Meeting 9

11/04/2021

Chisom Sopuruchi

Deliverables

➢ Edit Heart rate Function

Methodology and Learnings

How I did it:
Inserted list with column names

Results

```python
def biometricVar_per_epoch(epoch_dict, eeg_data):
    #import library
    import pandas as pd

    # define output dictionary
    epochbm_dict={}
    # list to store column names we want to access from the data frame
    df_cols = ['HR', 'Temp', 'SpO2']
    # apply rolling average to dataframe comprising of df_cols
    rolled_df = eeg_data.loc[:,df_cols].rolling(window=5000).mean()
    # populate the output dictionary
    for key, value in epoch_dict.items():
        epochbm_dict[key]=[epoch_dict[key]
                          ,rolled_df.loc[range(value[0], value[1])]]

    return epochbm_dict
```

Results

```
Out[4]: {'1': [[0, 53029],
                    HR        Temp      SpO2
        0           NaN       NaN       NaN
        1           NaN       NaN       NaN
        2           NaN       NaN       NaN
        3           NaN       NaN       NaN
        4           NaN       NaN       NaN
        ...         ...       ...       ...
        53024   54.2998   31.853213   0.0001
        53025   54.2998   31.853213   0.0001
        53026   54.2998   31.853213   0.0001
        53027   54.2998   31.853213   0.0001
        53028   54.2998   31.853213   0.0001

        [53029 rows x 3 columns]],
 '2': [[53029, 53528],
                    HR        Temp      SpO2
        53029   54.2998   31.853225   0.0001
        53030   54.2998   31.853237   0.0001
        53031   54.2998   31.853250   0.0001
        53032   54.2998   31.853262   0.0001
        53033   54.2998   31.853275   0.0001
        ...         ...       ...       ...
        53523   54.2998   31.862250   0.0001
        53524   54.2998   31.862275   0.0001
        53525   54.2998   31.862300   0.0001
        53526   54.2998   31.862325   0.0001
        53527   54.2998   31.862350   0.0001

        [499 rows x 3 columns]],
 '3': [[53528, 121033],
                    HR        Temp      SpO2
        53528   54.2998   31.862350   0.0001
        53529   54.2998   31.862350   0.0001
        53530   54.2998   31.862350   0.0001
        53531   54.2998   31.862350   0.0001
        53532   54.2998   31.862350   0.0001
        ...         ...       ...       ...
        121028  84.6762   31.837438   0.0001
        121029  84.6766   31.837438   0.0001
        121030  84.6770   31.837438   0.0001
        121031  84.6774   31.837438   0.0001
```

```
Out[6]: {'1': [[0, 53029],
                    HR
        0           NaN
        1           NaN
        2           NaN
        3           NaN
        4           NaN
        ...         ...
        53024   54.2998
        53025   54.2998
        53026   54.2998
        53027   54.2998
        53028   54.2998

        [53029 rows x 1 columns]],
 '2': [[53029, 53528],
                    HR
        53029   54.2998
        53030   54.2998
        53031   54.2998
        53032   54.2998
        53033   54.2998
        ...         ...
        53523   54.2998
        53524   54.2998
        53525   54.2998
        53526   54.2998
        53527   54.2998

        [499 rows x 1 columns]],
 '3': [[53528, 121033],
                    HR
        53528   54.2998
        53529   54.2998
        53530   54.2998
        53531   54.2998
        53532   54.2998
        ...         ...
        121028  84.6762
        121029  84.6766
        121030  84.6770
        121031  84.6774
```