ICS 115

FINALS

SITE REVIEWER

LESSON 3: FRAGMENT AND LISTVIEW

Fragments

- portion of user interface in an Activity.
- combine multiple fragments in a single activity to build a multi-pane UI and   reuse a fragment in multiple activities.
- has its own lifecycle

Fragments Lifecycle

- Linked to the lifecycle of the activity containing it.
- onCreateView() used to instantiate the user interface of a fragment.

List View

- view group that displays a list of scrollable items.
- list items are automatically inserted to the list using an Adapter

List Activity

- sub type of activity that features a List View as the primary UI.

Recycler View

- more flexible, powerful and advance version than list view.
- used to display larger data sets that can be scrolled very efficiently and maintaining a limited number of views.

Layout Managers

- Linear Layout Manager
- Grid Layout Manager
- Staggered Grid Layout Manager

Card View

- extends from frame layout class
- helps you to make card-like views that have shadows

Dependencies for Recycler View and Card View

- compile 'com.android.support:cardview-v7:21.0.+'
- compile 'com.android.support:recyclerview-v7:21.0.+'

Runtime Permissions

- Beginning in Android 6.0 (API level 23), users grant permissions to apps while the app is running, not when they install the app.
- This approach streamlines the app install process, since the user does not need to grant permissions when they install or update the app.
    - Normal Permissions
    - Dangerous Permissions

LESSON 5: ANDROID LAYOUTS AND CUSTOM VIEWS

Layout

- defines the visual structure for a user interface, such as the UI for an activity.
    - through XML
    - through Instantiate layout elements in runtime

Types of Layouts

- Linear Layout
- Relative Layout
- Grid Layout
- Table Layout
- Frame Layout
- Drawer Layout

Layout Properties

- android:id
- android:layout_width
- android:layout_height
- android:layout_margin
- android:layout_marginTop
- android:layout_marginBottom
- android:layout_marginRight
- android:layout_marginLeft
- android:layout_marginStart
- android:layout_marginEnd
- android:layout_weight
- android:layout_gravity
- android:layout_x
- android:layout_y

Customized Views

- Modify existing views
- Compund Views
- New Views

LESSON 6: ANDROID RESOURCES, THEMES AND MATERIAL DESIGN

Android Resources

- animator/
- anim/
- color/
- drawable/
- mipmap/
- layout/
- menu/
- raw/
- values/

Styles

- collection of attributes that specify the look and format for a View or window.
- defined in an XML resource that is separate from the XML that specifies the layout.
- height, padding, font color, font size, background color, and much more.

Defining Styles

- save XML file in res/values

Inheritance

- parent attribute in the <style> element lets you specify a style from which your style should inherit attributes

Material Design

- comprehensive guide for visual, motion, and interaction design across platforms and devices.

LESSON 7: ANDROID UI DIALOGS, MENUS AND WEBVIEW

Dialogs

- small window that prompts the user to make a decision or enter additional information.

Creating custom dialog

- Create layout and add it to an AlertDialog by calling setView() on your AlertDialog.Builderobject

Dialog Sub-classes

- Alert Dialog
- Progress Dialog
- Time Picker
- Date Picker

Toast

- provides simple feedback about an operation in a small popup.

Snackbars

- provide lightweight feedback about an operation.
- shows brief message at the bottom of the screen on mobile and lower left on larger devices.

Menu

- Options Menu and App Bar
- Context Menu
- Popup Menu

Options Menu and App Bar

- include actions and other options that are relevant to the current activity context

Context Menu

- actions that affect a specific item or context frame in the UI.

Popup Menu

- modal menu anchored to a View

Web View

- allows you to display web pages as a part of your activity layout