

(a) Sampling rate (for accelerometer, gyroscope)

The current sampling rate for accelerometer and gyroscope are 100ms which is set in react native. It is updated by using

```
setUpdateIntervalForType(SensorTypes.accelerometer, 100);  
setUpdateIntervalForType(SensorTypes.gyroscope, 100);
```

My android device's sampling rate is much higher than 100ms so we are getting less samples than expected.

(b) Total number of samples collected: **945**

(c) Total number of windows: 105

Each window is of the size 2 sec

The app will run for 225 seconds. (15 sec for each activity and for 1 iteration we have 3 activities, and we have a total of 5 iterations)

In each iteration an activity will have 7 windows. So for 1 iteration total windows is $7 \times 3 = 21$

For 5 iterations total windows = $21 \times 5 = 105$

(d) Number of windows for each of the activities:

For Sitting: $7 \times 5 = 35$

For Walking: $7 \times 5 = 35$

For Walking Upstairs: $7 \times 5 = 35$