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Pragmatic Product Leader Course

Become a Product Manager with Superpowers



Lesson 14H

App Development:

Mobile Apps



What is Android?

- Android is a mobile operating system for mobile phones, tablets and other devices
- Android is an open source project led by Google
- The operating system is based on the Linux kernel
- The main purpose of Android is to translate user's request to a language your device understands
- For example: When you wish to take a picture with your phone, Android provides a button, which when you click communicates with your phone and tells your phone to access the camera and take the picture



Android App Components

Activities

- Dictates the UI of the app
- Handles user interaction to the user screen
- Example: An email application can have one activity to display a list of emails on the mobile screen
- Example: Another activity could be composing an email

Services

- Controls the background processing involved with the app
- Example: An example of a service would be play music in the background while user is using a different app

Broadcast receivers

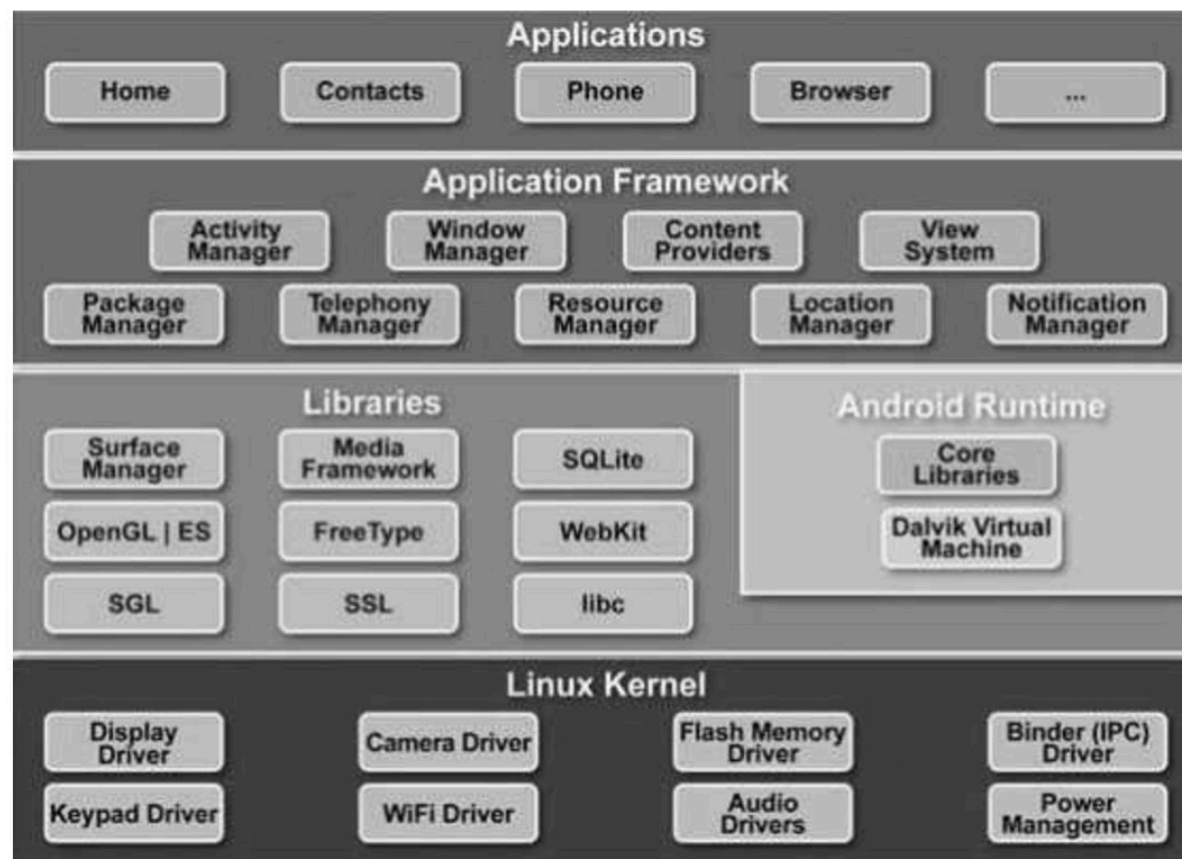
- These control the communication between the Android OS and the application
- Respond to broadcast messages sent from the system or other apps
- Example: Broadcast message can be initiated by an app, letting other apps know that some data has been downloaded and is available for use by other apps

Content Providers

- Control and dictate data and database management issues
- Supplies data from one application to another upon request

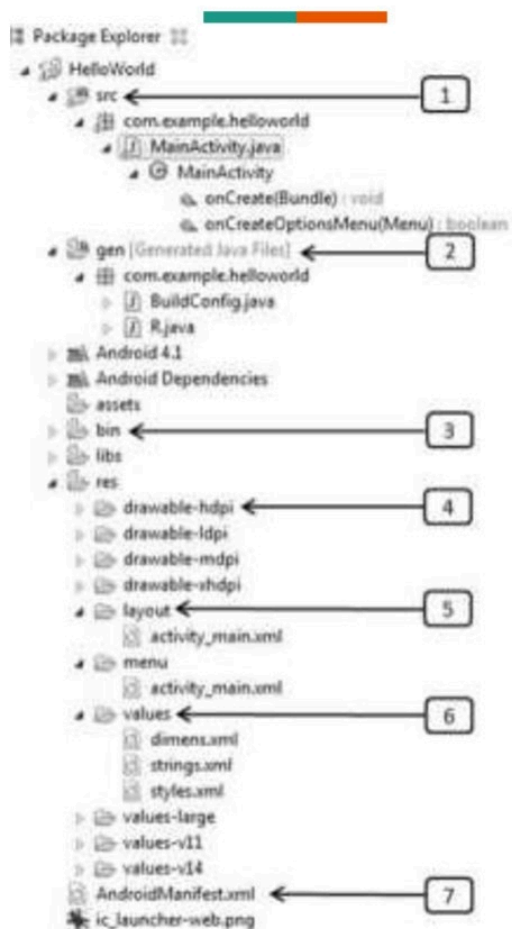


Android Architecture





Anatomy of an Android App



1 - src	<ul style="list-style-type: none">• Contains the .java source file• Contains the MainActivity.java source file• MainActivity is the activity class that runs when app is launched
2 - gen	<ul style="list-style-type: none">• Contains the .R file• References all resources found in the project• This file should never be modified
3 - bin	<ul style="list-style-type: none">• Contains package files - .apk
4 - res/drawable - hdpi	<ul style="list-style-type: none">• Directory for drawable objects designed for high density screens
5 - res/layout	<ul style="list-style-type: none">• Directory of files that defines your app's user interface
6 - res/values	<ul style="list-style-type: none">• Directory of XML files that contain a collection of resources such as strings and color definitions
7 - AndroidManifest.xml	<ul style="list-style-type: none">• Describes the fundamental characteristics of the app and defines their respective components



To conclude

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Thank you.

