User Interaction: Intro to Android

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INF 133 Fall 2014
• Unlike traditional Java, Android does not use a “main” function
• It uses a sophisticated set of callbacks
• Each step of the callback corresponds to a step in the lifecycle of the app
• This is so that the phone can shut your app down when important things happen, like a phone call arriving
• An implementation of the Activity class contains the callbacks
• “Activity” maps to “Observer”
• Key loops
• Entire Lifetime
• `onCreate() - onDestroy()`

http://developer.android.com/training/basics/activity-lifecycle/starting.html
Activity Lifecycle

- Key loops
- Visible Lifetime
  - `onStart()` - `onStop()`

http://developer.android.com/training/basics/activity-lifecycle/starting.html
• Key loops
• Foreground Lifetime
• `onResume()` - `onPause()`
• onPause() may be followed by kill
Activity Lifecycle

Why do you care? So that your app ...

• Does not crash if the user receives a phone call or switches to another app while using your app.
• Does not consume valuable system resources when the user is not actively using it.
• Does not lose the user's progress if they leave your app and return to it at a later time.
• Does not crash or lose the user's progress when the screen rotates between landscape and portrait orientation.
Activity Stack