

Case Study Project – Wheelchair Ramps

This document provides all the details you need to complete the case study. We recommend you read this document carefully before you get started.

Company Background

National Accessibility currently installs wheelchair ramps for office buildings and schools. 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.

It is a waste of time to contact venues that already have a ramp installed, and it also looks bad for the company. They would like the help of the data science team in predicting which venues already have a ramp installed.

Customer Question

The marketing manager would like to know:

- Can you develop a model to predict whether an event venue already has a wheelchair ramp installed?

Success Criteria

To reduce the amount of time wasted by the company contacting venues that already have a ramp, at least two-thirds of venues predicted to be without a ramp should not have a ramp.

Data Dictionary

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).

Submission Requirements

1. You are going to create a written report to summarize the analysis you have performed and your findings. This report should be for the data science manager. The task list below describes what they expect to see in your report.
2. You will need to use DataCamp Workspace to complete your analysis, write up your findings and share visualizations.
3. You must use the data we provide for the analysis.
4. You will also need to prepare and deliver an oral presentation. You should prepare around 8-10 slides to present to the non-technical customer. The task list below describes what they expect to see in the presentation.
5. Your presentation must be no longer than 10 minutes.