Data Science: A Programming Approach Mahyar S Vaghefi University of Texas Arlington

Individual Project #2

This project involves two separate mini-projects.

Titanic-Machine Learning from Disaster

- Step 1. Join kaggel at https://www.kaggle.com/, if you have not already done that.
- Step 2. You need to compete in the *Titanic Project* (accessible at https://www.kaggle.com/c/titanic)
- **Step 3.** Use train.csv file (available at kaggle web site) and predict unseen data on test.csv (available at kaggle web site).
 - Read the <u>full desciption</u> of the competition on the website
 - Download train and test datasets and load them into your environment (Jupyter)
 - Survived is your target (dependent variable)
 - You can use any combinations of available features to develop your models (Keep in mind that there are <u>missing values</u> is some features)
 - Use different classification methods (the ones that you learned in this course) to create your predictive models.
 - For each method create a separate Jupyter file
 - After developing your model(s), use them to predict the test data. Then, save your result as a separate CSV file.
 - You can find a sample of submission file in "Data" tab inside the project web site
 - One member of the group needs to submit the final prediction result (in a defined format) to kaggle. you can also creat a team and submit it as a team.
 - Capture your score. You need to report it.
- **Step 4.** Add the score for each of the prediction models at the end of the Jupyter file (as a comment).
- **Note.** <u>DO NOT</u> use other people code. The main idea is to use your own knowledge that you gained in the course. If I notice that any individual use outsider codes, then you will get no point for this part of the project.

Output

- Make sure to put descriptive comments on your code
- Report your result in a separate Word document
- Put your code files, and analysis report in a zip folder and submit it in Canvas

Due Date: May 7 2020 at 7:00 PM

Grading Criteria

Comprehensiveness	30%
Correctness	20%
Complete Report	20%
Clear Code	20%
Innovation (Extra)	20%
<u>Total</u>	120%