Technology Prediction based on Entry Test Result.

Proposal Date: THURSDAY, 21 Aug 2019

# MOTIVATION:

My motivation to use this dataset is to train the model that can predict and find the trends that mostly students do while selecting technology/department based on the score they obtain in Entry Test.

# PROBLEM STATEMENT:

“Many of the student form interior or rural areas of Sindh are helpless and unable to guess what technology they are being awarded based on the score they have achieved in Entry test”

# OBJECTIVES:

## Primary Objective:

The primary objective of this proposal is to predict the technology based on the Entry test result obtained by the student so that the student can predict which technology they can get on the basics of the score that they have achieved.

## Secondary Objective:

And evaluation of the Performance of two different machine learning algorithms.

# DATASET

The data set is easily available on the site mentioned in the reference [1] section of the page.

The dataset consists of 8 columns, 1 target attribute, and approximately more than 700 distinct records

Attributes Names:

* Sr. No.
* Seat No.
* Name
* Father's Name
* Surname
* District [Feature Attribute]
* U/R [Feature Attribute]
* CPN [Feature Attribute]

Target Attribute:

* Discp [Target Attribute]

# ACTIONS OF PLAN:

* Collection of Dataset.
* Filter and removal of rows that have null values.
* Conversion of classical data into equivalent encoded scheme.
* Selection of Useful Features and Target Attribute
* Selection of two popular Machine learning Algorithms: Linear Regression and Logistics Regression or Random Forest
* Evaluation and comparison of the results obtained by two different algorithms.
* Summary and some comments on usage of best model for this type of datasets.

# RESULTS

In the above proposal two different results will be obtained

* First, the trained model can be used to predict the technology by giving new data
* Second, it will evaluate and compare the accuracy of the two models, and which will be the best model for that kind of dataset.

# FUTURE PLAN

In future I can build an android application that is flexible enough to predict on different universities merit lists.

# REFERENCES

[1] Student Entry Test Result Downloadable. Link: <https://github.com/Mohammad-Bilal-Bhatti/Muet-Matit-Lists/blob/master/FIRST%20LIST%20MERIT%20F16.pdf>

[2] Different Merit List of Reference and Download. link: <https://github.com/Mohammad-Bilal-Bhatti/Muet-Matit-Lists>

[3] Medium Article on Linear Regression. link: <https://towardsdatascience.com/linear-regression-using-python-b136c91bf0a2>

[4] Medium Article on Random Forest. Link: [https://towardsdatascience.com/random-forest-in-python-24d0893d51c0](https://towardsdatascience.com/random-forest-in-python-24d0893d51c0%20)

[5] Medium Article on Logistic Regression. link: link: <https://towardsdatascience.com/building-a-logistic-regression-in-python-301d27367c24>