

v1.0.0

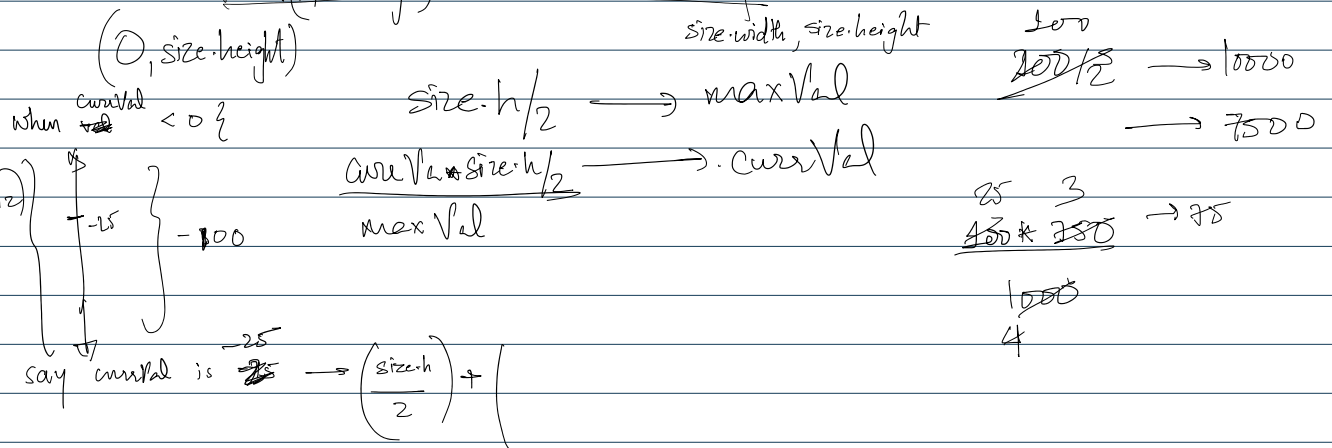
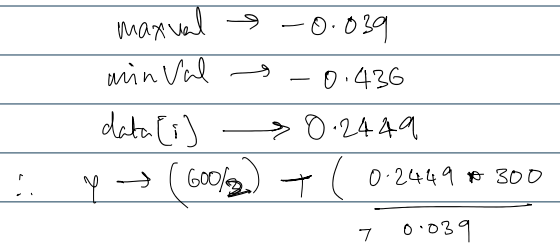
Sunday, May 5, 2024

9:12 PM

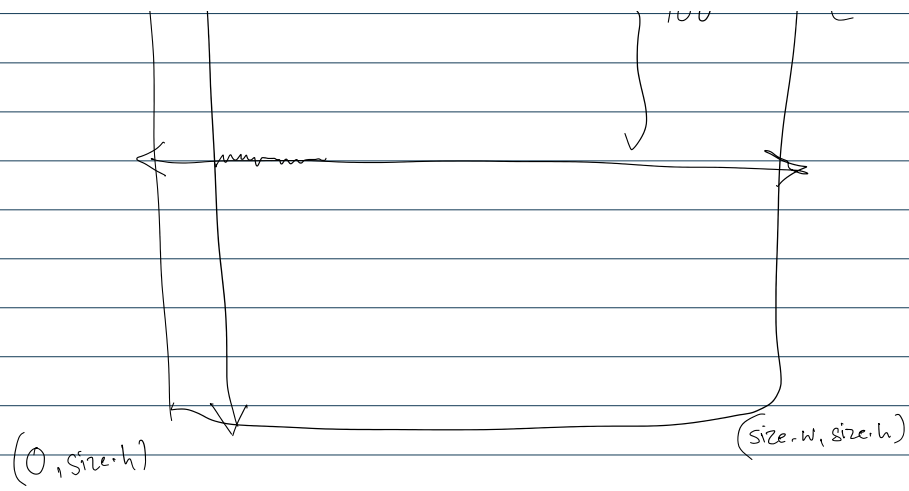
Sensors App

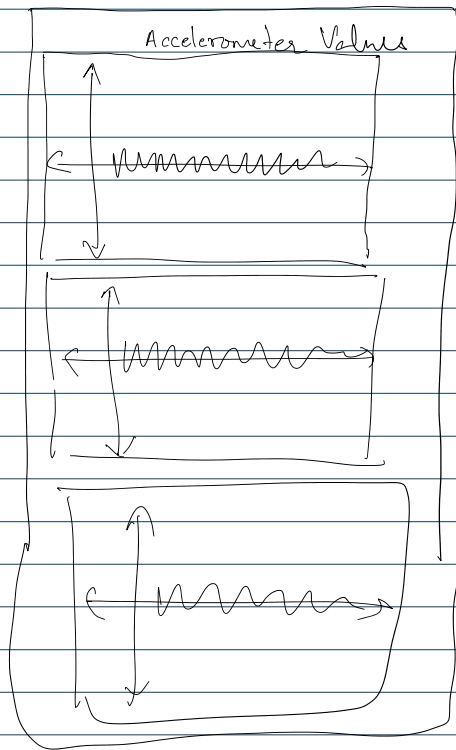
Accelerometer 0, 0, 0

Gyroscope 0, 0, 0



$(0,0)$ $+100$ $(size-1,0)$ $max\ val \rightarrow 100$
 $min\ val \rightarrow 100$
 $[+1, +1.1, +1.3, +1.4]$
 100



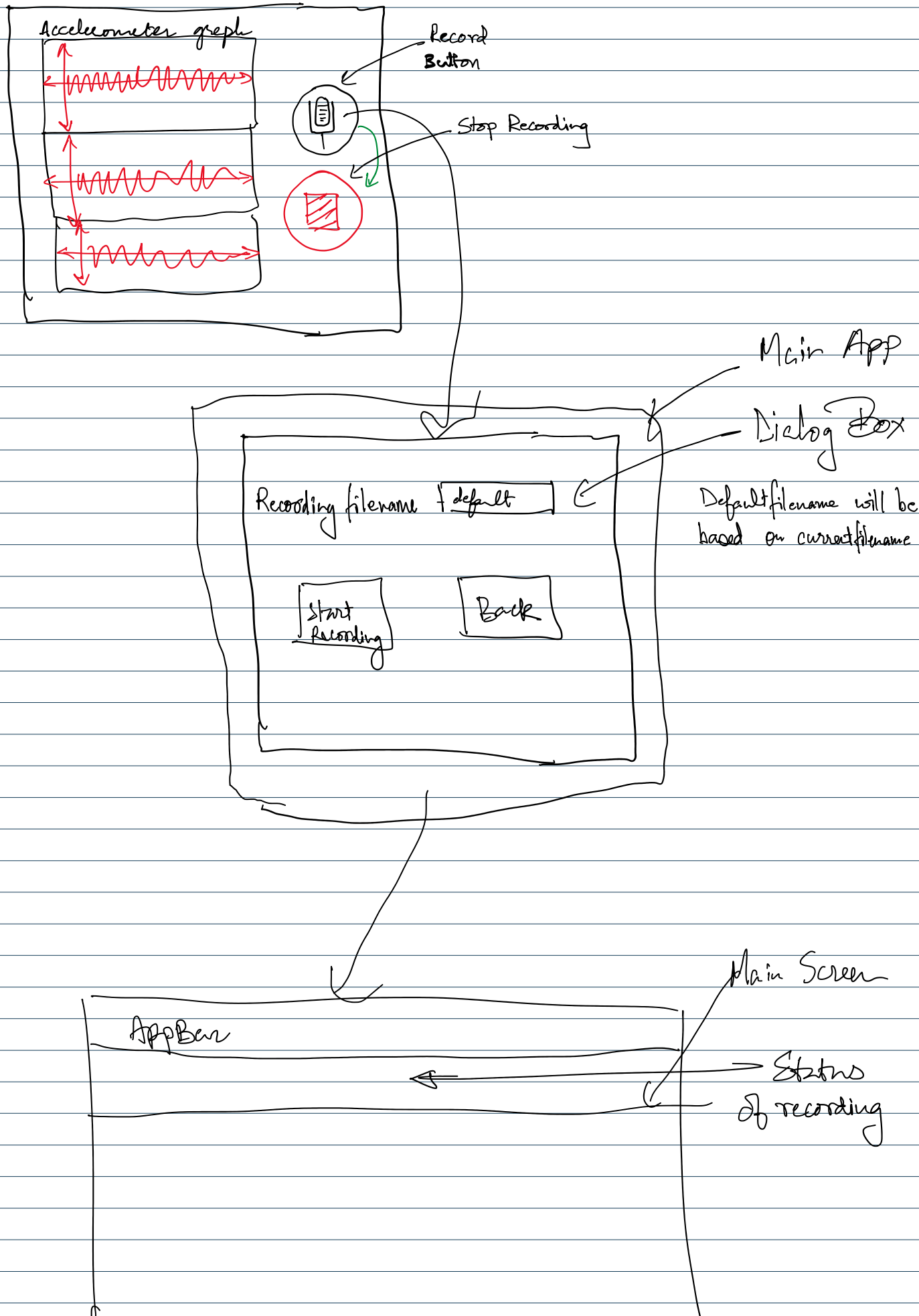


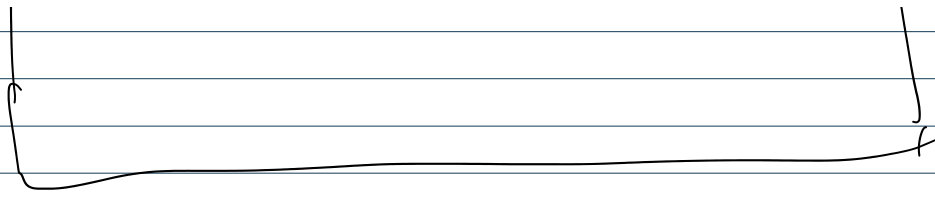
- * Completed graphing both Gyroscope & Accelerometer values
- * Put multiple GraphWidgets into ListView.
- * Turns out ListView stops rendering when its not in view
- * Added KeepAlive mixin for GraphWidget class so to preserve history when widget goes out of view

* Bugs / Errors

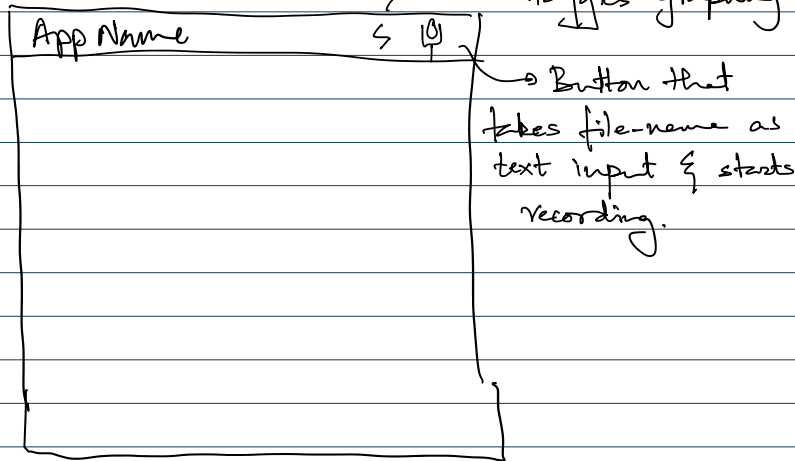
- ① Gyroscope values look weird on startup, idk why after a while they become normal but yeah.
- ② The performance isn't 60fps for graphing.

?





Current state of the app



Future of the App:

- 1] Currently only accelerometer values are being recorded. Add a toggle when getting the filename for both the sensors & potentially more in the future.
- 2] Firebase database has offline capabilities. Implement that to avoid loss in data stream when biking through ~~the~~ low network connectivity zones.
- 3] Implement capturing GPS coordinates. The frequency might be different than sensors recording so restructure your JSON accordingly.

Current recording [SON] structure

```

"users": {
  "run1": {
    "random-id": { "data": {} },
    "random-id": {} ,
    :
    "file-name" : "run-1"
    "sensor-type" : "accelerometer"
  }
}

```

New JSON structure

"users": {
 "random_id": {

```
"users" : {  
  "sum-1" : { "accelerometer" : { "random-id" : 23, }  
              "gyroscope" : { "random-id" : 43, ... }  
              "gps" : {  
                }  
            }  
}
```
