

# Report of CS 522 Assignment 1

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Video: In the Zip archive file, named "Yunfeng\_Wei.MOV"

Steps to create the Android App

1. Start a new Android Studio Project, set the application name as Assignment\_1, set the domain name as cs522.stevens.edu, as Figure 1.1.1. In the project, open the build.gradle(Module: app), set the targetSdkVersion to 21 as Figure 1.1.2 in order to run it on Android 5.0.1.

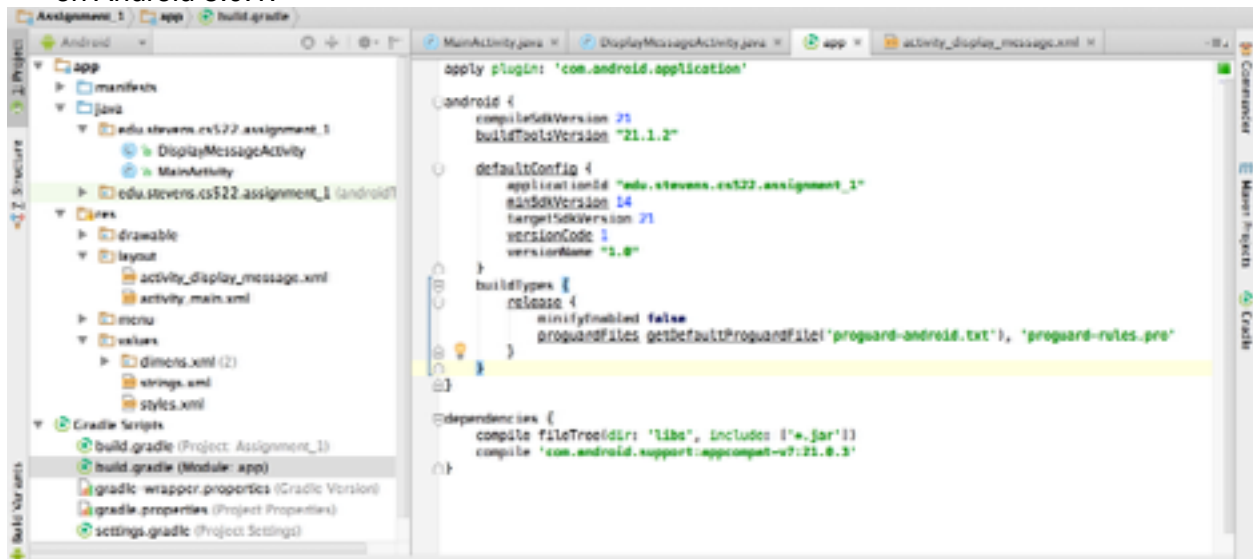


Figure 1.1.1

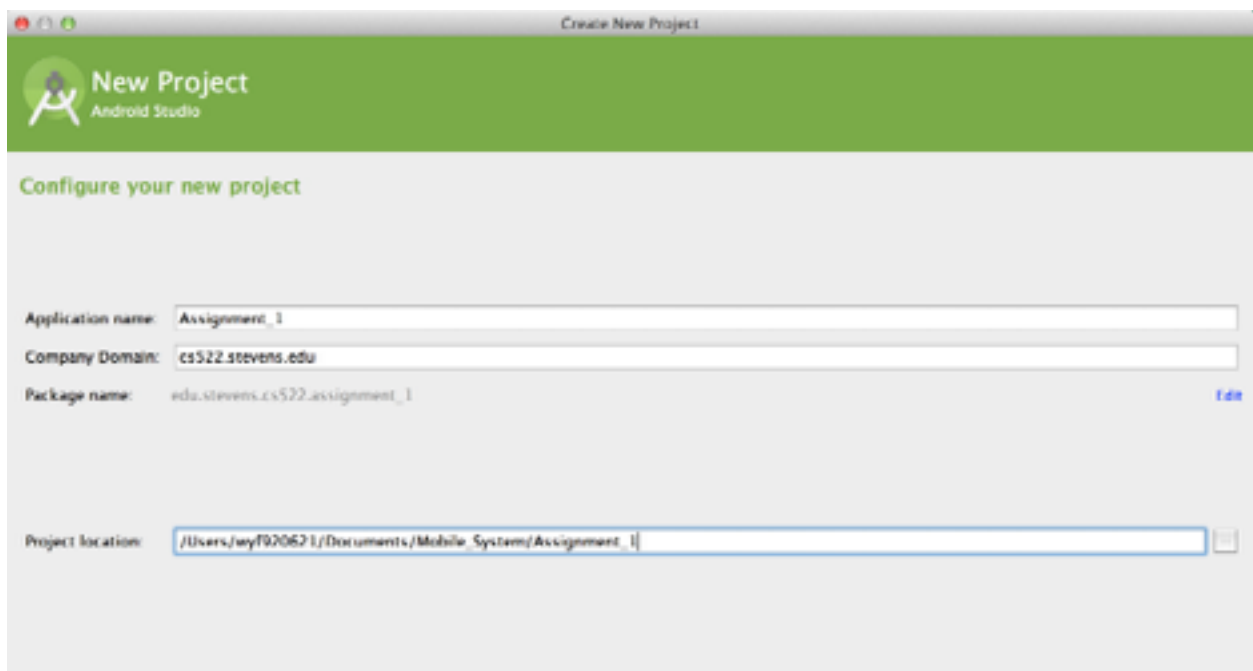


Figure 1.1.2

2. In the project, select the activity\_main.xml in the folder 'res/layout', change the RelativeLayout to LinearLayout, set the orientation of the layout to 'horizontal', delete the TextView and create a new EditText and a Button. Set the id of the EditText to 'edit\_message', the width to 1 and the hint of it to '@string/edit\_message' which will be defined in string.xml. Set the Button's content to 'SEND' and the OnClick() method to sendMessage() which will be defined in MainActivity.java. Figure 1.2.1 shows the Design view of the activity\_main.xml file, Figure 1.2.2 shows the xml text content view.

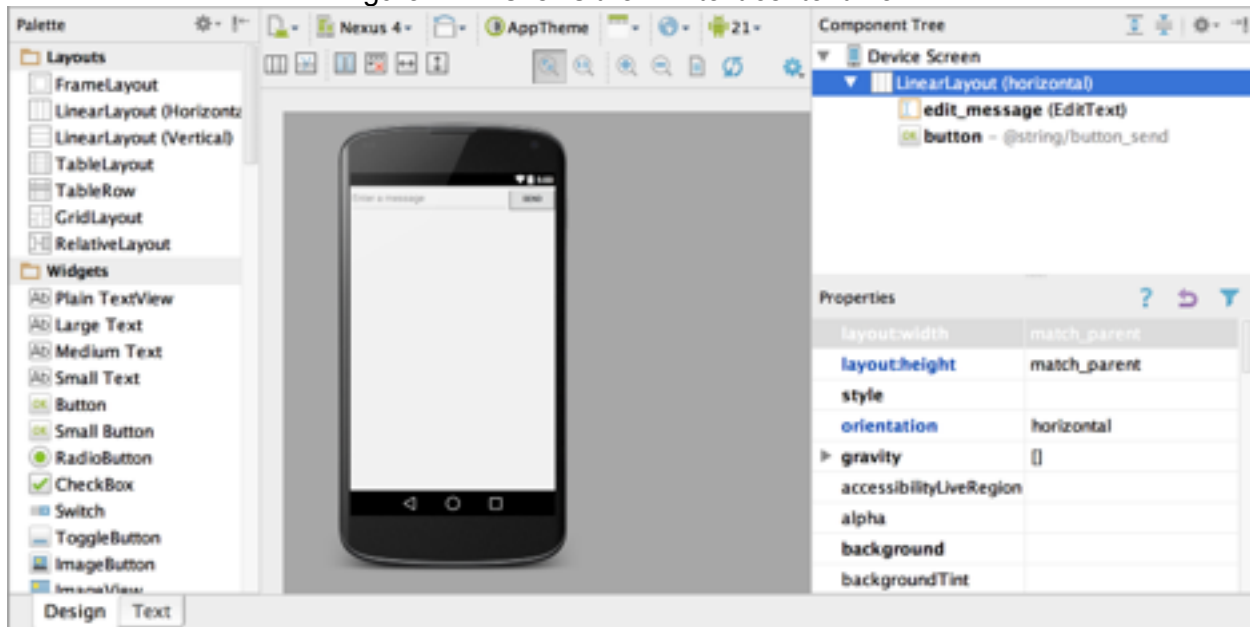


Figure 1.2.1

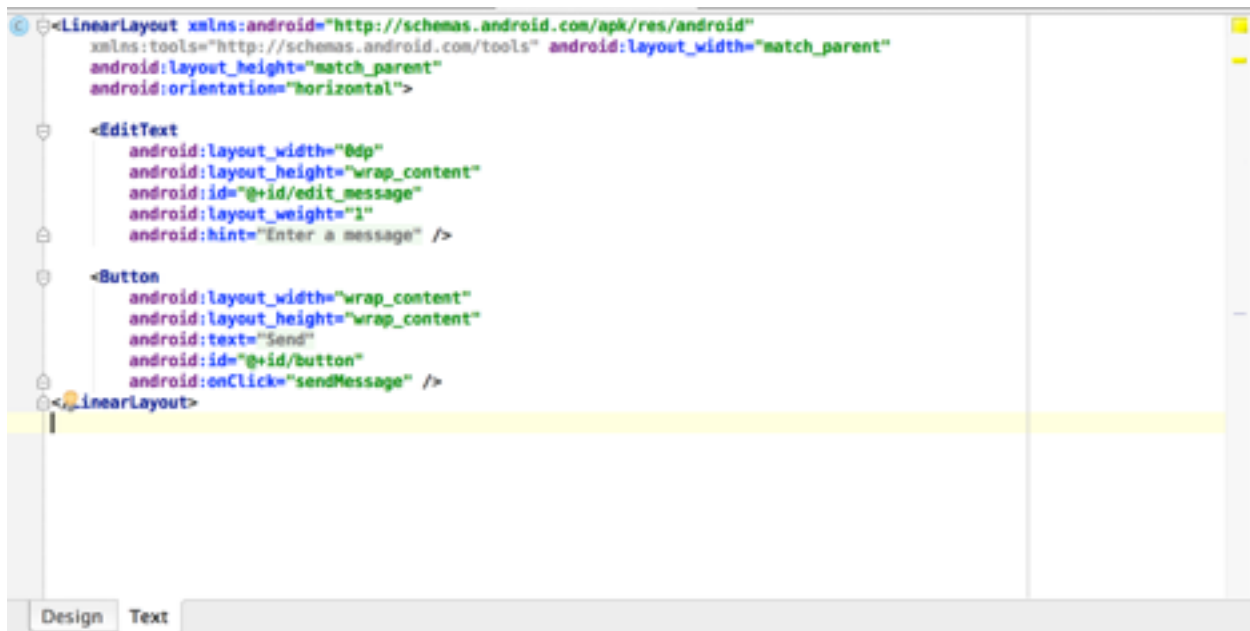


Figure 1.2.2

3. Modify the strings.xml file in the folder 'res/values' as Figure 1.3.1

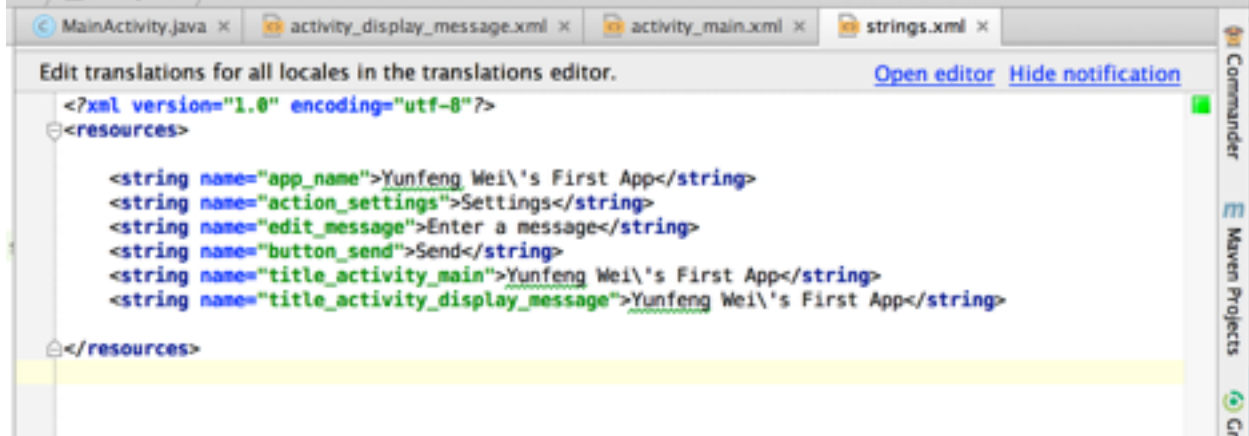


Figure 1.3.1

4. In the MainActivity.java, create a static constant string which is used for the Intent as the key. Set the string's content as "edu.stevens.cs522.assignment\_1.MESSAGE" as Figure 1.4.1



Figure 1.4.1

5. In the MainActivity.java, create a new method called sendMessage(), which is used to send the content of the message to another activity. In the method, define a new Intent for a new Activity 'DisplayMessageActivity' which is used to display the message. Use the findViewById() method to refer to the EditText in the activity\_main.xml, get the string in the EditText and send the message to the DisplayMessageActivity by intent. Start the Activity. sendMessage() method

is written as Figure 1.5.1



Figure 1.5.1

6. Create a new blank activity, set the activity name as “DisplayMessageActivity” and the Hierarchical Parent as “edu.stevens.cs522.assignment\_1.MainActivity” as Figure 1.6.1. In the onCreate() method, delete the callback of setContentView(). Define an Intent which is used to get Intent, define a new String to get the message from the Intent. Define a new TextView, set the size of the text as 40dp and set the content of the text as the message of the Intent. Finally, display the TextView on the Activity. Figure 1.6.2 shows the code of the onCreate() method.

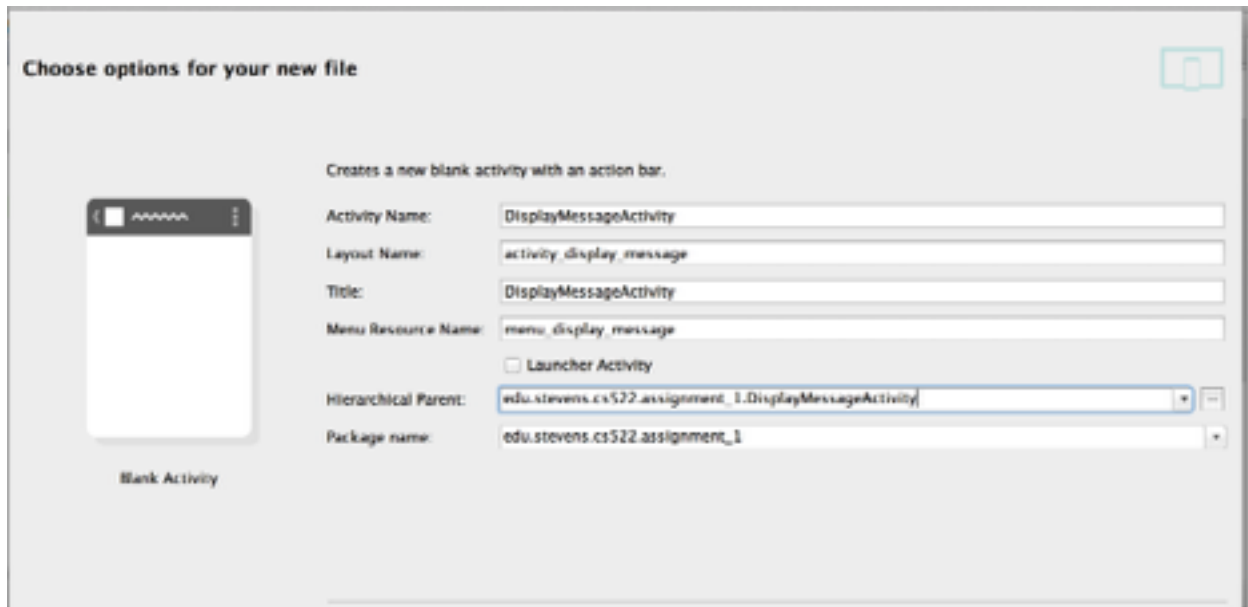


Figure 1.6.1

```
public class DisplayMessageActivity extends ActionBarActivity {

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

        // Get the message from the intent
        Intent intent = getIntent();
        String message = intent.getStringExtra(MainActivity.EXTRA_MESSAGE);

        // Set the text view
        TextView textView = new TextView(this);
        textView.setTextSize(40);
        textView.setText(message);

        // Set the text view as the activity layout
        setContentView(textView);

        //setContentView(R.layout.activity_display_message);
    }
}
```

Figure 1.6.2

7. Finally, run the application on the phone, Figure 1.7.1, Figure 1.7.2, Figure 1.7.3 and Figure 1.7.4 show the result.

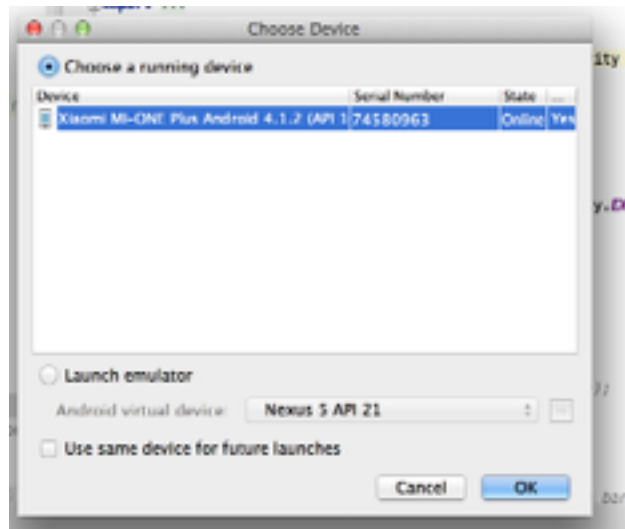


Figure 1.7.1

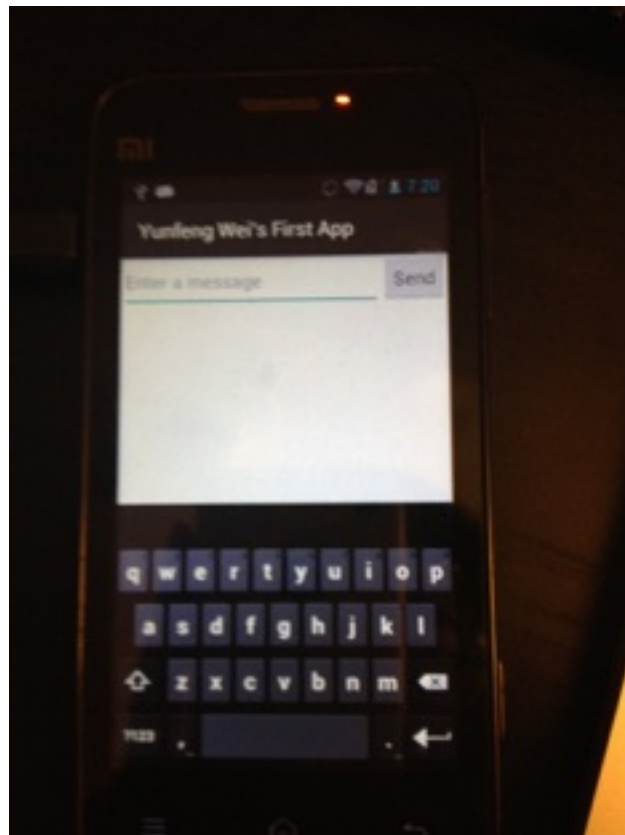


Figure 1.7.2

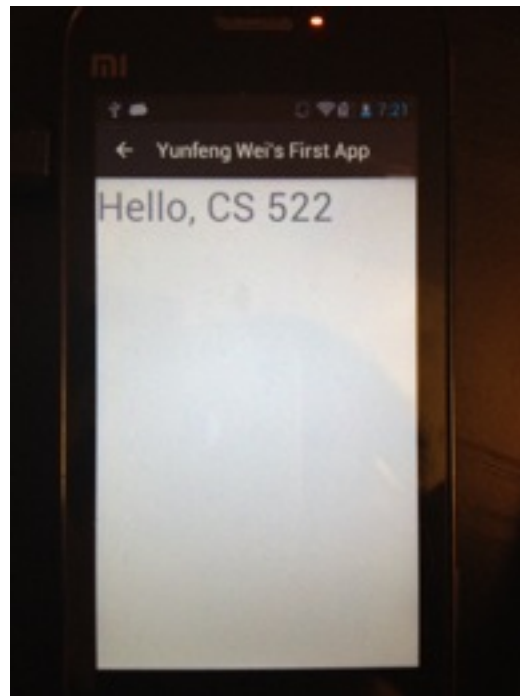


Figure 1.7.3

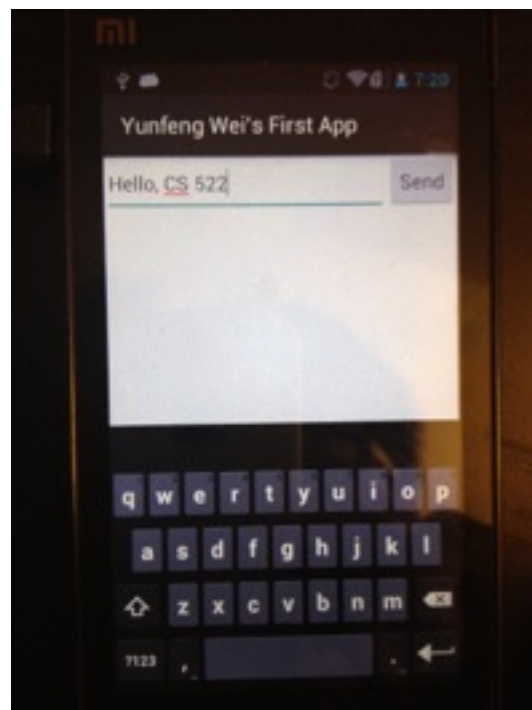


Figure 1.7.4