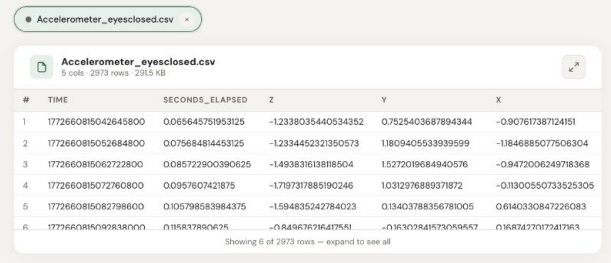
Romberg Web App

Jack Mortson

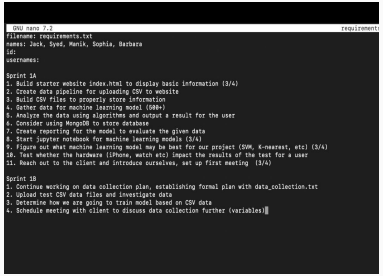


Accelerometer_eyesclosed.csv

Accelerometer_eyesclosed.csv
5 cols · 2973 rows · 291.5 KB

#	TIME	SECONDS_ELAPSED	Z	Y	X
1	1772660815042645800	0.065645751953125	-1.2338035440534352	0.7525403687894344	-0.907617387124151
2	1772660815052684800	0.075684814453125	-1.2334452321350573	1.180940553393959	-1.1846885077506304
3	1772660815062722800	0.085722900390625	-1.4938316138118504	1.5272019684940576	-0.9472006249718368
4	1772660815072760800	0.0957607421875	-1.7197317885190246	1.0312976889371872	-0.11300550733525305
5	1772660815082798600	0.105798583984375	-1.594835242784023	0.1340378835678100 5	0.6140330847226083
6	1772660815092838000	0.115837890625	-0.8496762164175 51	0.1583789062 5	-0.9496762164175 51	-0.1630284157305955 7	0.1687427017241716 3

Showing 6 of 2973 rows — expand to see all



GNU nano 7.2 requirements

```
filename: requirements.txt
names: Jack, Syed, Manik, Sophia, Barbara
id:
usernames:

Sprint 1A
1. Build starter website index.html to display basic information (3/4)
2. Create data pipeline for uploading CSV to website
3. Build CSV files to properly store information
4. Gather data for machine learning model (100+)
5. Analyze the data using algorithms and output a result for the user
6. Consider using MongoDB to store database
7. Create reporting for the model to evaluate the given data
8. Start jupyter notebook for machine learning models (3/4)
9. Figure out what machine learning model may be best for our project (SVM, K-nearest, etc) (3/4)
10. Test whether the hardware (iPhone, watch etc) impact the results of the test for a user
11. Reach out to the client and introduce ourselves, set up first meeting (3/4)

Sprint 1B
1. Continue working on data collection plan, establishing formal plan with data_collection.txt
2. Upload test CSV data files and investigate data
3. Determine how we are going to train model based on CSV data
4. Schedule meeting with client to discuss data collection further (variables)
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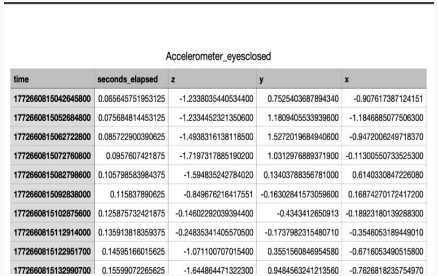

Accelerometer_eyesclosed

time	seconds_elapsed	z	y	x
1772660815042645800	0.065645751953125	-1.2338035440534400	0.7525403687894340	-0.907617387124151
1772660815052684800	0.075684814453125	-1.2334452321350600	1.180940553393960	-1.1846885077506300
1772660815062722800	0.085722900390625	-1.4938316138118500	1.5272019684940600	-0.9472006249718370
1772660815072760800	0.0957607421875	-1.7197317885190200	1.0312976889371900	-0.11300550733525300
1772660815082798600	0.105798583984375	-1.594835242784020	0.1340378835678100	0.6140330847226080
1772660815092838000	0.115837890625	-0.8496762164175551	-0.1630284157305960	0.1687427017241720
1772660815102875600	0.125875732421875	-0.1460229203939440 0	-0.434341265091 3	-0.1892318013928830 0
1772660815112914000	0.135913818359375	-0.2483534140557050 0	-0.173798231548071 0	-0.3546053189449010
1772660815122951700	0.1459516660156 25	-1.071100707015400	0.355156084695458 0	-0.6716053490515800
1772660815132990700	0.1559907226562 5	-1.644864471322300	0.948456324121356 0	-0.7626818235754970

GNU nano 7.2 data_collection.txt

```
data_collection.txt
jmortson
Jack Mortson
1691

1. Two 40 second recordings using Sensor Logger app per participant
2. Chop first 5 and last 5 seconds of each recording to clean data
3. Everyone get 3-5 people for the data collection
4. Follow instructions in document for recording (feet together, phone on chest etc)
5. Upload files to Github for the team
6. Use specific naming conventions to stay organized by subject and eyes closed or eyes opened for each trial
7. TBD
```

Research Paper

01

Created requirements.txt containing product backlog for Web App

02

Downloaded Sensor Logger App and recorded trial tests to start collecting data

03

Built data_collection.txt to start establishing a protocol for data collection to train ML model

RP

- Data Analysis
- Data Collection
- ML Algorithms