

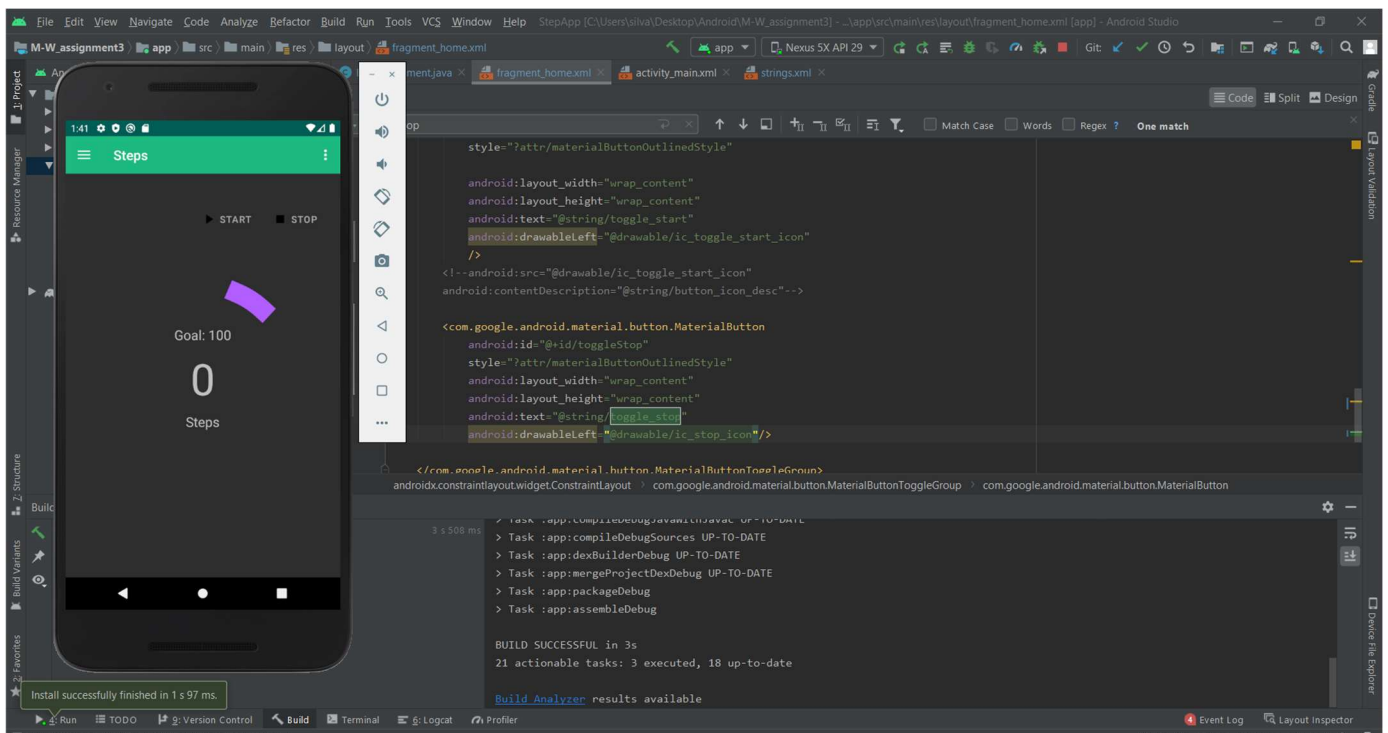
Assignment01 Mobile&Wearable computing

Edoardo _ Silva _Assignment01

https://github.com/NanolathingStuff/M-W_assignment3.git

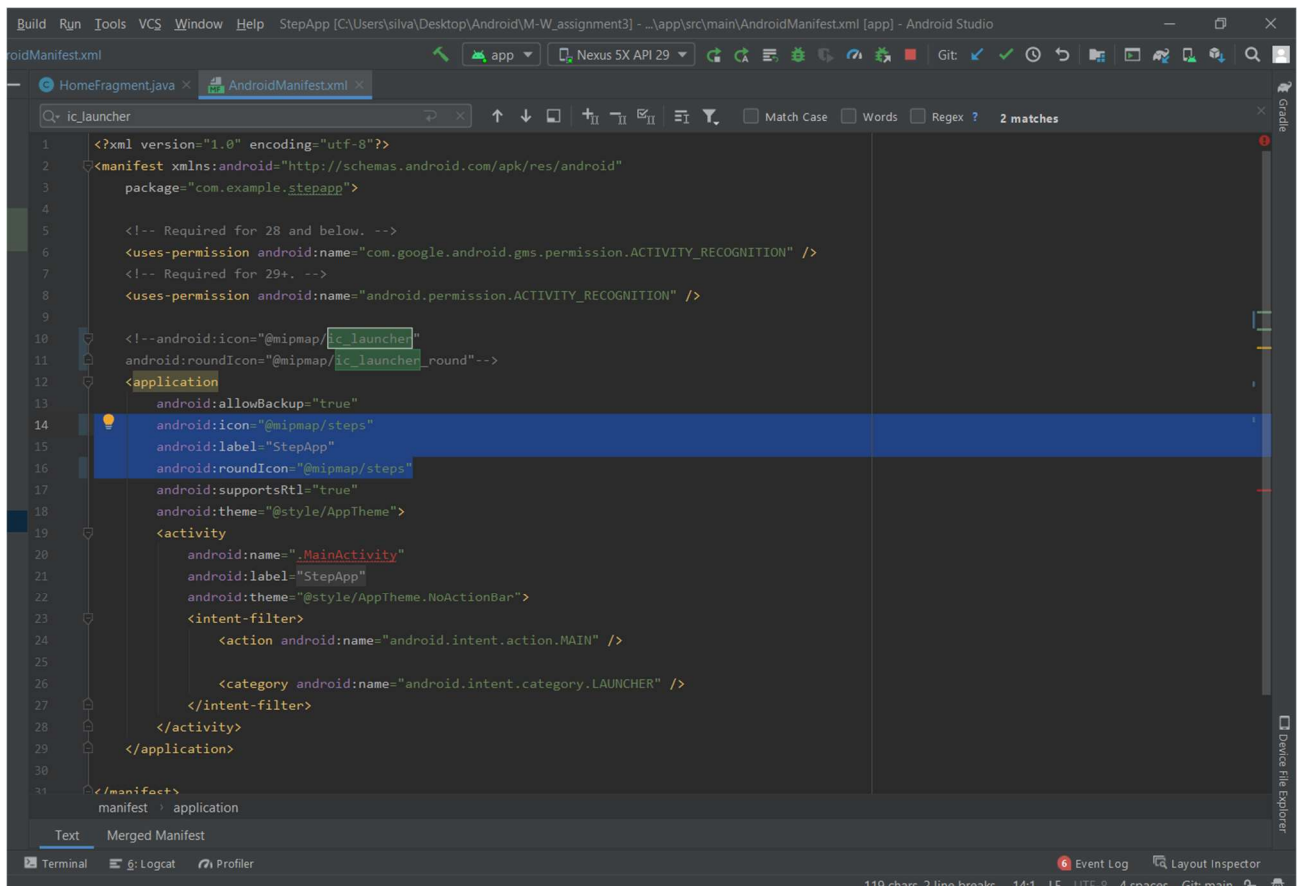
gh repo clone NanolathingStuff/M-W_assignment3

Added icons left to buttons in fragment_home.xml



```
...
android:drawableLeft="@drawable/ic_toggle_start_icon"
...
android:drawableLeft="@drawable/ic_stop_icon"/>
...
```

Changed App icon in manifest.cml



```

...
android:icon="@mipmap/stepapp"
android:label="@string/app_name"
android:roundIcon="@mipmap/stepapp"
...
  
```

countSteps() that counts the number of steps from the Android STEP_DETECTOR

```

119
120     // Android step detector
121     int mAndroidStepCount = 0;
122
123     // TextView
124     TextView stepsCountTextView;
125
126     //DONE 1.0
127     public StepCounterListener(TextView tv) { stepsCountTextView = tv; }
128
129
130
  
```

```

// instance of the sensor manager for the step detector

// DONE 1.1
// instantiate the StepCounterListener
//listener = new StepCounterListener();
listener = new StepCounterListener(stepsCountTextView);

// Toggle group button
  
```

```

        if (forwardSlope < 0 && downwardSlope > 0 && dataPointList.get(i) > stepThreshold ) {
            mACCStepCounter += 1;
            Log.d( tag: "ACC STEPS: ", String.valueOf(mACCStepCounter));

            //DONE 12: update the text view
            stepsCountTextView.setText(String.valueOf(mACCStepCounter));
        }
    }

    // Calculate the number of steps from the step detector
    private void countSteps(float step) {

        Log.d( tag: "STEPS", msg: "Value: " + String.valueOf(step));
    }
}

```

```

// TextView
TextView stepsCountTextView;

//DONE 10
public StepCounterListener(TextView tv){
    stepsCountTextView = tv;
}

..... 0

listener = new StepCounterListener(stepsCountTextView);

...

// case Step detector
case Sensor.TYPE_STEP_DETECTOR:

    countSteps(steps);

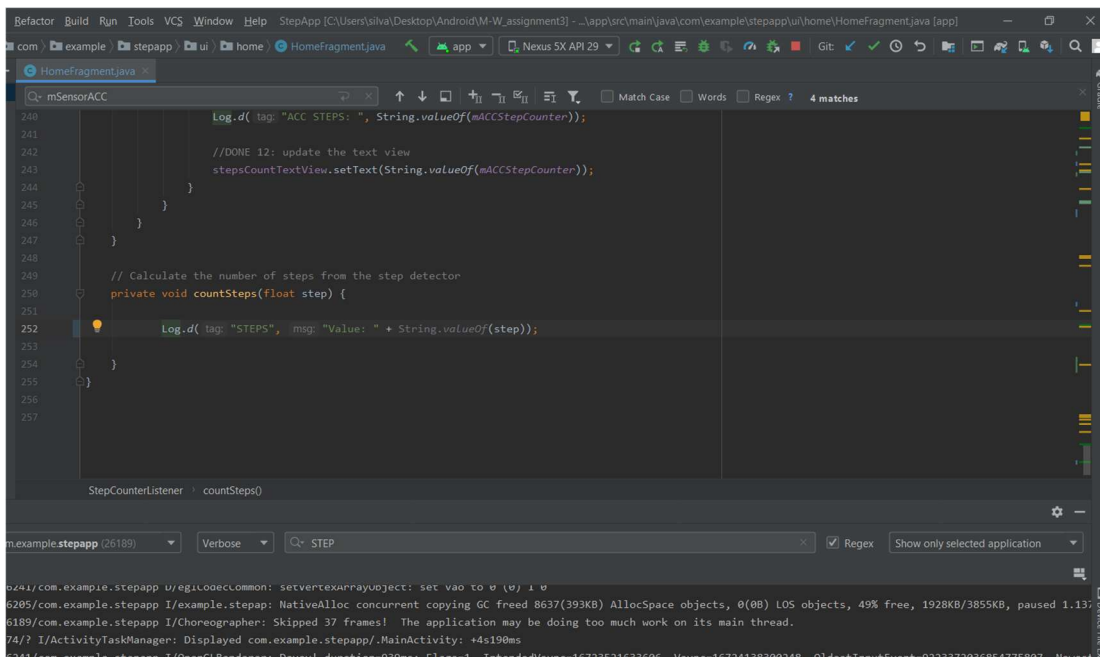
private void countSteps(float step) {

    Log.d("STEPS", "Value: " + String.valueOf(step));
}

for (int i = 0; i < dataPointList.size(); i++) {
    if (i == 0) {
    }
    else if (i < dataPointList.size() - 1) {
        forwardSlope = dataPointList.get(i + 1) - dataPointList.get(i);
        downwardSlope = dataPointList.get(i) - dataPointList.get(i - 1);

        if (forwardSlope < 0 && downwardSlope > 0 && dataPointList.get(i) >
stepThreshold ) {
            mACCStepCounter += 1;
            Log.d("ACC STEPS: ", String.valueOf(mACCStepCounter));

```



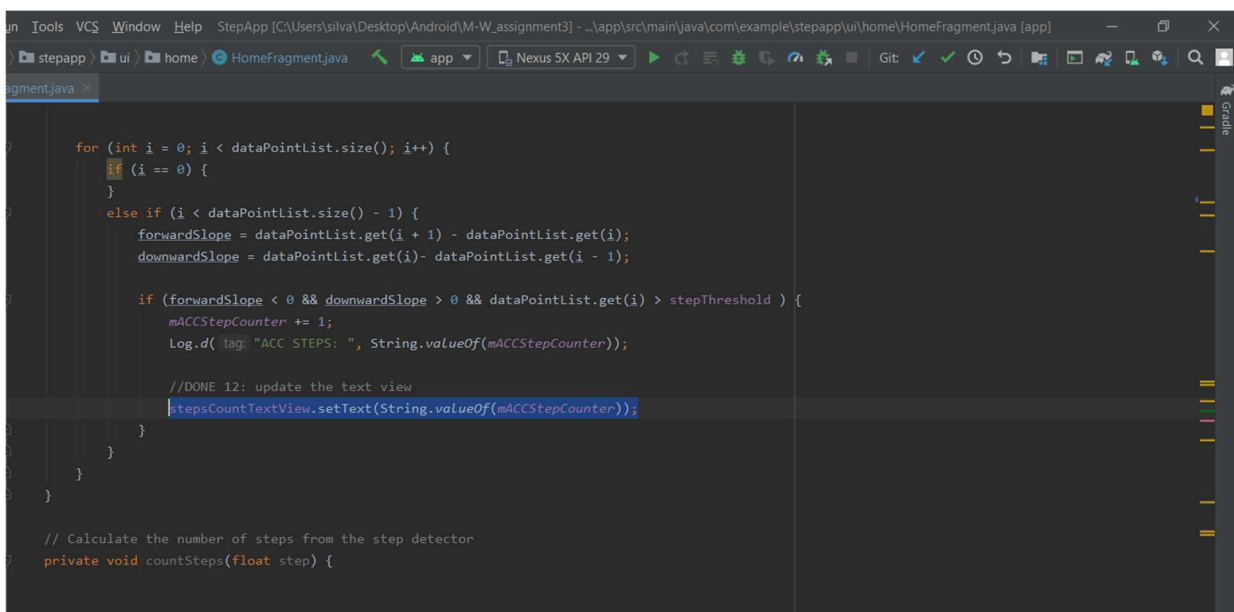
```
240 Log.d( tag: "ACC STEPS: ", String.valueOf(mACCStepCounter));
241
242 //DONE 12: update the text view
243 stepsCountTextView.setText(String.valueOf(mACCStepCounter));
244 }
245 }
246 }
247 }
248
249 // Calculate the number of steps from the step detector
250 private void countSteps(float step) {
251
252 Log.d( tag: "STEPS", msg: "Value: " + String.valueOf(step));
253
254 }
255 }
256
257
```

StepCounterListener → countSteps()

com.example.stepapp (26189) Verbose Q- STEP Show only selected application

com.example.stepapp I/eglOpenCLCommon: setVertexArrayObject: set vao to 0 (0) 1 0
com.example.stepapp I/example.stepapp: NativeAlloc concurrent copying GC freed 8637(393KB) AllocSpace objects, 0(0B) LOS objects, 49% free, 1928KB/3855KB, paused 1.13s
com.example.stepapp I/Choreographer: Skipped 37 frames! The application may be doing too much work on its main thread.
com.example.stepapp I/ActivityTaskManager: Displayed com.example.stepapp.MainActivity: +4s190ms
com.example.stepapp I/OpenGLRenderer: Draw call duration: 930ms; Class: 1. Intended draw ops: 16723531633606. Viewops: 16724133360748. OnDrawTimeEvent: 9322377036854725807. Viewops: 16724133360748.

Update the Circular Progress Bar with the number of steps



```
for (int i = 0; i < dataPointList.size(); i++) {
    if (i == 0) {
    }
    else if (i < dataPointList.size() - 1) {
        forwardSlope = dataPointList.get(i + 1) - dataPointList.get(i);
        downwardSlope = dataPointList.get(i) - dataPointList.get(i - 1);

        if (forwardSlope < 0 && downwardSlope > 0 && dataPointList.get(i) > stepThreshold ) {
            mACCStepCounter += 1;
            Log.d( tag: "ACC STEPS: ", String.valueOf(mACCStepCounter));

            //DONE 12: update the text view
            stepsCountTextView.setText(String.valueOf(mACCStepCounter));
        }
    }
}

// Calculate the number of steps from the step detector
private void countSteps(float step) {
```

```
stepsCountTextView.setText(String.valueOf(mACCStepCounter));
```

Proof it's working

