Data Science Career Track
Overview of the Capstone Projects

During this course, you'll work on three different capstone projects. This document offers an overview of these projects so that you have a sense of the work you'll tackle as you progress.

Guided Capstone (Capstone One)

Time estimate: ~23 hours

Your first capstone project comes up fairly early in the course. For this project, you'll be given a lightweight introduction to each step of the Data Science Method. You'll then be guided through each of those steps with helpful tips and instructions. This first capstone is designed to build your foundational understanding of each of these important steps, while also giving you an opportunity to practice each step before applying your knowledge to your second capstone.

Capstone Two

Time estimate: ~50 hours

Your second capstone project follows the same Data Science Method steps as the first capstone, but this time with less guidance. You'll be asked to:

- Come up with a project idea and proposal
- Find and wrangle data
- Use exploratory data analysis techniques to understand that data
- Pre-process and create a training dataset
- Build a working model
- Document and present your work

Each of these steps will be their own submission and are interwoven throughout the core units of the course.

Capstone Three

Time estimate: ~50 hours

For your third capstone, you'll again work through each step of the Data Science Method, but this time you'll choose a project idea that aligns with the track that you choose.

- If you choose the Business Insider track, you'll come up with a project intended to deliver business insights and recommendations. You will use the business analytics techniques and advanced visualization skills you learn in this track to create a comprehensive and actionable capstone project.
- The Generalist track capstone can incorporate a variety of the topics covered in that track, including:
  - Time series analysis
  - Natural language processing
  - Image processing
  - Recommendation systems
  - Network analysis
- For the Advanced Machine Learning capstone, you'll have the choice of incorporating one of the following topics into your capstone and will move your model into development using industry-standard tools:
  - Deep learning (neural networks)

- Time series analysis
- Natural language processing
- Image processing
- Recommendation systems
- Network analysis