## Udacity

Developing Android Apps



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Latest revision: July 5, 2015

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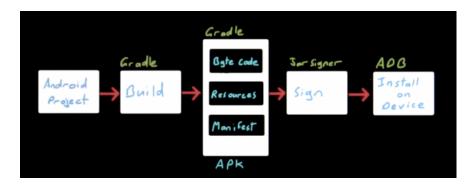
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## Abstract

Todo...

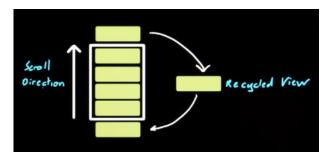
## 1 Create Project Sunshine

- Package name should be the reverse domain name that you own (eg. com.example you can't publish a project with this namespae)
- The target SDK is automatically assigned to the most recent version
- MinSDK must should balance a large audience with new features
- An **activity** serves as a presentation layer for our UI
- A **fragment** represents a behaviour or portion of our screen
- To create a new icon:
  - 1. Right-click $\rightarrow$ New $\rightarrow$ Image Asset.
  - 2. Choose an image
  - 3. Overwrite "ic\_launcher"
- Android Stack:
  - Application Layer
  - Application Framework
  - C/C++ Libs & Android Runtime
  - Linux Kernel
- Gradle is the build toolkit for handling dependencies and building into byte code, resources, and manifest

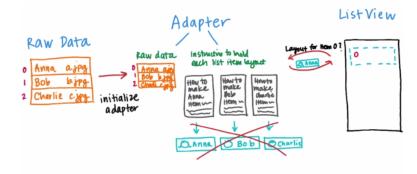


- The "res" file contains all the resource files: layouts, values, images
- Fame, Linear, and Relative layout are basic view groups
- **Frame layout**: useful for simple layouts, with a single view or stack or views. Views are all algined against the frame boundaries only.
- **Linear layout**: perfect for stacking views vertically or horizontally, one after another. Only way to break-up display proportionally.

- Relative layout: sophisticated layout that allows the position of views relative to other views or the boundaries of the view
- ScrollView allows the ability to scroll through the content of the layout it contains
- ListView starts by filling the screen with views, and a few on either end to assure no loading on scroll.
- Each view is recycled to save memory when it's moved off screen, which is how all **AdapterView** objects behave



- An adapter then serves an interface for the data, managing location and creation (so memory is dealt with effectively)



- For the sunshine data, which is in array, we'll use an ArrayAdapter, with the paramters:
  - Context: global info about app environment, including access to system servcies: getActivity
  - ID of the list item layout: resource id of layout: R.layout.list\_item\_forecast
  - ID of text view: resource id of UI: R.id.list\_item\_forecast\_textview
  - List of data: data object weekForecast

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