Mobile Application Programming: Android

Global Application State
Activities

- Apps are composed of activities
- Activities are self-contained tasks made up of one screen-full of information
- Activities start one another and are destroyed commonly
- Apps can use activities belonging to another app
Custom Controls

- Create subclass of View class

- Override:
  - `onDraw(Canvas c)`
  - `onMeasure(int wMeasure, int hMeasure)`

- Add listener interface and listener property for the interesting events the control generates and call on... methods when events occur

- Implement view-level transient data saving
Application
Application Controller (MVC)
Launching Activities
Launching Activities

Intent
Launching Activities

How to share this?
Application Class

- Instantiated **before** any Activity
- Can be accessed using any Context object using `getApplicationContext()` method
- Has an **onCreate** method
- Does **not** have an **onPause**
  - **onTerminate** also does not work as a replacement
Sharing Using Application
Sharing Using Application
Singletons

- Single-instance class with global state
- Time-tested design pattern
- Enforces instantiation controls
- Has a `getInstance()` method that makes singleton
- Should be thread-safe!
- Need to define a way to make persistent and call in an appropriate place in your application