**CS260 Android (Part I)**

1) Grab the project ClassCode01 from the Cs260-01 Public folder on Turing.

2) Run the application in an emulator

3) Let's review the code

4) Create a menu in the ClassCode01Activity

(a) Add two menu items "About" and "Print Integers"

```
public boolean onCreateOptionsMenu (Menu menu)
{
  super.onCreateOptionsMenu (menu);
  // menu.add (groupId, itemId, order, textToDisplay);
  menu.add (0, 0, 0, "About" );
  menu.add (0, 1, 0, "Print Integers");

  return true;
}
```

(b) Process menu selections

```
public boolean onOptionsItemSelected (MenuItem item)
{
  int itemID = item.getItemId ();

  if (0 == itemID) // Start About Activity
  {
    Intent intent = new Intent (this, About.class);
    startActivity (intent);
    return true;
  }
  else if (1 == itemID)
  {
    return true;
  }
  return true;
}
```

5) Create about.html in the layout folder using a simple LinearLayout.

6) Place a TextView widget in the LinearLayout that displays the text "About Activity"

7) Create a new activity called About.java

```java
package edu.pacificu.cs.ClassCode01;

import android.app.Activity;
import android.os.Bundle;

public class About extends Activity
{
  @Override
  public void onCreate (Bundle savedInstanceState)
  {
    super.onCreate (savedInstanceState);
    setContentView (R.layout.about);
  }
}
```

8) Add the activity About to the AndroidManifest.xml

## CS260 Android (Part II)

1) Create an Activity PrintInts.java that will initially display a TextView in code (i.e. versus xml). Simply print "PrintInts Activity" when the activity is started.

```java
public class PrintInts extends Activity
{
  private LinearLayout mRoot;
  private TextView mTextView;

  @Override
  public void onCreate(Bundle savedInstanceState)
  {
    super.onCreate(savedInstanceState);

    LinearLayout.LayoutParams linearContainerParams =
        new LinearLayout.LayoutParams (
            ViewGroup.LayoutParams.FILL_PARENT,
            ViewGroup.LayoutParams.WRAP_CONTENT,
            0.0f);

    LinearLayout.LayoutParams linearWidgetParams =
        new LinearLayout.LayoutParams (
            ViewGroup.LayoutParams.FILL_PARENT,
            ViewGroup.LayoutParams.FILL_PARENT,
            1.0f);

    mRoot = new LinearLayout (this);
    mRoot.setOrientation (LinearLayout.VERTICAL);
    mRoot.setBackgroundColor (Color.LTGRAY);
    mRoot.setLayoutParams (linearContainerParams);

    mTextView = new TextView (this);
    mTextView.setText ("Balance($)");
    mTextView.setTextColor (Color.RED);
    mTextView.setGravity (Gravity.RIGHT);
    mTextView.setLayoutParams (linearWidgetParams);

    mRoot.addView (mTextView);

    setContentView (mRoot);

  }
}
```

2) Pass information between the Activities ClassCode01Activity and PrintIntsActivity.

**In ClassCode01Activity**

```
Intent intent = new Intent (this, PrintInts.class);
intent.putExtra ("int", 10);
```

**In PrintInts Activity**

```
Bundle extras = getIntent ().getExtras ();
int value = extras.getInt ("int");
```

3) Using the passed in integer, create a table of values 1 to the integer passed in one row per integer. As a starting point, here is a row in a table with two headings.

```
LinearLayout.LayoutParams linearContainerParams =
    new LinearLayout.LayoutParams (
        ViewGroup.LayoutParams.FILL_PARENT,
        ViewGroup.LayoutParams.WRAP_CONTENT,
        0.0f);

LinearLayout.LayoutParams linearWidgetParams =
    new LinearLayout.LayoutParams (
        ViewGroup.LayoutParams.FILL_PARENT,
        ViewGroup.LayoutParams.FILL_PARENT,
        1.0f);

TableLayout.LayoutParams tableContainerParams =
    new TableLayout.LayoutParams (
        ViewGroup.LayoutParams.FILL_PARENT,
        ViewGroup.LayoutParams.WRAP_CONTENT,
        0.0f);

TableLayout.LayoutParams tableWidgetParams =
    new TableLayout.LayoutParams (
        ViewGroup.LayoutParams.FILL_PARENT,
        ViewGroup.LayoutParams.FILL_PARENT,
        1.0f);

TableRow.LayoutParams rowContainerParams =
    new TableRow.LayoutParams (
```

```
            ViewGroup.LayoutParams.FILL_PARENT,
            ViewGroup.LayoutParams.WRAP_CONTENT,
            0.0f);

TableRow.LayoutParams rowWidgetParams =
    new TableRow.LayoutParams (
            ViewGroup.LayoutParams.FILL_PARENT,
            ViewGroup.LayoutParams.FILL_PARENT,
            1.0f);

mRoot = new LinearLayout (this);
mRoot.setOrientation (LinearLayout.VERTICAL);
mRoot.setBackgroundColor (Color.LTGRAY);
mRoot.setLayoutParams (linearContainerParams);

mTableLayout = new TableLayout (this);
mTableLayout.setOrientation (TableLayout.VERTICAL);
mTableLayout.setBackgroundColor (Color.BLUE);
mTableLayout.setLayoutParams (tableContainerParams);
mRoot.addView (mTableLayout);

mTableRow = new TableRow (this);
mTableRow.setOrientation (TableLayout.VERTICAL);
mTableRow.setBackgroundColor (Color.CYAN);
mTableRow.setLayoutParams (rowContainerParams);
mTableLayout.addView (mTableRow);

mTextView = new TextView (this);
mTextView.setText ("Balance($)");
mTextView.setTextColor (Color.RED);
mTextView.setGravity (Gravity.RIGHT);
mTextView.setLayoutParams (rowWidgetParams);
mTableRow.addView (mTextView);

mTextView = new TextView (this);
mTextView.setText ("Month");
mTextView.setTextColor (Color.RED);
mTextView.setGravity (Gravity.RIGHT);
mTextView.setLayoutParams (rowWidgetParams);
mTableRow.addView (mTextView);

setContentView (mRoot);
```