

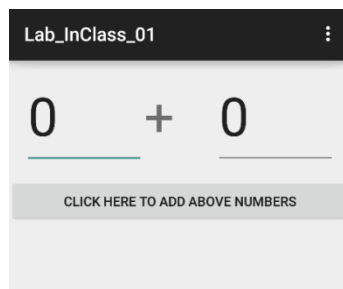
Social Calculator – In class lab

We will make a calculator that shares its results.

See project Lab_InClass_01_skeleton.zip for skeleton. Build on this following the steps below. See project Lab_InClass_01_solution.zip for solution to lab.

The java code is also part of this project. It is commented out so you can try it yourself.

1. Make an activity.



2. (optional) Verify inputs. Must have a number, if not set focus on empty field and notify user via short message. Use a Toast.

```
String str2 = et2.getText().toString();

//validate inputs
//make it so the box without a number gets the correct focus
//might want to check range of ints too
if (str1.isEmpty() || str2.isEmpty()){
    Toast.makeText(this, "Please enter a number", Toast.LENGTH_SHORT).show();
    et1.requestFocus();
    return;
}
```

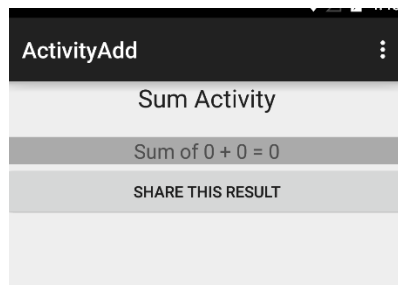
3. When user presses the button create an explicit intent to start activityadd.

4. Put the numbers in the intent and start activityadd

```
//get inputs
numb1 = Integer.parseInt(str1);
numb2 = Integer.parseInt(str2);

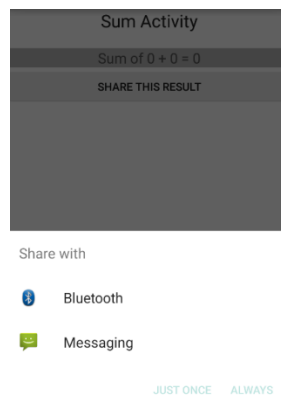
Intent myIntent = new Intent(this, ActivityAdd.class);
myIntent.putExtra("Number1", numb1);
myIntent.putExtra("Number2", numb2);
startActivity(myIntent);
```

5. Create activityadd with the following UI



6. Display the result of the addition (dark gray line above)

7. When user presses the button create an **implicit** intent to share info and start it.



```
public void doShare(View view) {
    Intent intent = new Intent(Intent.ACTION_SEND);
    intent.setType("text/plain");
    intent.putExtra(Intent.EXTRA_EMAIL, "kperkins@cnu.edu");
    intent.putExtra(Intent.EXTRA_SUBJECT, "Astonishing News!");
    intent.putExtra(Intent.EXTRA_TEXT, "Did you know that the " + myTv.getText().toString() + " ???");
    startActivity(intent);
}
```

8. If you have enough time, in the mainactivity, save the numbers the user enters in sharedpreferences and load them again when app restarts.

```
public void getPref() {  
    //SHAREDREFERENCES - PERMANENT STORAGE  
    SharedPreferences settings = getSharedPreferences(PREF_FILE_NAME,MODE_PRIVATE);  
    numb1 = settings.getInt("Number1", 0);  
    numb2 = settings.getInt("Number2", 0);  
}  
  
public void savePref() {  
    //SHAREDREFERENCES - PERMANENT STORAGE  
    SharedPreferences settings = getSharedPreferences(PREF_FILE_NAME,MODE_PRIVATE);  
  
    // can only make changes with editor  
    SharedPreferences.Editor editor = settings.edit();  
  
    // slap something in it, strings, bools, ints, check the docs  
    editor.putInt("Number1", numb1);  
    editor.putInt("Number2", numb2);  
  
    // Commit the edits! You dont call this it aint saved!  
    editor.commit();  
}
```