Tutorial Week 1 – 31285 MAD
4%

Part A (aim to complete in class)

Objectives:

- Get a clear idea about the subject and the assessments.
- Get familiar with Android Studio.

1. (5%) Create a new Android Studio project with the following characteristics:
    - Application name: Exercise1
    - Package name: com.mad.exercise1
    - Min SDK: API 15
    - Basic Activity
    - Activity name: MainActivity

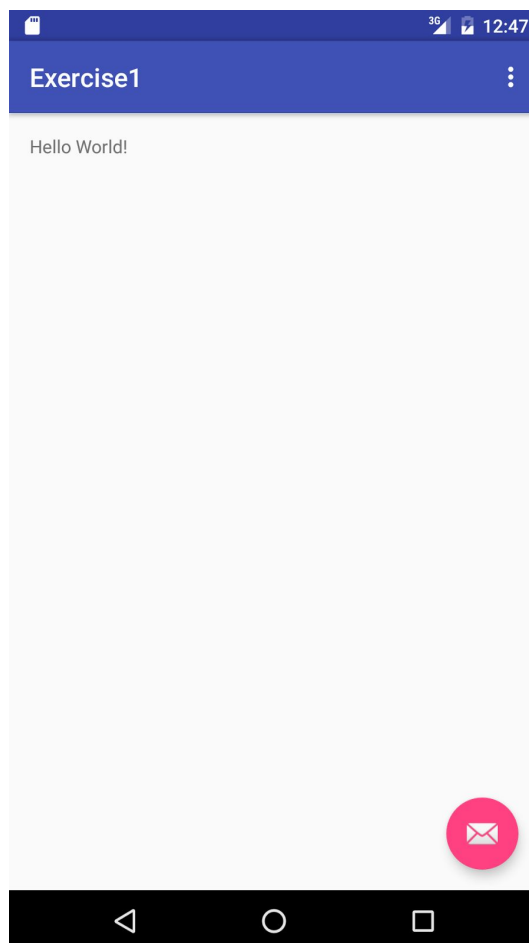2. Run the app on your emulator or real Android device. It should show the following screen.

Fig 1: Hello World

3. (35%) Create a form that looks like Figure 2 (change photo to whatever you like!!)
   ○ First name (EditText) (hint field "First name")
   ○ Last name (EditText) (hint field "Last name")
   ○ Age (EditText) (hint field "Age")
   ○ Profile photo (ImageView) (image must be a png file)
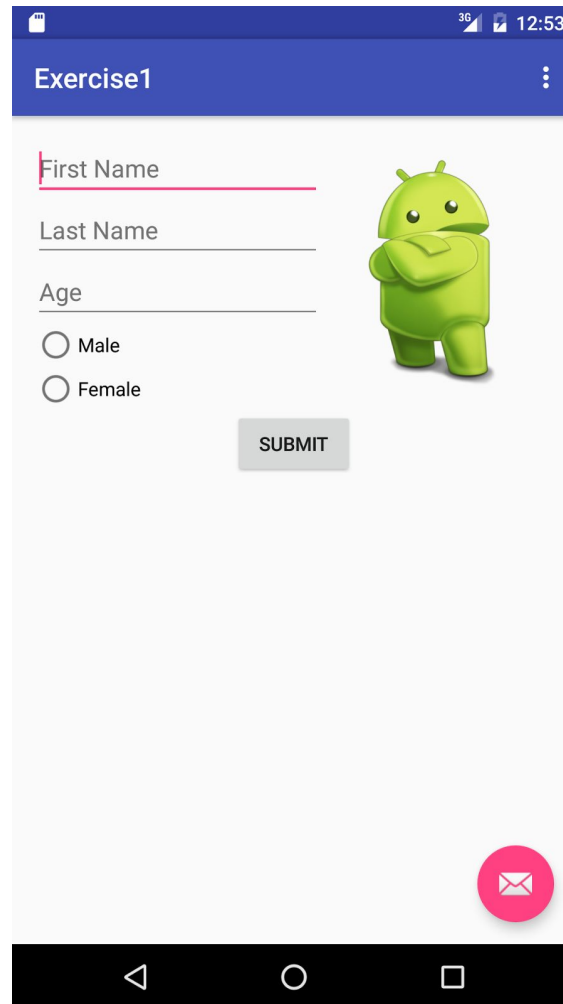   ○ Submit button (Button)

Fig 2: Form

4. (10%) Change the behaviour of the EditText fields so that the first and last name fields are configured especially for input of a person's name, and the age field allows only numeric input. See http://developer.android.com/guide/topics/ui/controls/text.html for what you could do.

5. Add other widgets to the form such as "Date picker" to enter date of birth. Play with the Android Design feature to position widgets BUT also look at the generated XML when you switch from "Design" to "text in Android studio. Try to add widgets using the "Text" mode (not graphical interface).

Part B (complete at home)

Preparation: Watch Videos in Section 4 "Android App Development Essential Training" on LYNDA.com. See Figure 3 (left).

6. (25%) Try to locate the Java code in your program that handles the action of clicking on the Floating Action Button (FAB) i.e. the round pink button:

```java
FloatingActionButton fab = (FloatingActionButton) findViewById(R.id.fab);
fab.setOnClickListener(new View.OnClickListener() {
  @Override
  public void onClick(View view) {
    Snackbar.make(view, "Replace with your own action",
        Snackbar.LENGTH_LONG).setAction("Action", null).show();
  }
});
```

Below this Java code, paste an exact copy of it. Change the copied code in the following ways: Local variable type: Button, Local variable name: submitBtn, Resource ID: the id of your "Submit" button, Snackbar message: "Welcome!". When you click "Submit", it should show a message like Figure 3 (middle).

7. (25%) Modify your code so that clicking the submit button shows the message "Welcome <firstName> <lastName>!" as shown in Figure 3 (right).
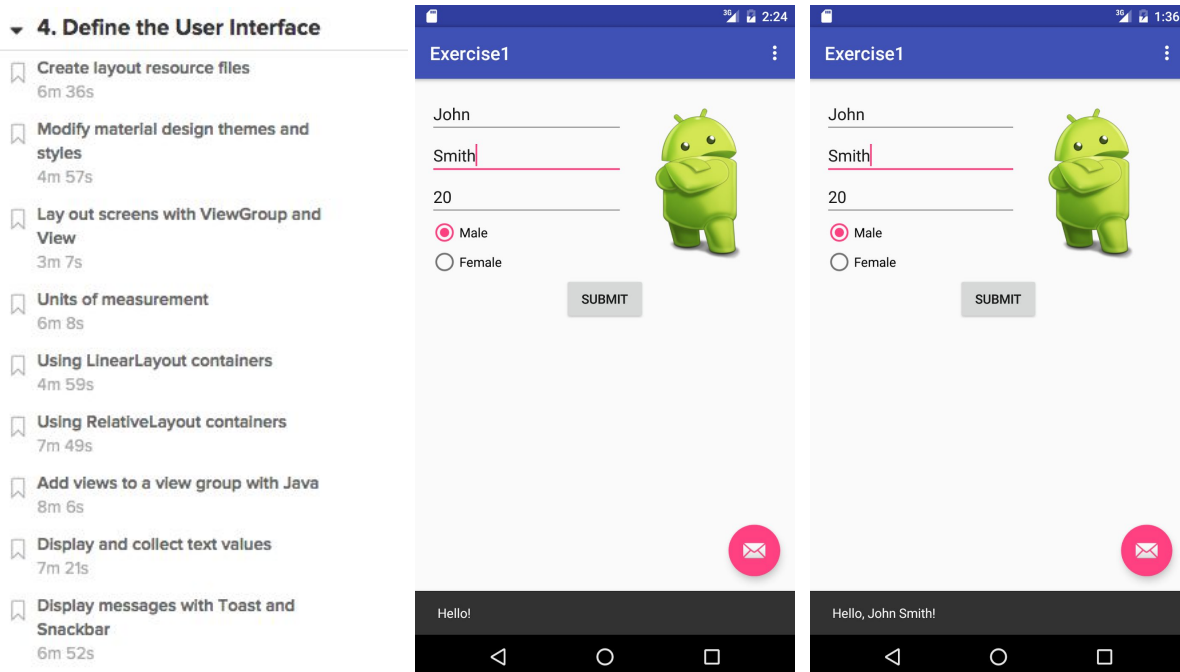

Fig 3