Hackathon Assignment

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Given each pattern of sequence that contains 17 amino acids (fixed length pattern). And the model classifies interacting and not-interacting patterns.

This repository contains 3 files :

- Input files : Contains the training data and validation data
- A prediction csv file
- Python file named “MT19132_KastalaMuraliKrishna.py”

To run the program follow these steps :

- Run the python file in your terminal.
- Once the program starts running, it will ask for the paths of training and testing data.
- While running the program, it will show all the required information regarding the data.
- The data is splitted in a ratio of 70:30 as training and testing data.
- Before executing the models it will ask for an user input saying which model to run.Pic is shown below:

```
Choose the model :
1. Random Forest
2. Multi Layer Perceptron
3. Naive Bayes
4. XGBoost
5. KNN

Enter a number to choose the model : 1
```

- After the model finishes its running, according to the model chosen it will extract the predicted files named as :
  - Prediction_RF.csv : prediction got from random forest
  - Prediction_MLP.csv : prediction got from MLP
  - Prediction_NB.csv : prediction got from Naive Bayes
  - Prediction_XGB.csv : prediction got from XGBoost
  - Prediction_KNN.csv : prediction got from KNN

Thank You