio may be used for Android app development**

- **Xcode may be used for iOS app development**

Common Development Platform Tools

Common Development Platform Tools

Software development kits usually provide various utilities

> which are helpful in developing and testing applications.

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These utilities can take screenshots, extract logs, send rando events and notifications to the device, monitor various parameters such as memory and CPU utilization, and create virtual devices.

Some examples are:

Android Virtual Device (AVD) Manager

Android Debug Bridge (ADB)

Android Device Monitor (Deprecated)

Instruments for iOS

Emulators & Simulators

Emulators & Simulators

- **The terms simulator & emulators are sometimes used interchangeably but incorrectly.**

- **A simulator models the runtime environment**

- **An emulator models the hardware and utilizes the same runtime environment as the physical hardware.**

- **Emulators are used to reduce the cost of test environments by replacing real devices for some of the testing.**

Setting up a Test Lab

Setting up a Test Lab

- **On-premise lab:**
  - **All devices are located on the site**

- **Remote test lab:**
  - **It uses RDA (Remote DeviceAccess)**