Case Study Project - Boat Listing Survey

Congratulations, you have just landed your first job as a data scientist at Nearly New Nautical! Nearly New Nautical is a website that allows users to advertise their used boats for sale. To boost traffic to the website, the product manager wants to prevent listing boats that do not receive many views.

The product manager wants to know if you can develop a model to predict the number of views a listing will receive based on the boat's features. She would consider using your model if, on average, the predictions were only 50% off of the true number of views a listing would receive.

In addition, she has noticed that many users never complete the introductory survey to list their boat. She suspects that it is too long and has asked you whether some features are more predictive of views than others. If so, she may be able to trim the length of the survey and increase the number of people who sign up.

You will need to present your findings in two formats:

1. First, you will need to present your findings to the product manager via a 10 minute oral presentation. The owner has no technical data science background.
2. You will also need to submit a technical report to your manager, who does have a strong technical data science background.

For details on how your report and presentation will be graded, you can refer to the grading rubric.

Data

The data is available in a DataCamp Workspace, which you can find from the certification dashboard. The data set has the following columns:

Column Name	Details
Price	Character, boat price listed in different currencies (e.g. EUR, Â£, CHF etc.) on the website
Boat Type	Character, type of the boat
Manufacturer	Character, manufacturer of the boat
Type	Character, condition of the boat and engine type(e.g. Diesel, Unleaded, etc.)
Year Built	Numeric, year of the boat built
Length	Numeric, length in meter of the boat
Width	Numeric, width in meter of the boat
Material	Character, material of the boat (e.g. GRP, PVC, etc.)
Location	Character, location of the boat is listed
Number of views last 7 days	Numeric, number of the views of the list last 7 days