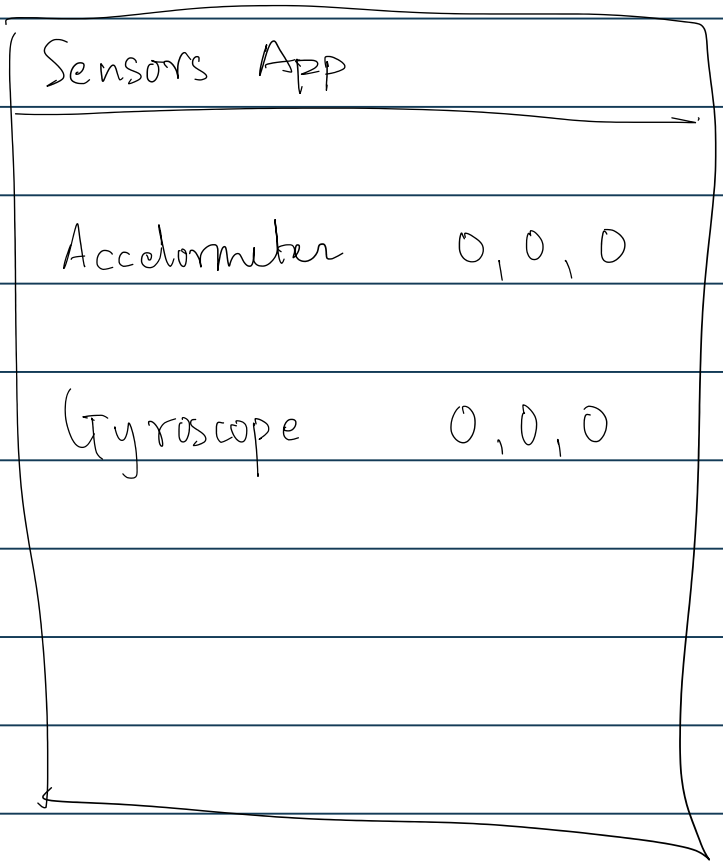
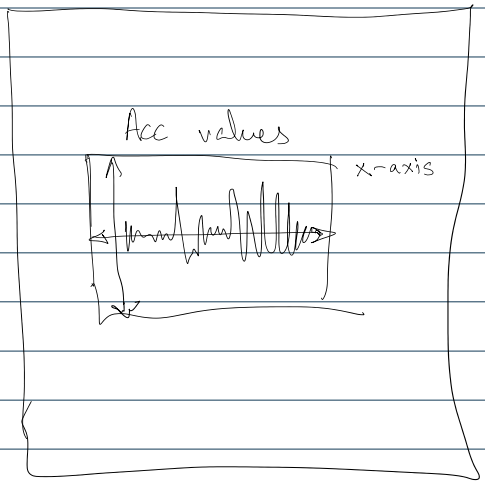
v1.0.0

Sunday, May 5, 2024 9:12 PM



v1.0.1

Wednesday, May 8, 2024 3:45 PM

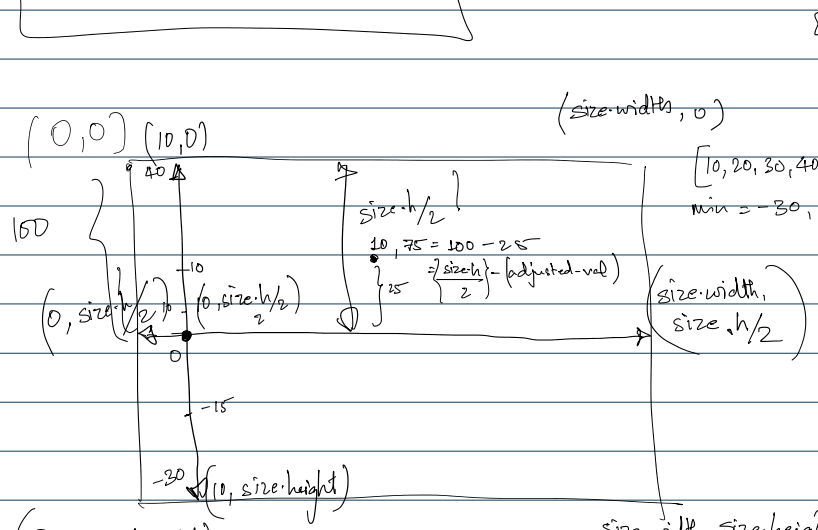


maxVal → −0.039

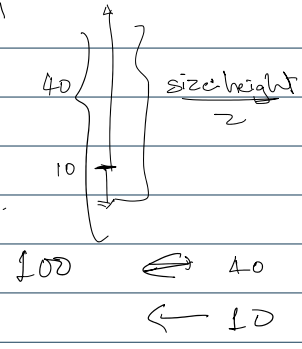
minVal → −0.436

data[i] → 0.2449

∴ y → (600/2) + (0.2449 * 300 / 0.039)



100px = size.h



100 −

size.h/2 → maxVal

curVal * size.h/2 / maxVal → currVal

200/2 → 10000 → 7500

25 3
100 * 300 → 75
1000
4

when curVal < 0 {

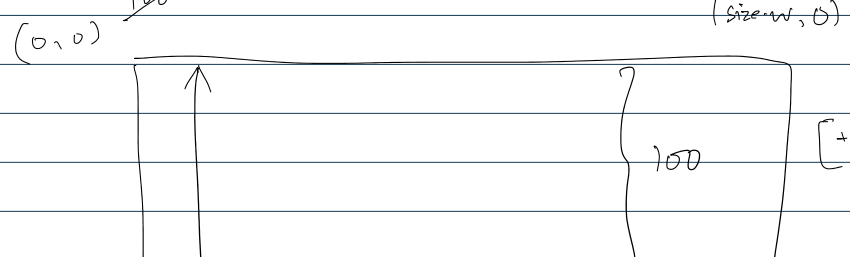
(size.h/2) −25 −100

say curVal is −25 → (size.h/2) + (

size.h/2 → abs(minYval)

currVal * size.h/2 / abs minYval → currVal

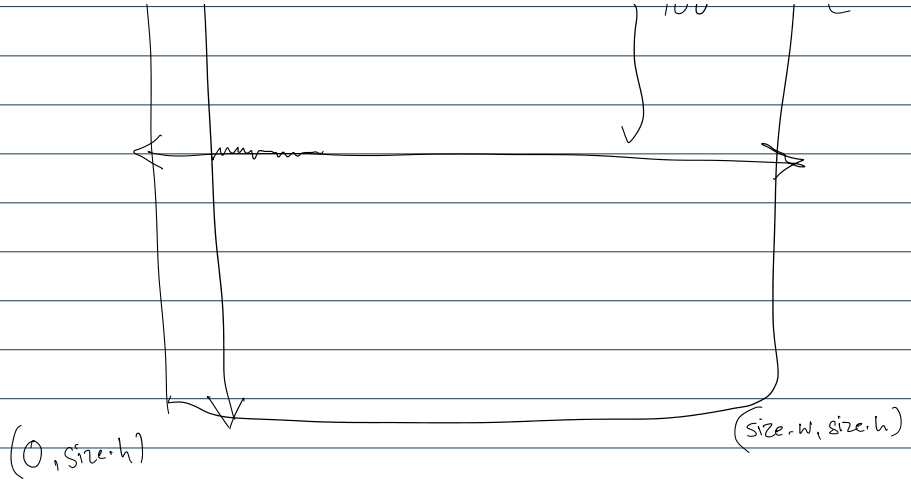
−25 * 100/100 + 100 → abs(



maxVal → 100

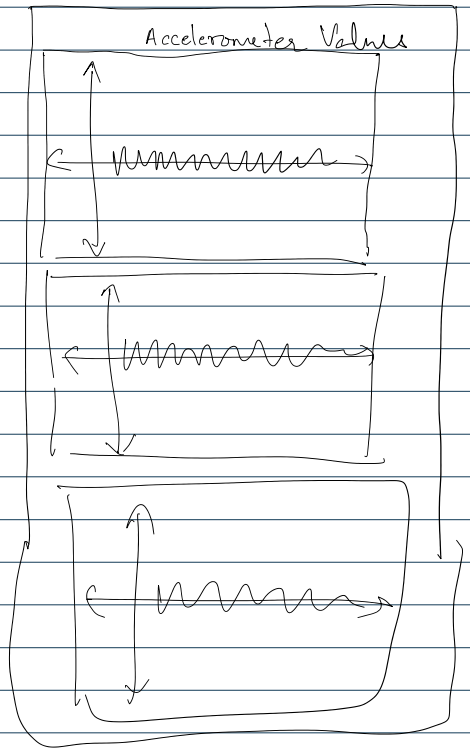
minVal → 100

[+1, +1.1, +1.3, +1.4]


(0, size.h)
(size.w, size.h)

v1.0.2

Thursday, May 9, 2024 1:18 PM



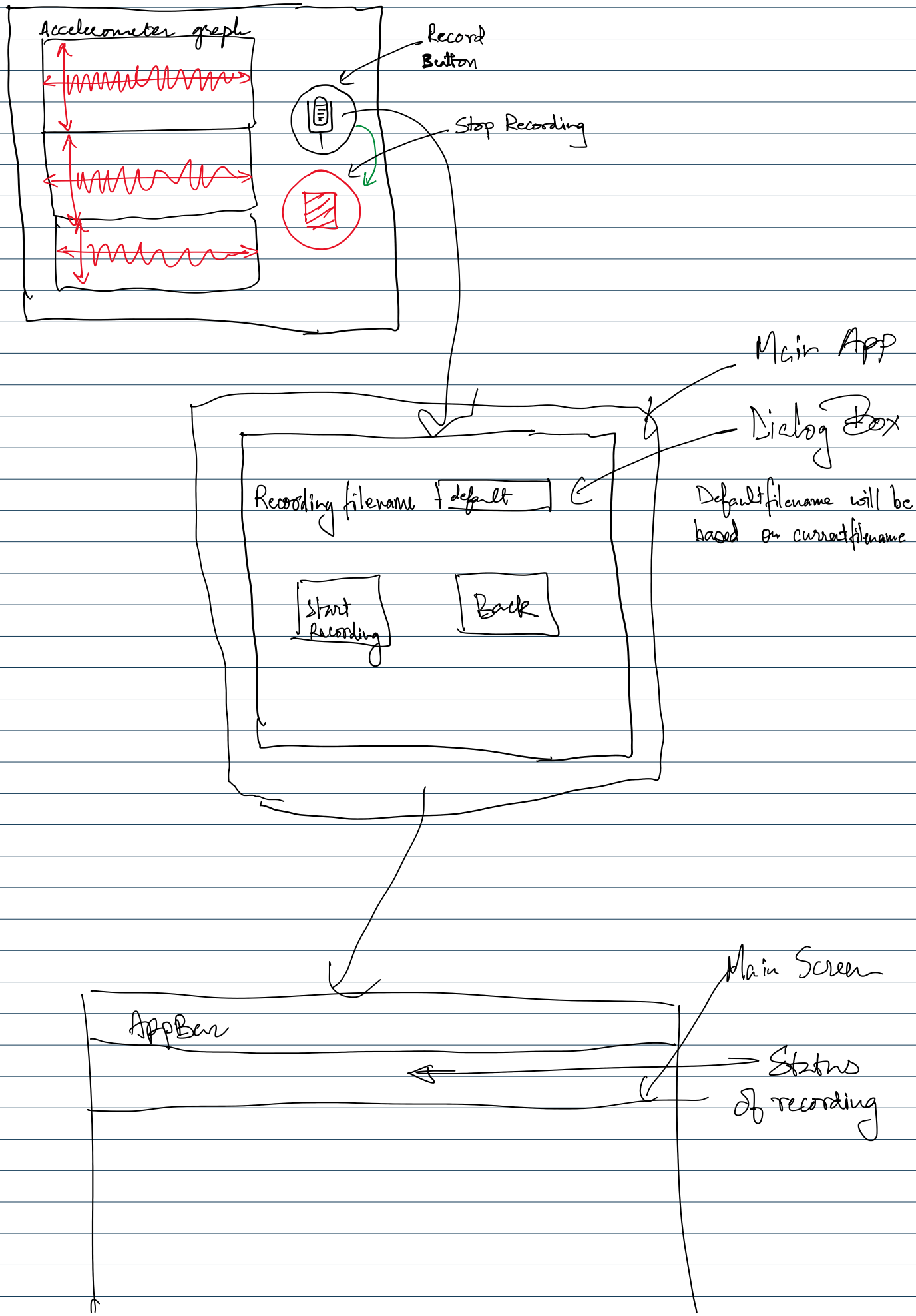
* Completed graphing both Gyroscope & Accelerometer values
* Put multiple GraphWidgets into ListView.
* Turns out ListView stops rendering when its not in view
* Added KeepAlive mixin for GraphWidget class so to preserve history when widget goes out of view

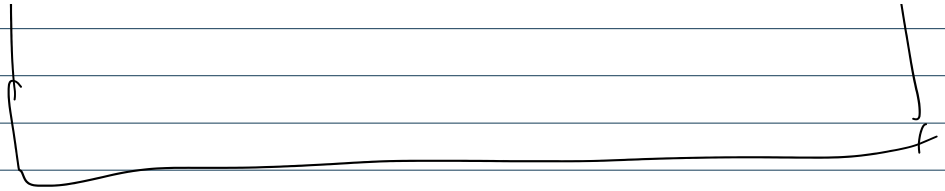
* Bugs / Errors

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.

v1.0.3

Thursday, May 9, 2024 7:47 PM

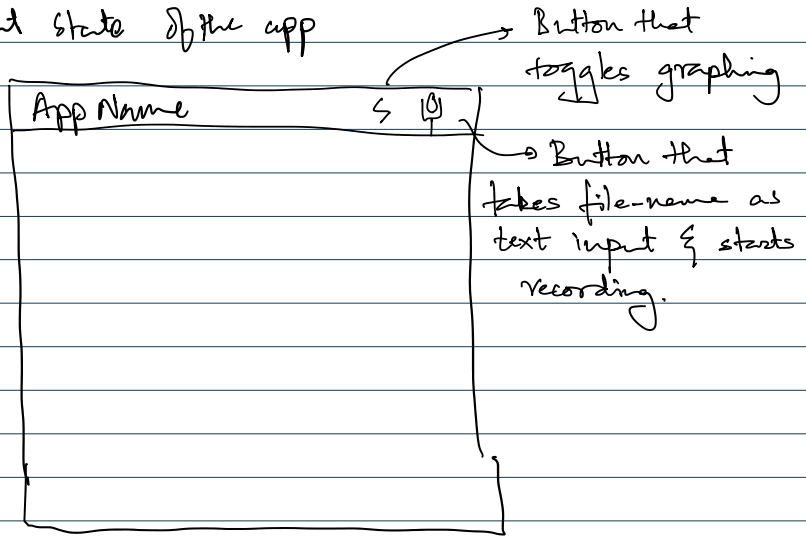




V1.0.4

Thursday, June 6, 2024 5:08 PM

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 low network connectivity zones.

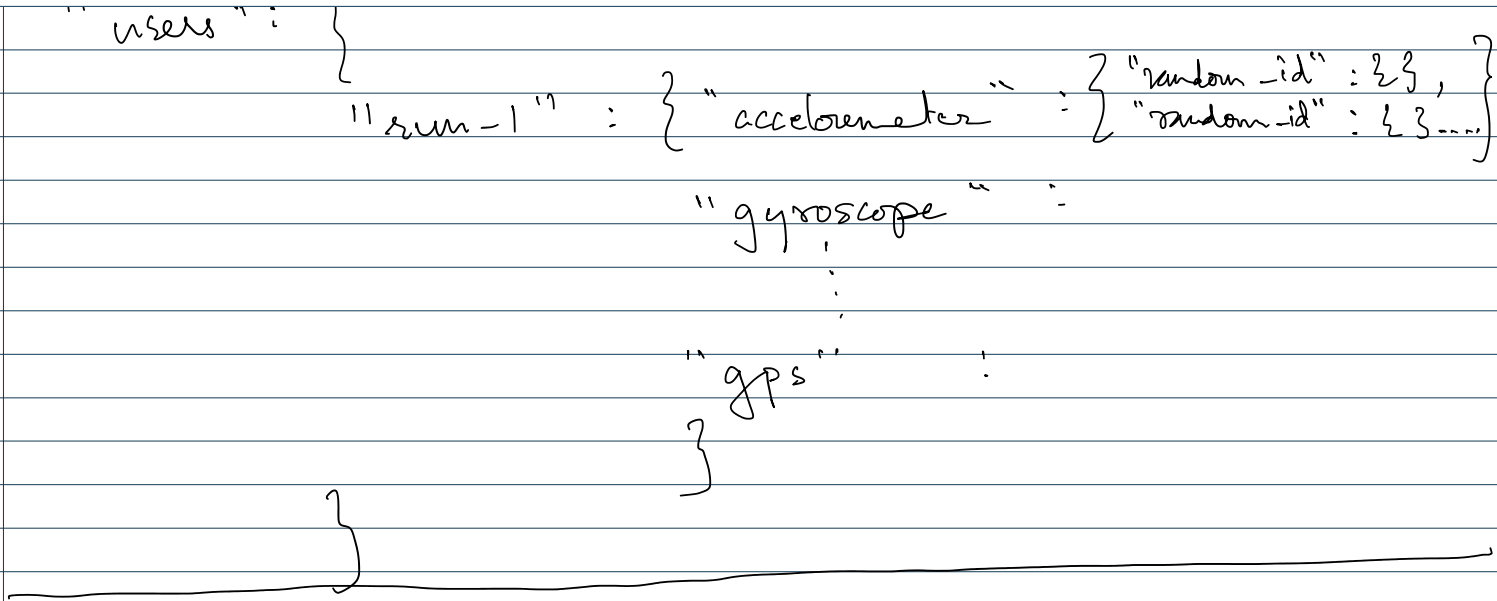
3.] Implement capturing GPS coordinates. The frequency might be different than sensors recording so restructure your JSON accordingly.

Current recording JSON structure

```
"users": {
    "run1": { "random_id": {"data": {}}, ...
              "random_id": {},
              :
              "file_name": "run_1"
              "sensor_type": "accelerometer"
    }
```

New JSON structure

```
"users": {
    ... { "random_id": {}, }
```


"users" : {
"user-1" : { "accelerometer" : { "random_id" : {},
"random_id" : {}, ... }
"gyroscope" : {
"gps" : {
}
}

V1.0.5

Wednesday, June 12, 2024 3:39 PM

Current state of the app

1) Both acc & gyro values are streamed & charted on the web app

To do for v1.0.5

1) Start streaming GPS location. ✓

v1.0.6

Friday, June 14, 2024 7:12 PM

Current state of the app

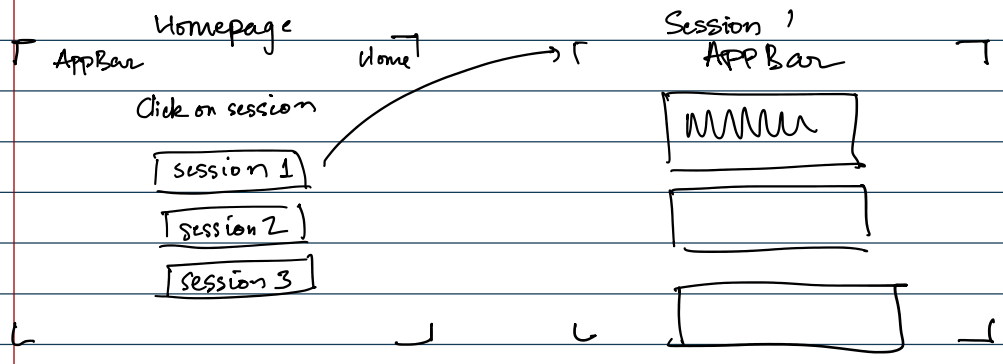
1.] App is at a functional state - Need to handle some more edge cases like

a.] GPS, sensor stream when doesn't return any data need to handle that case.

b.]

v1.0.0 react web app

Tuesday, June 11, 2024 3:31 PM



To Do for v 1.0.1

1.] Add error handlers when one of the two sensors are not streamed. ✓

2.] Add zoom & pan function for Line charts of historic data.

3.] Enlarge chart size (Maybe?)

4.] Add a slider to view past "n" points for the first 2 charts