Capstone Project 1: Project Proposal

Project Title:

"Wine Quality Project"

Project Mentor: Gritank Dhamija

What is the problem to be solved?

The quality of any wine depends on various factors such as amount of alcohol, sugar, acidity, pH, density, sulphates, citric acid, chlorides etc. The purpose of this project is to build a model which will Classify wine into High Quality and Low Quality.

Who is this project beneficial for?

The project is helpful for anyone who wants to determine which ingredient determine the quality of wine and how can quality of wines be improved.

What data are you using? How will you acquire the data?

I am using data provided by Kaggle. It contains amount of ingredient that makes up wine and respect quality of wine. Data is available at:
https://www.kaggle.com/uciml/red-wine-quality-cortez-et-al-2009

Techniques that I would use to solve the problem:

1) Data Wrangling - I will observe the data for all the missing values, incorrect entries and based on the observation I will clean the data for further use.

2) Exploratory Data Analysis - I would plot the relation between different parameters in the dataset and based on that I can find the trends for storytelling.

3) Machine Learning Model - After all the initial work on the dataset it would be time to build a Machine Learning Model to find the Prediction of the Flight ticket Prices. I may use Linear Regression, Random Forest regression.

What are the methods I will use to deliver the project?

I will be using the following tools to work on the project:

- Jupiter Notebook for the major part of the project.

- I will be using Python version 3.x for writing the code.

- I will use Google doc for submission on the in-process project reports.

- PowerPoint for Data Storytelling presentation.

References:

- Springboard Curriculum material

- Data Camp courses, Google, Stack overflow, GitHub, etc.

- And any other Open Resources.