

Jedi Golf Coding Challenge

In this challenge you have been given the role of Luke Skywalker's golf caddy.

Luke is competing in the JGA Tour (Jedi Golfer's Association). Each tournament is held on a different planet.

As his caddy, your job is to make recommendations on the most suitable golf club to use on each planet based on the predicted shot distance.

The following information is available to help develop your solution:

- A set of historic shots played by Luke in previous tournaments is available in "data/training_data.csv"
- Golf club information is available in "data/club_data.csv"
- Planet information is available in "data/planet_data.csv"
- You can use the assumption that the initial ball speed is 1.5 times the golf club swing speed
- You can assume flat terrain and the golf ball does not bounce or roll
- The JGA use golf balls with the following parameters:

Parameter	Value
Diameter (m)	0.043
Mass (kg)	0.045
Coefficient of drag	0.3
Coefficient of lift	0.2

You can assume the swing_speed within club_data.csv is the speed Luke would swing consistently with the given club.

You can assume Luke won't use *The Force* throughout the JGA Tour.

To test your solution, you can use the test data available in "data/test_data.csv"

We expect you to spend up to a couple hours on this and you may not require all the data and information made available. If you run out of time, along with your assumptions feel free to let us know what you would have done next.

Our preference regarding programming language would be Python. If you wish to use another language that is fine - we may discuss your language choice in subsequent discussions.

We are interested in the analytical approach you take to this, and we will discuss that further. But we will also assess your capability to write clean, logically organised code that can be easily shared and used by others.

We would prefer a clean, simple solution over a technically complex solution in messy scripts.