

# Data Fellowship: Hackathons

9-5pm, (8 hrs)

## Module Overview

Apprentices attend two hackathons during the Data Fellowship, one after the Data Analytics and one after the Data Science bootcamp.

The hackathons are an opportunity for apprentices to *apply* their knowledge in a real-world setting using live datasets.

Apprentices will have the opportunity to **work in teams** to solve real-world business decisions. They will use the data analytics lifecycle to research, define, analyse and present a project to an independent panel.

The panel will be comprised of stakeholders that mirrors a real company (project owner, executive sponsor, data engineer etc).

## Output

A visualisation and presentation that a non-specialist can follow.

## Learning Objectives

- Apply key concepts learned in the General Assembly bootcamps (Data Analytics & Data Science) in a real-world setting using live datasets
- Work as a project team to research, define, analyse and present a project

## Materials

- Classroom space (dependent on cohort size)
- Whiteboard
- Projector
- Power strips
- Catering
- Datasets
- Assessment rubric

## Coach Setup

- Allocate apprentices into teams of 4-5 (dependent on cohort size)
- Assign project brief to teams (if possible, assign teams to a brief that is different from the industry their company operates in)



## Project Briefs

### *Data Analytics*

1. The CMO for a travel company is looking to target 25–35-year-olds who are concerned about climate change. The company has set itself the goal of reducing air travel for customers by 37% in 2020. The executive sponsor has asked for your recommendation on the top 3 destinations for summer 2020, that does not involve a flight, based on the following criteria:

**Potential datasets:**

- [NOAA](#)
- [Weatherbase](#)
  - Average monthly temperature above 22 degrees Celsius
  - Average monthly rainfall less than 60mm
  - Less than 4hrs from London

2. The CTO of an on-demand delivery startup based in Greater London is looking to open the company's first operational facility. The company uses a fleet of electric scooters to provide a "last-mile" delivery service to Fortune 500 companies in the city (e.g. important packages, laundry service, the CEO's sushi order). The executive sponsor has asked you to make a recommendation about where to open the first location, based on the following criteria:

**Potential datasets:**

- [Open Postcode Geo](#)
- [Commercial and Industrial Property Stats](#)
  - Lowest rent
  - Within 20 minutes of the City and Canary Wharf
  - Low emission zone

3. The CEO of the Department of Health is putting together a spending recommendation for 2020. The department is particularly concerned about rising levels of obesity, access to nutrition and air quality across Greater London. You have been asked to put together a report analysing the top health issues per borough, based on the following criteria:

**Potential datasets:**

- [London Datastore](#)
  - Which boroughs should receive more investment?
  - How would you prioritise spending across the city?
  - What health issues should the Dept. of Health focus on?