

Overview of Android: Application Framework & Apps Layers

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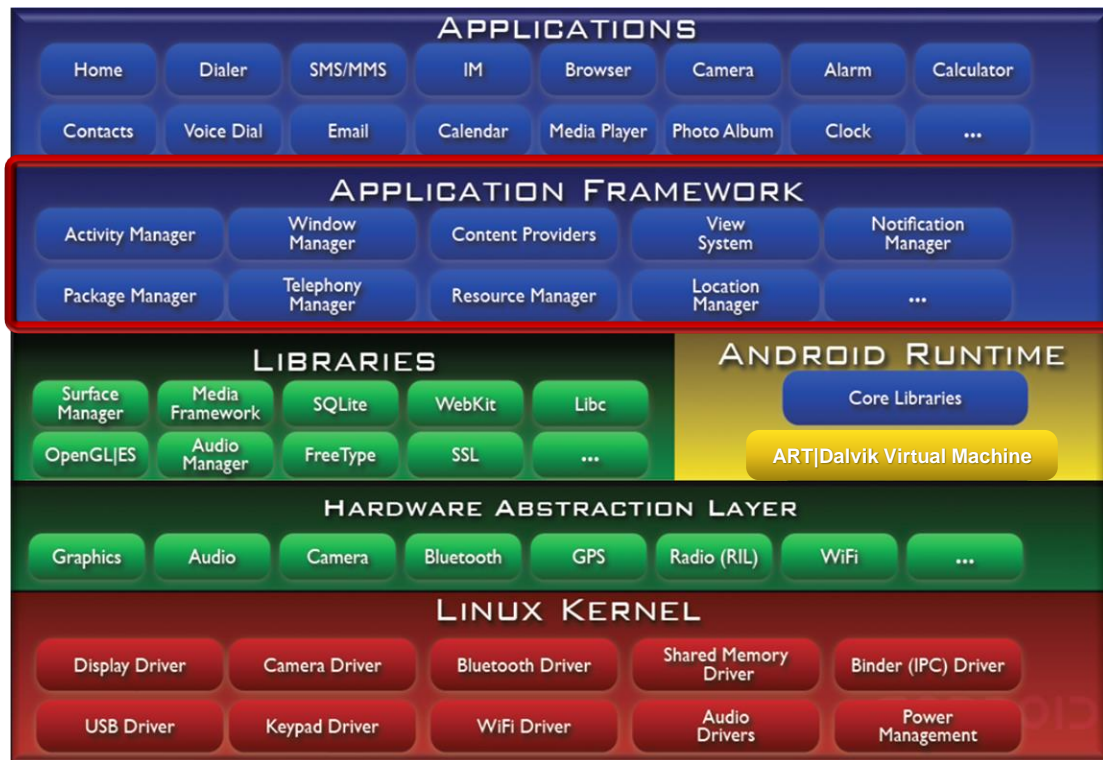
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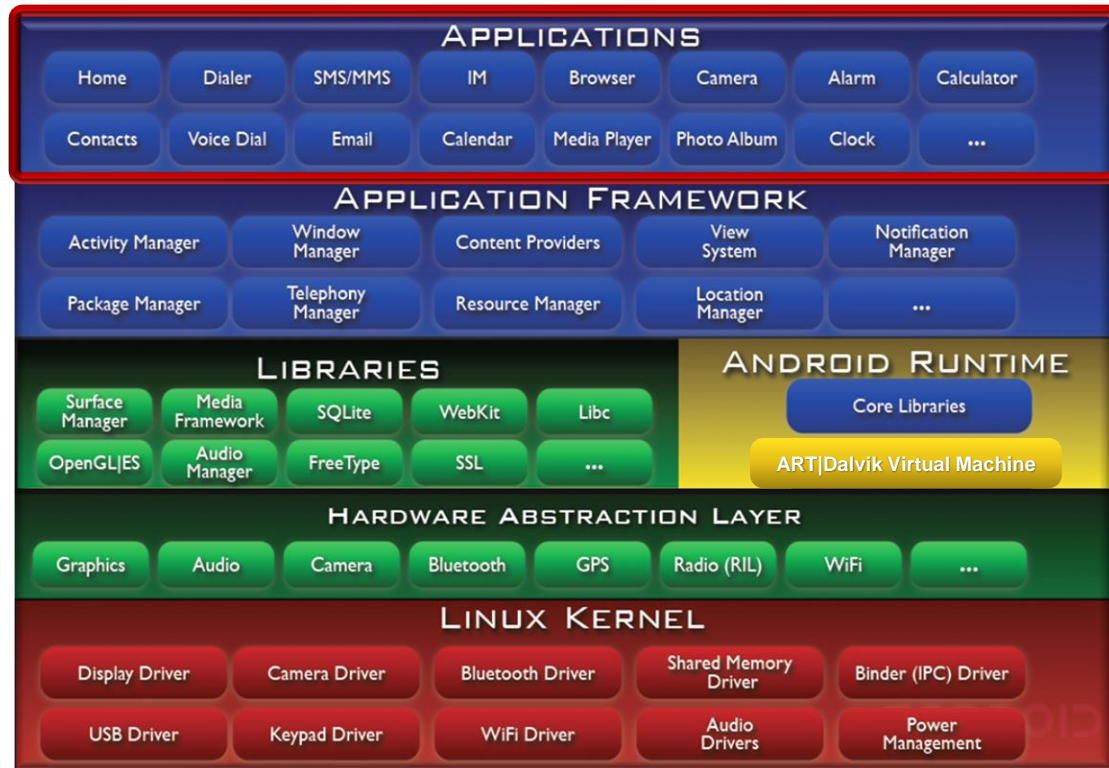
Learning Objectives in this Part of the Lesson

1. Understand what is an application framework & know why it's useful
2. Recognize common system services in the Android Application Framework layer



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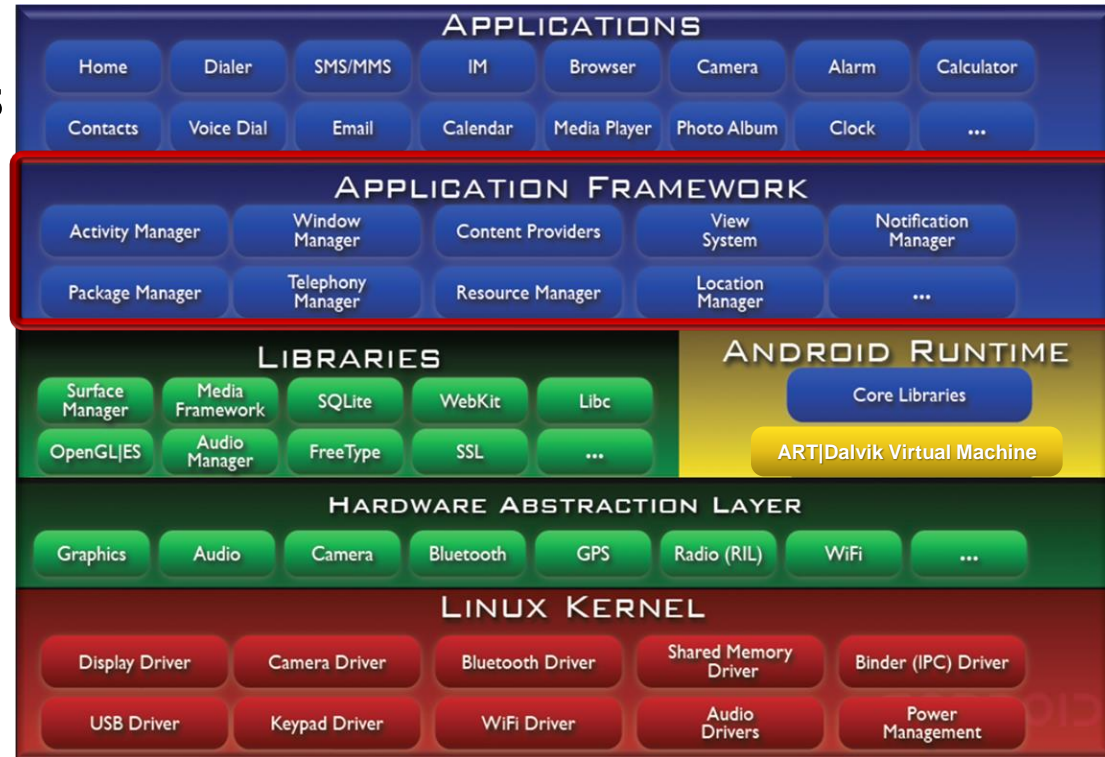
1. Understand what is an application framework & know why it's useful
2. Recognize common system services in the Android Application Framework layer
3. Recognize common apps that are available on an Android device



Overview of the Android Application Framework & Apps Layers

Overview of Android: Application Framework & Apps Layers

- The *Application framework* layer contains system services that provide apps with the capabilities & info they need to do their work

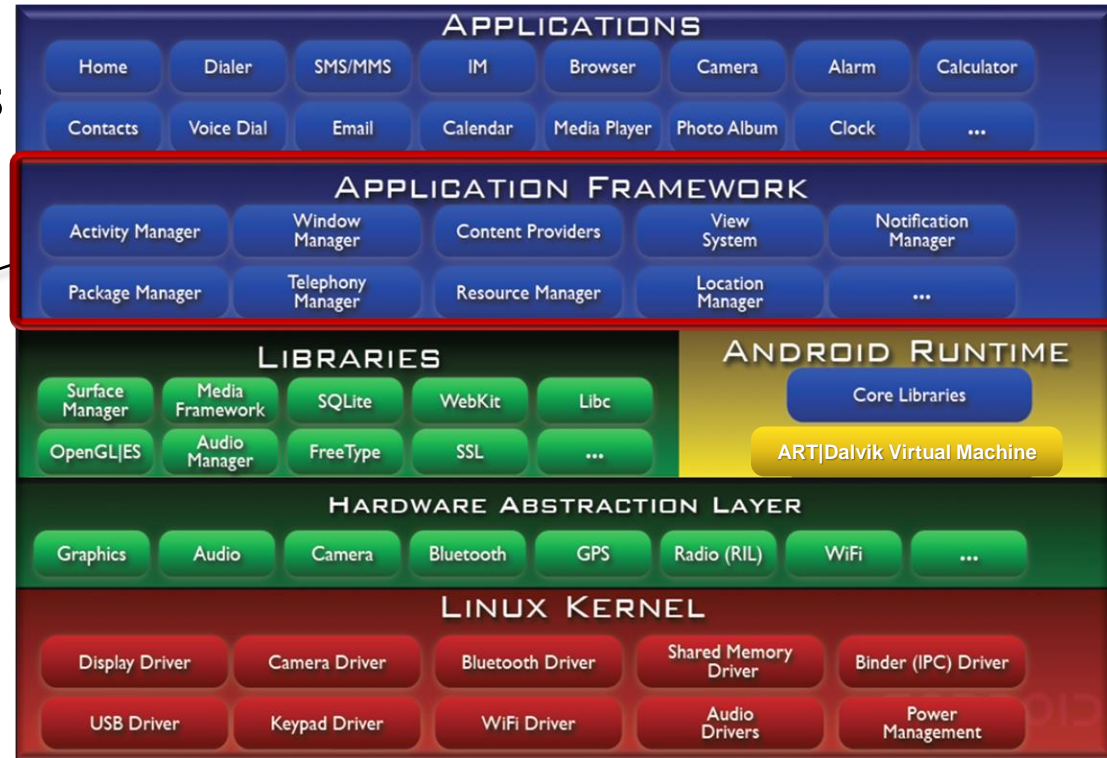


See opensourceforu.ifytimes.com/2013/12/birds-eye-view-android-system-services

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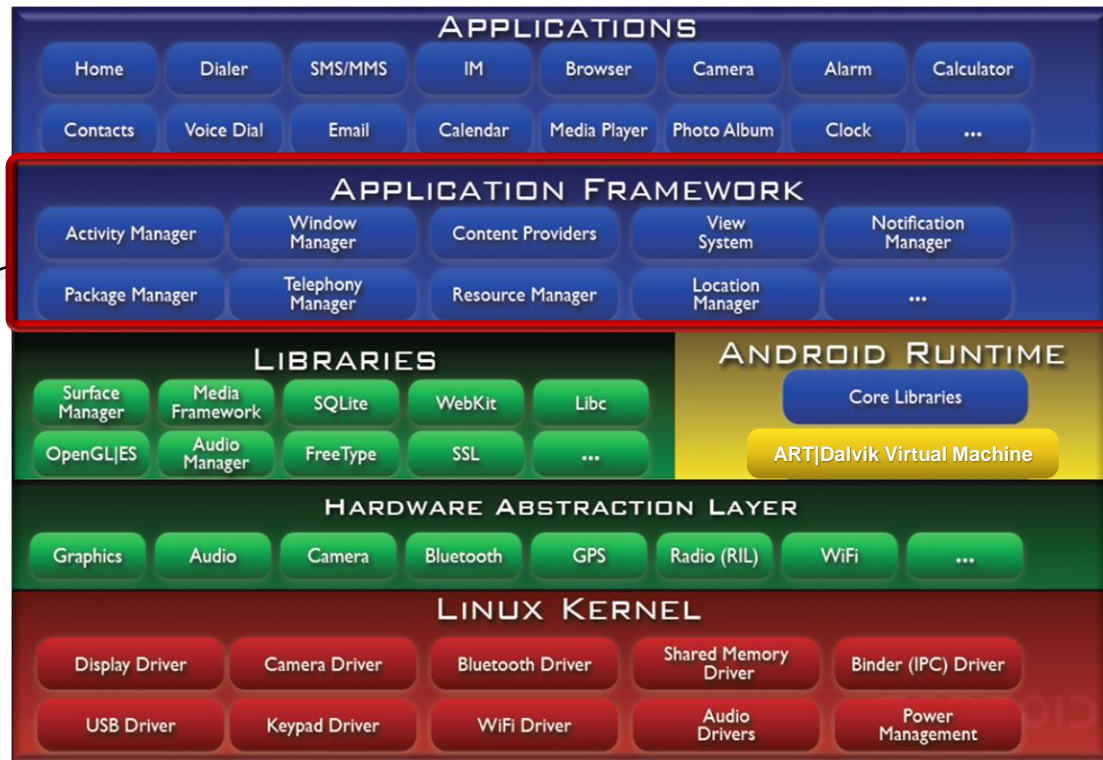
- Expose hardware & Linux OS kernel capabilities to apps*
- Run continuously during system operation*
- Control flow is driven by various events & callbacks*



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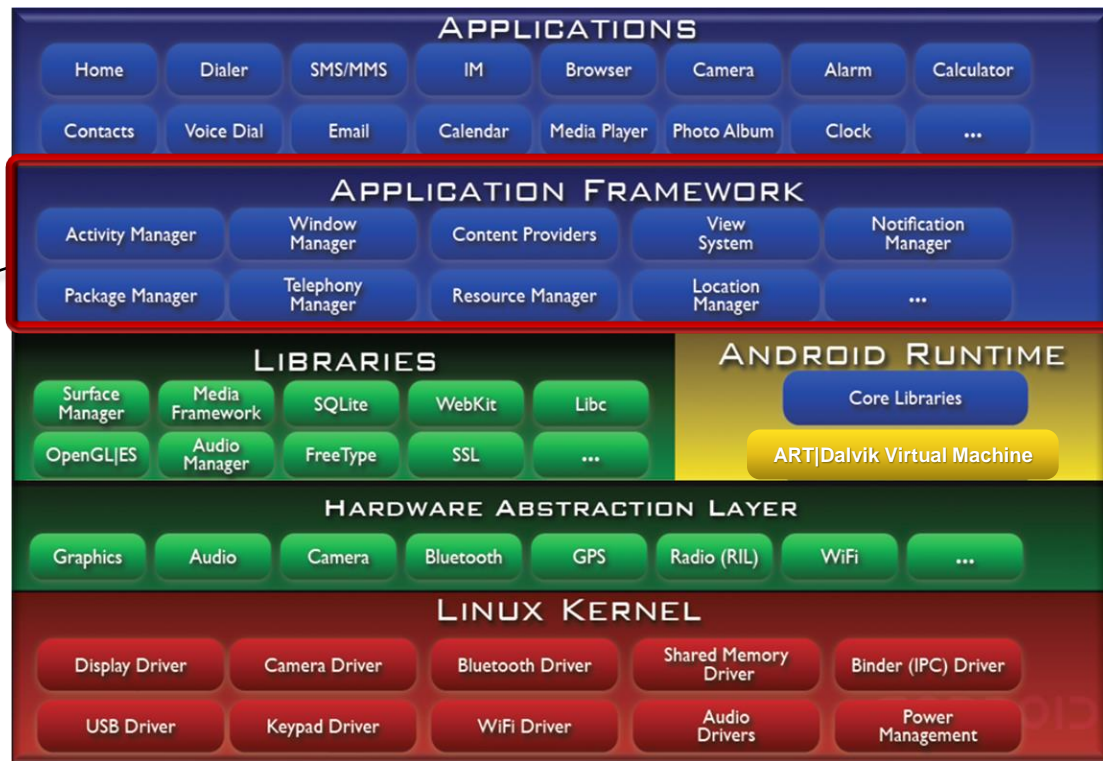
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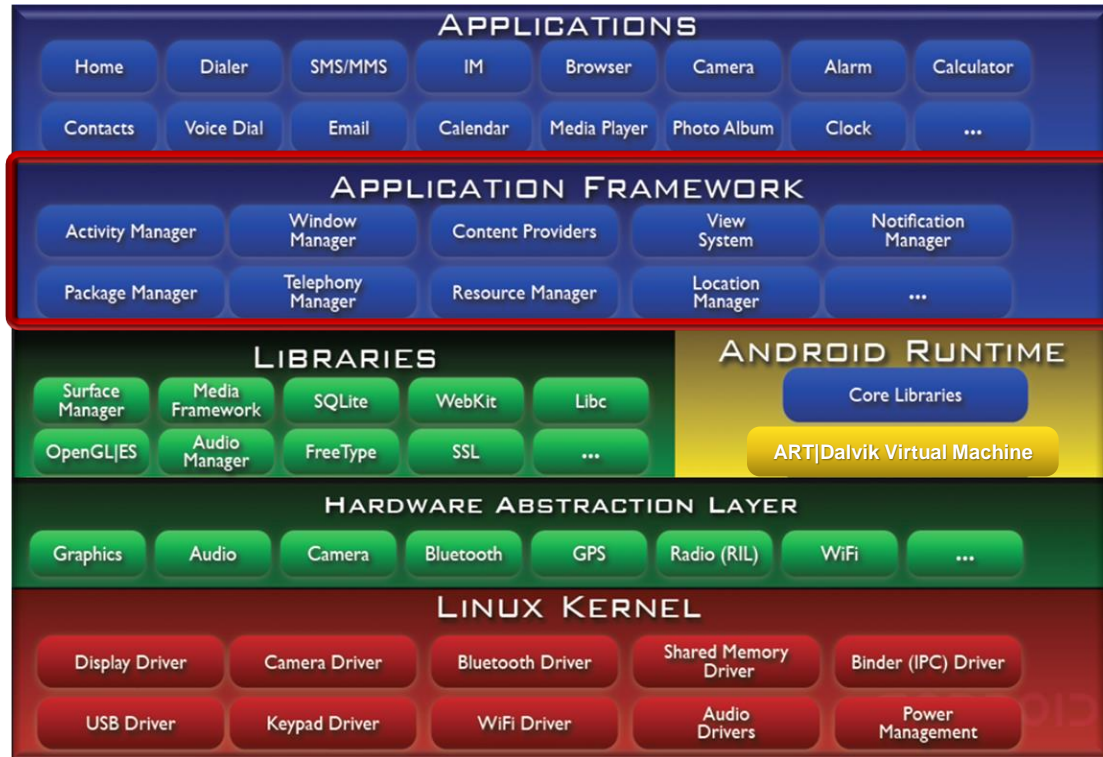
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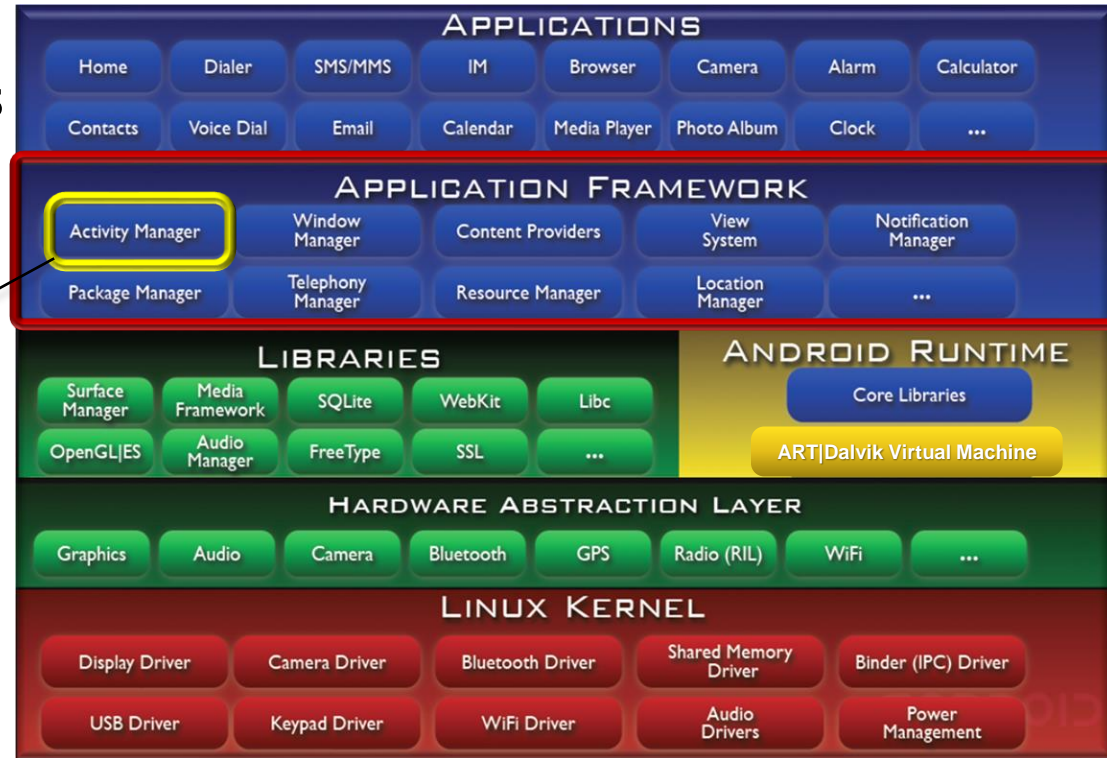
- The *Application framework* layer contains system services that provide apps with the capabilities & info they need to do their work



These system services are largely written in Java, with some C/C++ native code

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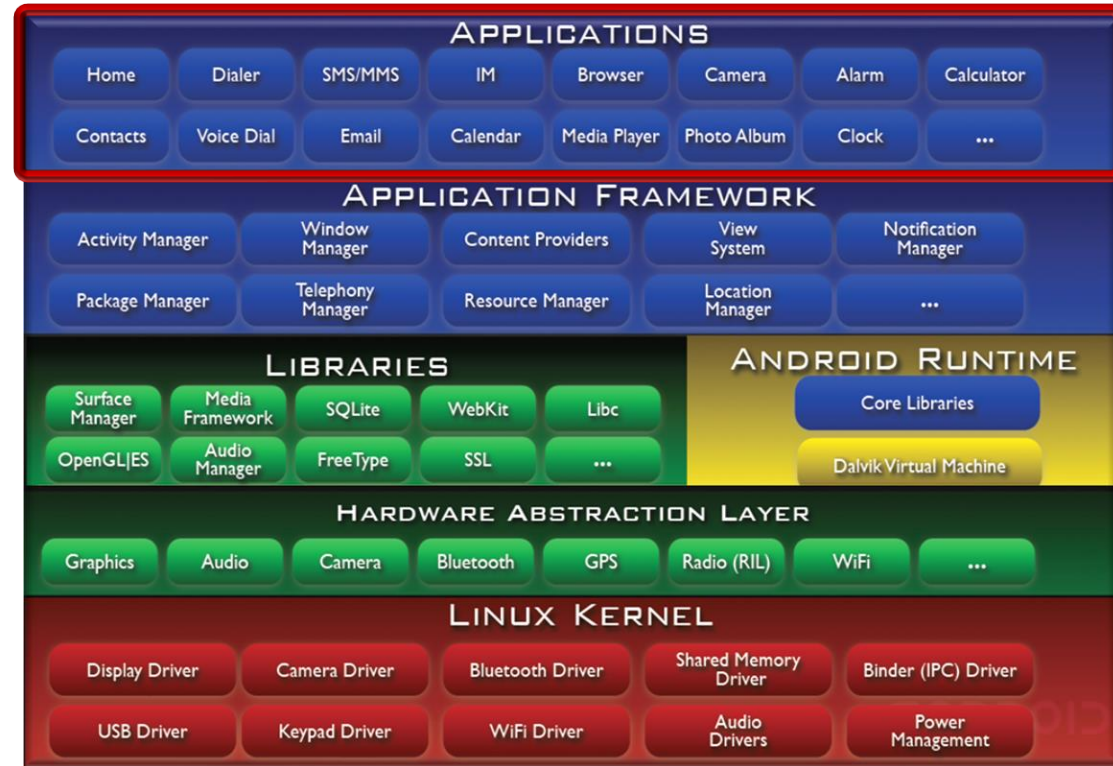


We focus on the Activity Manager Service throughout this course

This service uses intents to interact with activities, services, & broadcast receivers

Overview of Android: Application Framework & Apps Layers

- Atop Android's software stack are apps used every day



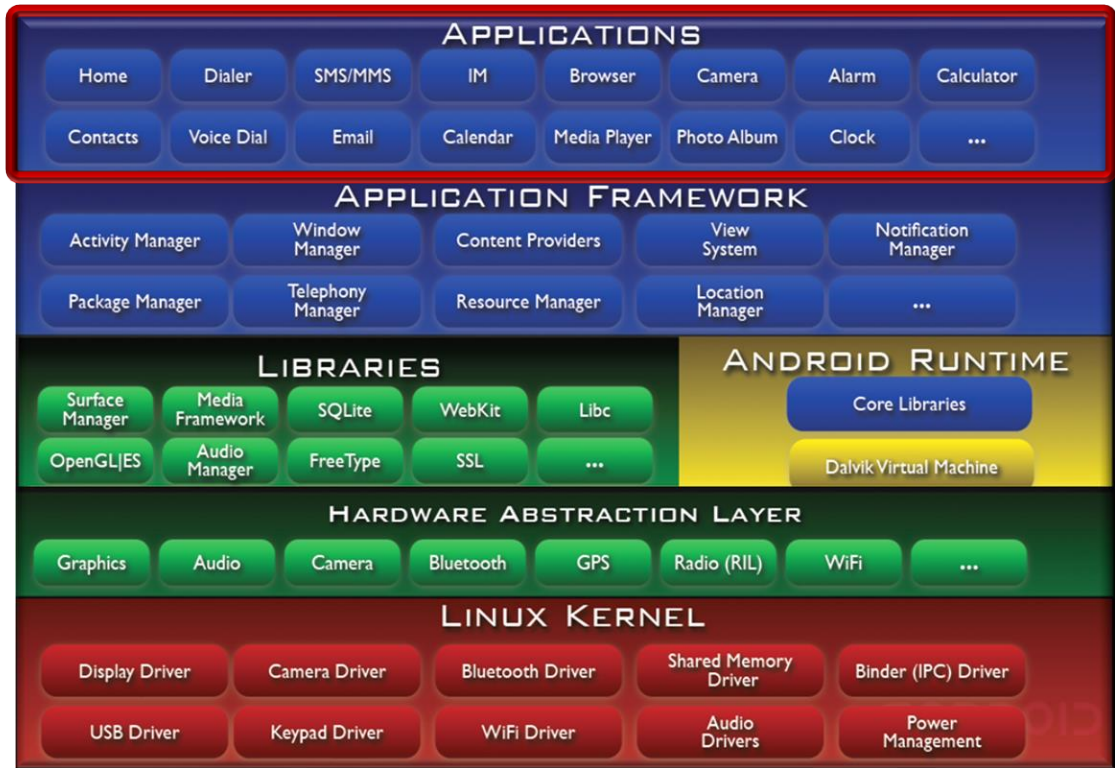
See android.googlesource.com/platform/packages/apps

Overview of Android: Application Framework & Apps Layers

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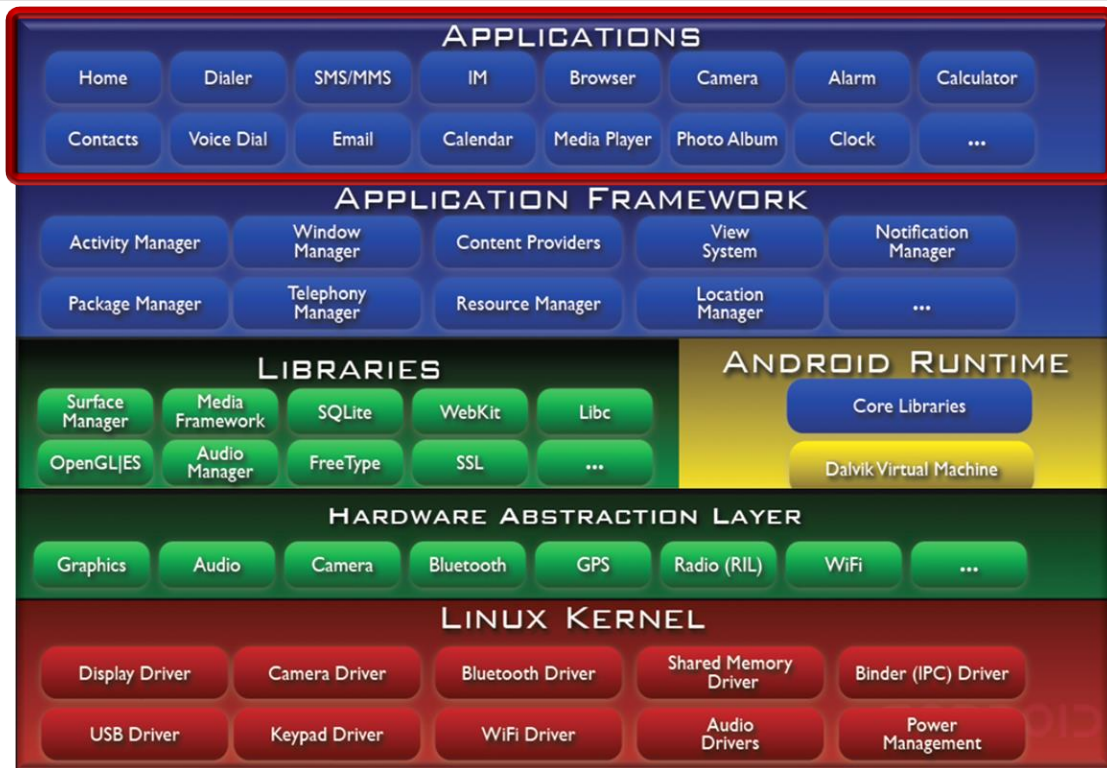


Overview of Android: Application Framework & Apps Layers

- Atop Android's software stack are apps used every day



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- It's also possible to write apps in C/C++



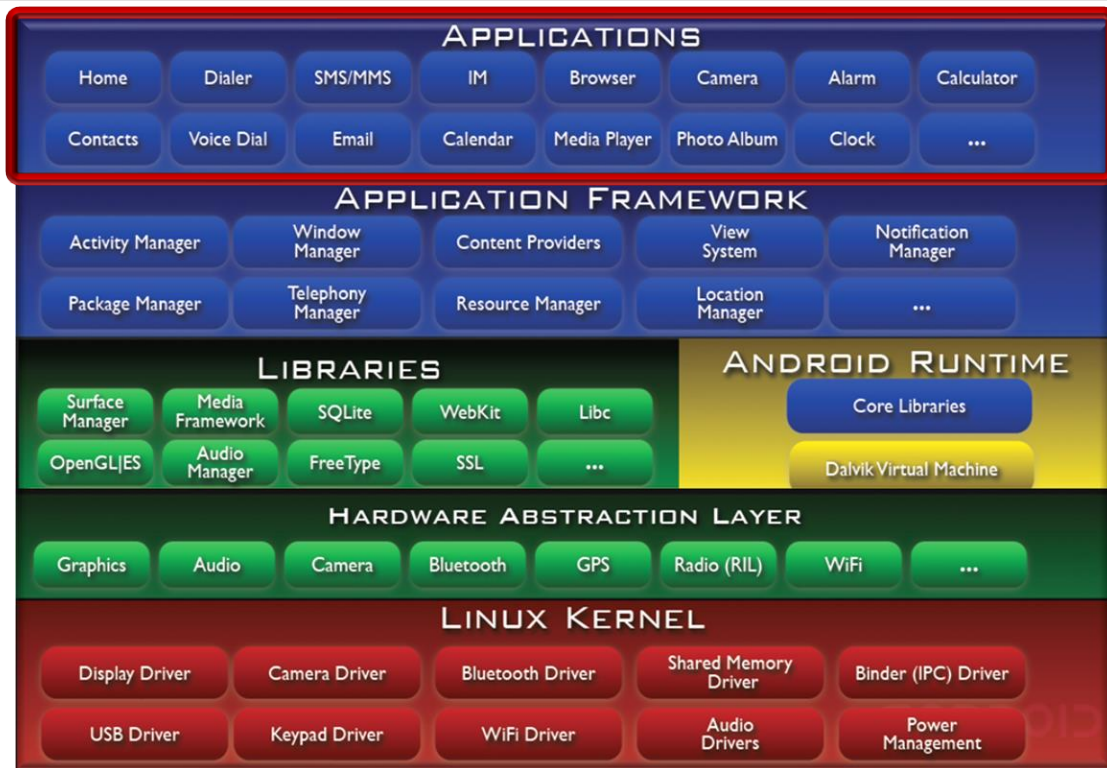
See developer.android.com/ndk

Overview of Android: Application Framework & Apps Layers

- Atop Android's software stack are apps used every day



- The bulk of these apps are written in Java
- It's also possible to write apps in C/C++
- As well as Kotlin!



See developer.android.com/kotlin

End of the Overview of Android: Application Framework & Apps Layers