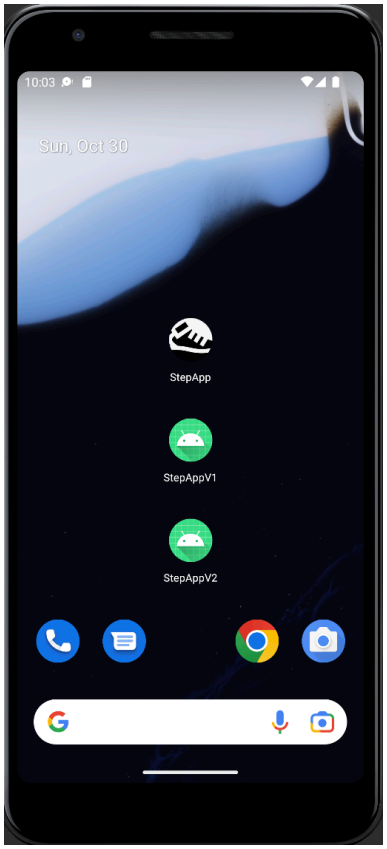
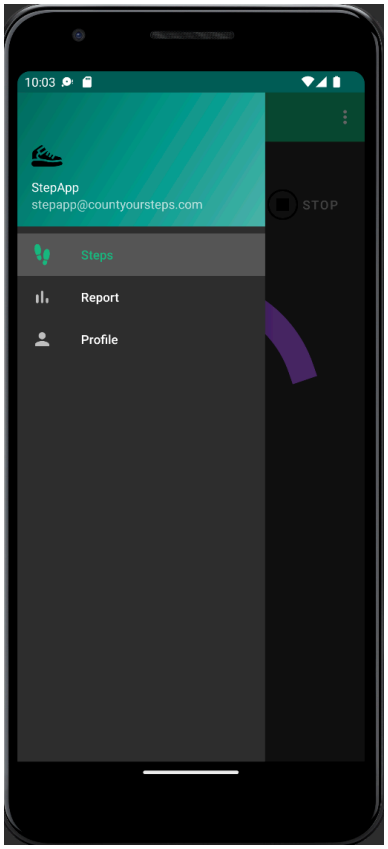
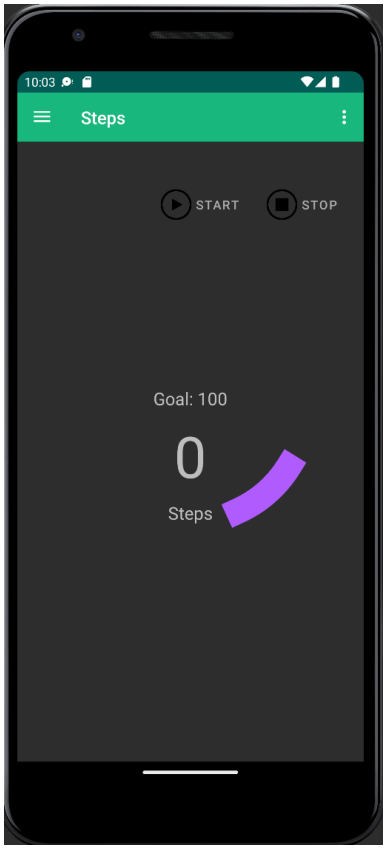
**Assignment Report**
Assignment 01
Giorgio Cesano
URL: https://github.com/Gioce/Mobile-Wearable-Computing

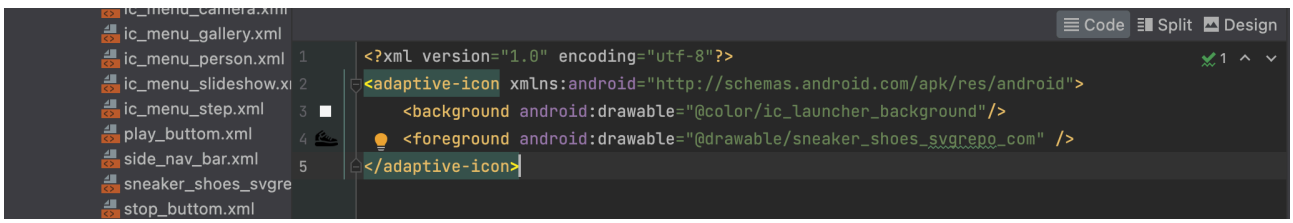
## StepApp



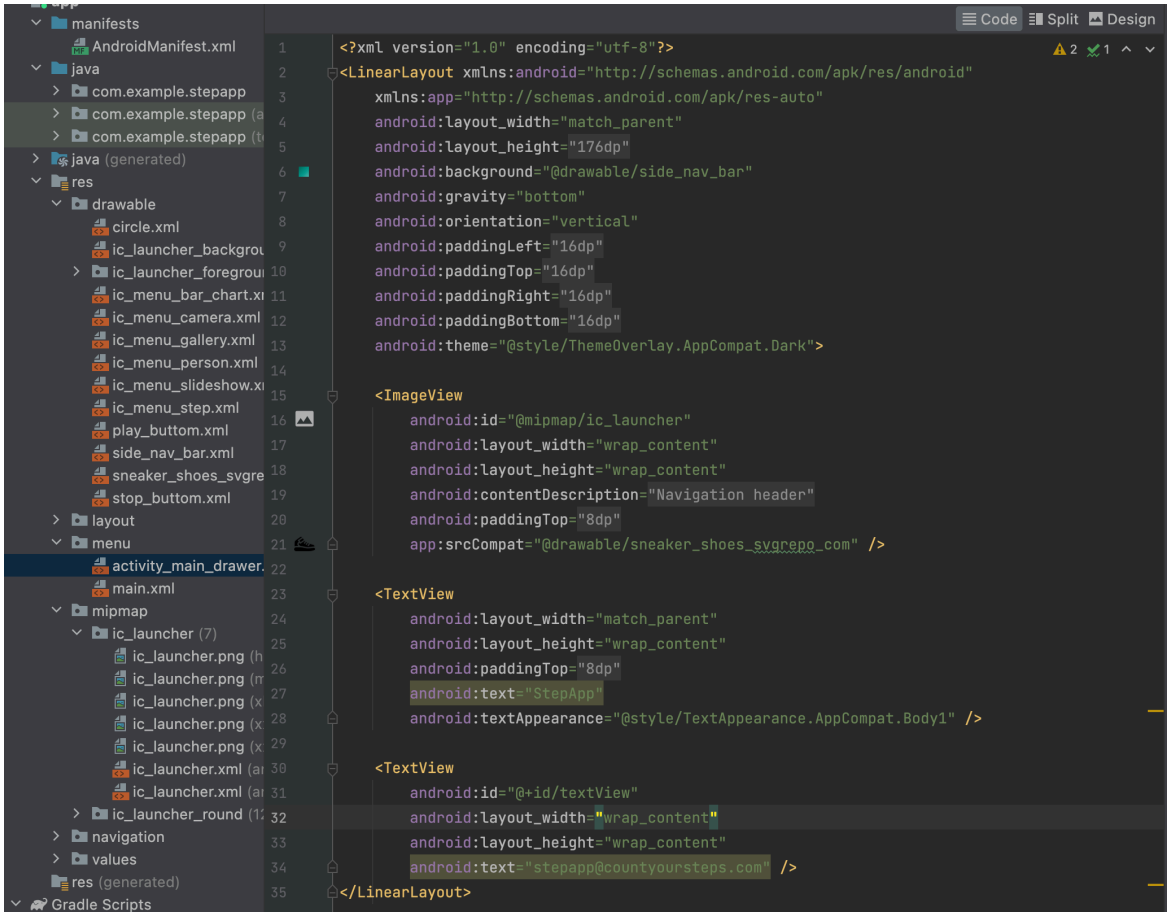



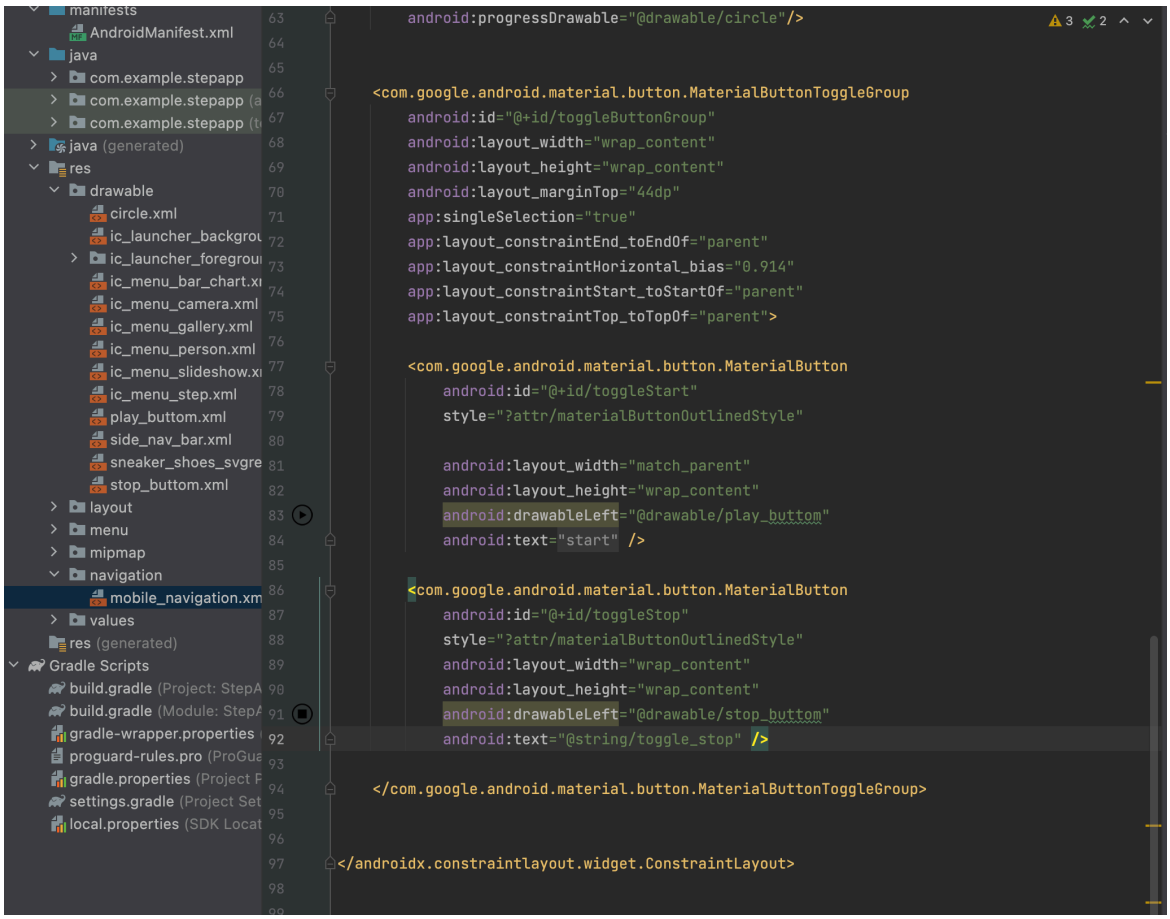

## StepApp Home Icon Code



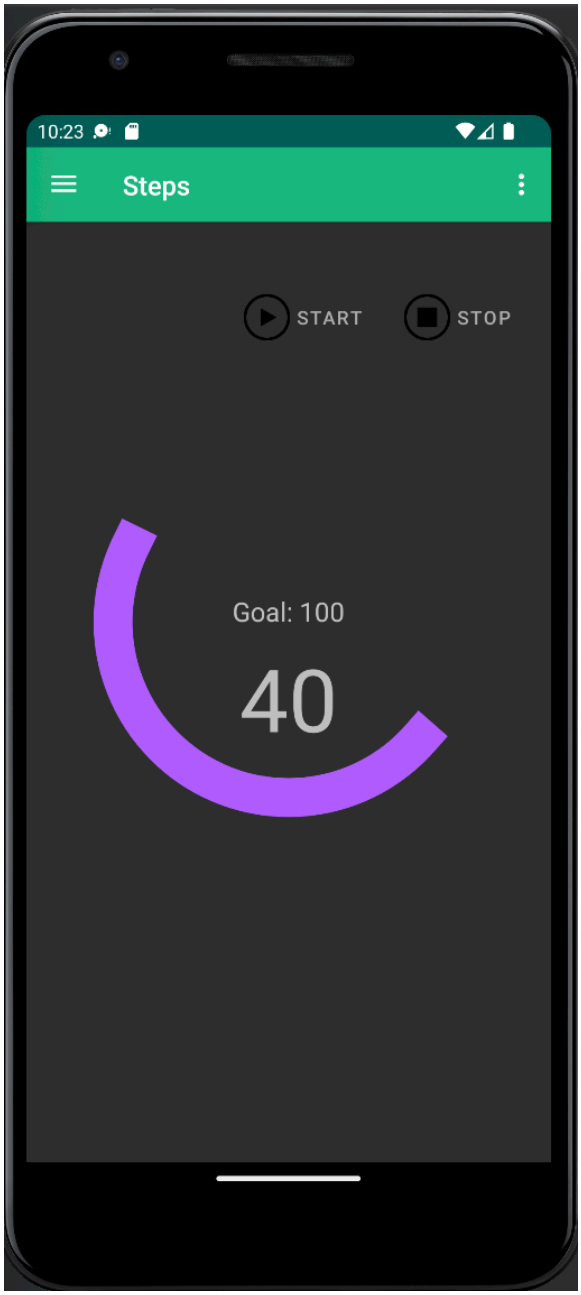
## StepApp Menu Icon Code




## StepApp Play and Stop Button Icons



**StepApp countSteps() function**




**StepApp countSteps() function code**

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

    int mstepCount = (int) step;

Log.d( tag: "NUM STEPS ANDROID",  msg: "Num.steps: " + String.valueOf(mstepCount));

}
```

**StepApp Circular Progress Bar with the number of steps**

```java
public View onCreateView(@NonNull LayoutInflater inflater,
                         ViewGroup container, Bundle savedInstanceState) {

    View root = inflater.inflate(R.layout.fragment_home, container,  attachToRoot: false);

    // TODO 9: Initialize the TextView variable
    stepsCountTextView = (TextView) root.findViewById(R.id.stepsCount);

    // TODO 2: Get an instance of the sensor manager.
    mSensorManager = (SensorManager) getActivity().getSystemService(getContext().SENSOR_SERVICE);
    mSensorACC = mSensorManager.getDefaultSensor(Sensor.TYPE_LINEAR_ACCELERATION);

    // instance of the sensor manager for the step detector
    mSensorStepDetector = mSensorManager.getDefaultSensor(Sensor.TYPE_STEP_DETECTOR);

    // TODO 11
    // instantiate the StepCounterListener
    listener = new StepCounterListener(stepsCountTextView);

    // Toggle group button
    materialButtonToggleGroup = (MaterialButtonToggleGroup) root.findViewById(R.id.toggleButtonGroup);
    materialButtonToggleGroup.addOnButtonCheckedListener(new MaterialButtonToggleGroup.OnButtonCheckedListener() {
        @Override
        public void onButtonChecked(MaterialButtonToggleGroup group, int checkedId, boolean isChecked) {
            if (group.getCheckedButtonId() == R.id.toggleStart) {

                //Place code related to Start button
                Toast.makeText(getContext(),  text: "START", Toast.LENGTH_SHORT).show();

                // TODO 3: Check if the Accelerometer sensor exists
                if (mSensorACC != null) {

                    // Register the ACC listener
                    mSensorManager.registerListener(listener, mSensorACC, SensorManager.SENSOR_DELAY_NORMAL);
                }
                else {
                    Toast.makeText(getContext(), "ACC not available", Toast.LENGTH_SHORT).show();
                }

                // Check if the Step detector sensor exists
                if (mSensorStepDetector != null) {
```