Final Capstone Project Plan:

- The goal of this project is to create a machine learning model that can accurately predict the outcomes of NBA games based on recent historical performance data as well as external factors such as home or away games.
- Once it is tuned to be as accurate as possible, it can provide value by comparing its predictions with betting odds, and identify potentially profitable bets.
- I'll implement a neural network using Keras and Tensorflow to create a classifier for win and loss predictions. Based on my research, this will most likely be the most accurate method, but I will try a variety of classification models to compare against.
- The biggest challenge will be tuning for accuracy. Vegas experts hover around 70% accuracy and a coin flip achieves 50%, so the 70% mark should be a good target.

Data: I'll be accessing NBA stats through the NBA API using the python wrapper.

Technical Steps:

1. Load relevant data from NBA API into pandas dataframe.
2. Explore and clean up the data.
3. Feature selection
4. Implement and tune the neural network
    a. Tune many variations in order to select the most accurate.
5. Implement other classification models for comparison.
6. Incorporate betting odds information.
7. Use the model to predict upcoming profitable bets.