

Project Report (9 to 15 August 2020)

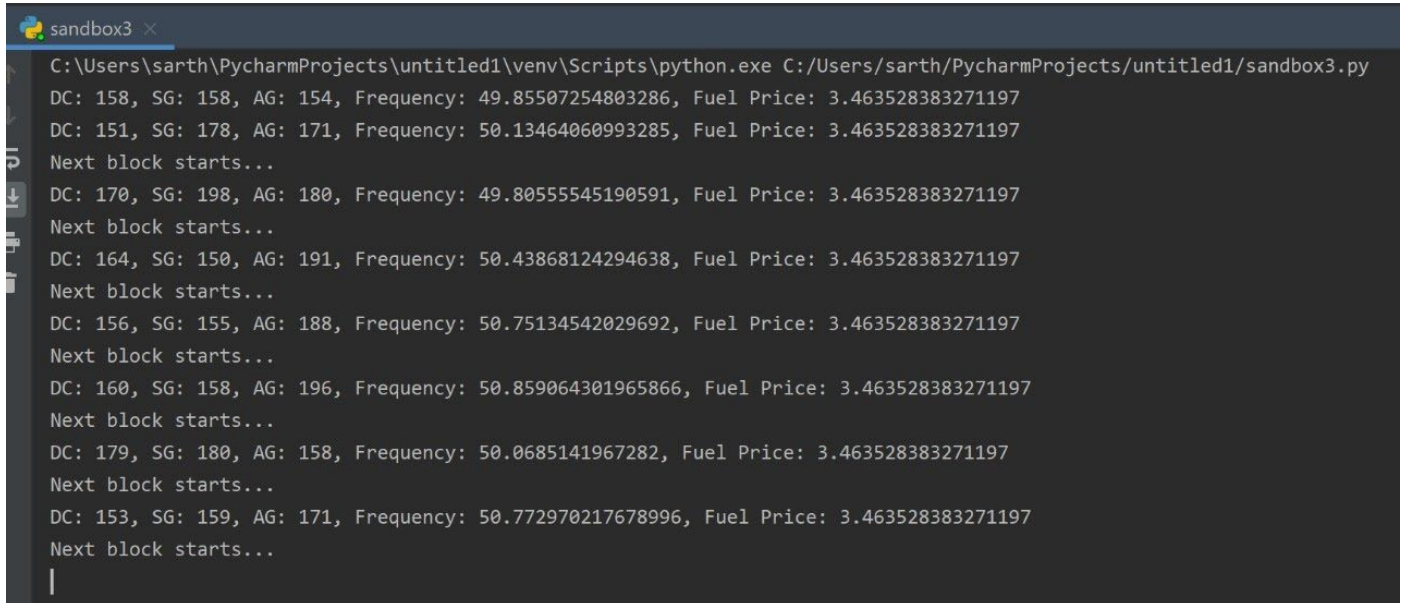
The motivation for the development of the app

- The app provides mobility and flexibility to its users. The user can access the dashboard of the powerplant if both are on a shared network.

Last Week's Work

We generated randomised data as per the given constraints. The AWS server (link provided in the last report) acts as a mock server and hosts this data.

We wrote code to update the data in intervals of 15 minutes or one block interval for parameters such as DC, SG, etc. and one-day interval for parameters such as fuel price, completing the mimicking of the system currently in place at the power station.



```
sandbox3 x
C:\Users\sarth\PycharmProjects\untitled1\venv\Scripts\python.exe C:/Users/sarth/PycharmProjects/untitled1/sandbox3.py
DC: 158, SG: 158, AG: 154, Frequency: 49.85507254803286, Fuel Price: 3.463528383271197
DC: 151, SG: 178, AG: 171, Frequency: 50.13464060993285, Fuel Price: 3.463528383271197
Next block starts...
DC: 170, SG: 198, AG: 180, Frequency: 49.80555545190591, Fuel Price: 3.463528383271197
Next block starts...
DC: 164, SG: 150, AG: 191, Frequency: 50.43868124294638, Fuel Price: 3.463528383271197
Next block starts...
DC: 156, SG: 155, AG: 188, Frequency: 50.75134542029692, Fuel Price: 3.463528383271197
Next block starts...
DC: 160, SG: 158, AG: 196, Frequency: 50.859064301965866, Fuel Price: 3.463528383271197
Next block starts...
DC: 179, SG: 180, AG: 158, Frequency: 50.0685141967282, Fuel Price: 3.463528383271197
Next block starts...
DC: 153, SG: 159, AG: 171, Frequency: 50.772970217678996, Fuel Price: 3.463528383271197
Next block starts...
|
```

(Generation of Mock data in intervals of 15 minutes or one time block)

Future Work

The android app, which so far worked on static data, will be programmed to retrieve data from the server at regular intervals of time. Additionally, the server performs any required calculations (example - penalties for consecutive twelve block deviation), freeing up the resources on the phone. Finally, access to unauthorised users will be restricted through the creation of a login portal.