INSTRUCTIONS

Requirements:

- 1. OS: Linux
- 2. RAM: Min 8GB
- 3. Jupyter Notebook
- 4. python3
- 5. pip
- 6. numpy
- 7. pandas
- 8. sklearn
- 9. matplotlib
- 10. PIL
- 11. scipy
- 12. sys
- 13. os
- 14. lightgbm
- 15. nltk
- 16. csv

Installation

1. Python3

```
sudo apt-get install python3.6
```

2. Jupyter Notebook

```
python3 -m pip install jupyter
sudo apt install jupyter-core
```

3. Pip

```
sudo apt-get install python3- pip
```

4. Numpy

```
pip3 install numpy
```

5. Matplotlib

```
pip3 install matplotlib
```

6. pandas

```
pip3 install pandas
```

7. sklearn

```
pip3 install sklearn
```

8. PIL

```
pip3 install Pillow==2.2.2
```

9. scipy

```
pip3 install scipy
```

10. lightgbm

```
pip3 install lightgbm
```

11. nltk

```
pip3 install nltk
```

12. csv

```
pip3 install csv
```

Instructions to run code:

- 1. Download the zip folder of the project.
- 2. Unzip Project.
- 3. Install all the requirements using:

pip3 install -r requirements.txt

4. Run the program for feature extraction which will generate the out.csv file using :

python3 code/EEG_feature_extraction.py

- 5. Now feed the extracted features csv to feature selection program and SVM & KNN classifier program.
- 6. For running the programs open the ipynb file in vs code or google colab and then run the code.(Please mention the correct path for out.csv file)
- 7. Results will be displayed.

Expected time to run code: 45 min (SVM.ipynb), 5 min (KNN.ipynb)