

Case Study Project - Used Car Sales

You have been hired as a data scientist at a used car dealership in the UK. The sales team are having problems with pricing used cars that arrive at the dealership. They would like your help. To start with, they would like you to work with the Toyota specialist to test your idea(s). They have collected some data from other retailers on the price that a range of Toyota cars were listed at. It is known that cars that are more than £1500 above the estimated price will not sell. The sales team wants to know whether you can make predictions within this range.

You will need to present your findings to the Head of Sales, who has no technical data science background.

Data

The data is included in a DataCamp Workspace environment that you can find at one of the following links:

- <u>R</u>
- Python

The data set has the following columns:

Column Name	Details
model	Character, the model of the car, 18 possible values
year	Numeric, year of manufacture from 1998 to 2020
price	Numeric, listed value of the car in GBP
transmission	Character, one of "Manual", "Automatic", "Semi-Auto" or "Other"
mileage	Numeric, listed milage of the car at time of sale
fuelType	Character, one of "Petrol", "Hybrid", "Diesel" or "Other"
tax	Numeric, road tax in GBP. Calculated based on CO2 emissions or a fixed price depending on the age of the car.
mpg	Numeric, miles per gallon as reported by manufacturer
engineSize	Numeric, listed engine size, one of 16 possible values



Presentation Session & Grading

During your session you will deliver your final presentation only. You must be prepared to present in that session as well as provide the link to your workspace for grading. For full details on grading and how the session will run, see the <u>General Information Guide</u>.

Sharing your Analysis

So that we can grade your analysis, you will need to share your workspace.

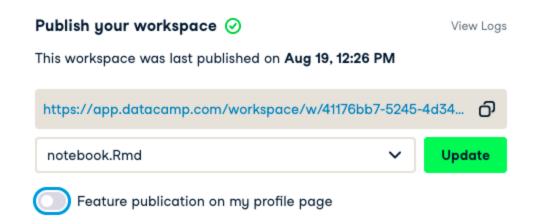
Before your scheduled session, press the "Share" button in the top right corner of the Workspace.



When prompted, press the "Publish" button. You will then see options similar to below.

Make sure you uncheck "Feature publication on my profile page".

You will need to share the link provided when asked during your session.



If you make any changes to your work between publishing and your session, please make sure to "Update", or you may be graded on a previous version of your work.