Capstone Project Overview

The capstone reflects the effort you have put forth in this program and showcases your ability to develop and answer a question of interest using the tools you have learned. Your final capstone project will focus on both the application of a predictive model and your ability to communicate your findings.

Deliverables

- A predictive model using supervised or unsupervised learning techniques on a dataset of your choosing
- A technical write-up in Jupyter Notebook posted on your GitHub repository
- An non-technical README describing your findings posted on your GitHub repository

Structure and Schedule

Module 11—Draft the Problem Statement

In Module 11, you will define your problem statement and develop a prospectus of the project. The prospectus provides a general overview of the question you will be asking, what data you think you will need to answer the question, and the techniques you might use to answer the question. This submission is pass/fail because it is expected that your plan will change based on your facilitator's feedback.

Modules 12 to 15—First 1:1 With Your Learning Facilitator

Sometime during these modules, your Learning Facilitator and you will find a mutually agreeable time to talk synchronously about your project. Your Learning Facilitator may:

- Help you refine your initial question and data needs
- Suggest where to source the data you will need
- Suggest methodologies for answering your question. Remember, your Learning Facilitator may propose unfamiliar methodologies that better serve your needs

Module 17—Problem Statement

In Module 17, you will submit your formal problem proposal, including:

- Research question you intend to answer
- Expected data sources and structure
- Expected results
- Expected techniques

Module 20—Initial Report and EDA

In Module 20, you will submit your findings, including:

- Jupyter notebook where you did the work
- Project template (from Module 17) with completed results section

Modules 21 to 23—Second 1:1 With Your Learning Facilitator

After you submit your initial findings, you and your Learning Facilitator will find a mutually agreeable time to go through your results to:

- Identify any gaps/errors in the findings
- Suggest possible further explorations (after the program)
- Answer questions about the non-technical report

Module 24—Final Analysis and Report

In Module 24, you will submit your technical findings and a non-technical report describing your capstone project. You will deliver these items in an organized and well-structured GitHub repository that will contain an informative README and collection of Jupyter Notebooks. The notebooks will walk through your analysis, and the README file will provide a non-technical write-up that covers your problem, results, important findings, and suggestions for next steps.