

Case Study Project – Wheelchair Ramps

Congratulations, you have landed your first job as a data scientist at National Accessibility! National Accessibility currently installs wheelchair ramps for office buildings and schools. However, the marketing manager wants the company to start installing ramps for event venues as well. According to a new survey, approximately 40% of event venues are not wheelchair accessible. However, it is not easy to know whether a venue already has a ramp installed.

The marketing manager would like to know whether you can develop a model to predict whether an event venue has a wheelchair ramp. To help you with this, he has provided you with a dataset of London venues. This data includes whether the venue has a ramp.

It is a waste of time to contact venues that already have a ramp installed, and it also looks bad for the company. Therefore, it is especially important to exclude locations that already have a ramp. Ideally, at least two-thirds of venues predicted to be without a ramp should not have a ramp.

You will need to present your findings in two formats:

1. First, you will need to present your findings to the marketing 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
venue_name	Character, name of the venue.
Loud music / events	Character, whether the venue hosts loud events (True) or not (False).
Venue provides alcohol	Numeric, whether the venue provides alcohol (1) or not (0).
Wi-Fi	Character, whether the venue provides wi-fi (True) or not (False).
supervenue	Character, whether the venue qualifies as a supervenue (True) or not (False).
U-Shaped_max	Numeric, the total capacity of the u-shaped portion of the theatre.
max_standing	Numeric, the total standing capacity of the venue.
Theatre_max	Numeric, the total capacity of the theatre.
Promoted / ticketed events	Character, whether the venue hosts promoted/ticket events (True) or not (False).
Wheelchair accessible	Character, whether the venue is wheelchair accessible (True) or not (False).