Capstone Project Overview

Overview

This program's capstone will reflect the concepts and technical knowledge you have acquired throughout the program, and it will showcase 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. By the end of Module 24, you will have completed the following:

- Build a predictive model using supervised or unsupervised learning techniques on a dataset of your choosing
- Develop a technical write-up in Jupyter Notebook posted on your GitHub repository
- Create a non-technical report describing your findings

Timeline/Deliverables

Module 6: Draft the Problem Statement
In Module 6, 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, the data you require to answer the question, and the techniques you might use to answer the question.

Modules 11–14: First One-on-One Session with Your Program Leader
Sometime during these modules, you and your Program Leader will find a mutually agreeable time to talk synchronously about the problem statement you articulated in Module 6. Your Program Leader 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 that your Program Leader may propose unfamiliar methodologies that better serve your needs.

Module 16: Finalize the Problem Statement

In Module 16, you will submit your formal problem proposal, including:

- The 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 the following:

- A completed Jupyter notebook with your problem statement/question, data sources/structure, results, and techniques used (essentially, a fully built out version of what you submitted in Module 16)

Modules 21–23: Second One-on-One Session with Your Program Leader

After you submit your initial findings, you and your Program Leader 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 non-technical report describing your capstone project. This report is designed to accompany your Jupyter notebook, providing a non-technical write-up that covers your problem, results, important findings, and suggestions for next steps.

To help you structure your report, we have provided the following template for your reference: Final Report Template