**Data and Programming Foundations for AI: Summary Portfolio Project (Scoping Overview)**

**Goals**

* Apply skills from throughout the Skills Path to demonstrate proper attainment of knowledge
* Select, curate, and analyze a data set via exploratory data analysis and basic data visualizations

**Data**

* We’ll aim to examine the per-capita Gross Domestic Product (GDP) economic output of 187 countries in the time period of 1970-2022, denoted in US Dollars (USD)
  + Note: Although the original dataset contained 187 countries, 8 had missing data, so the final analysis included 179 countries.
* Dataset was obtained from Kaggle on August 11, 2024
  + [Data source here](https://www.kaggle.com/datasets/dataanalyst001/per-capita-gdp-of-all-countries-1970-to-2022?select=Per+Capita+GDP+of+All+Countries+1970+to+2022.csv)

**Analysis**

* Average growth rate
* Global variance
* Outlier identification
  + Max total growth = Republic of Korea
  + Min total growth = Mozambique
  + Max year over year growth = Oman, in 1974 (228.9%)
* Growth visualization
  + Raw GDP
  + Year over year growth percent

**Future Improvements**

* Could adjust the data for inflation
* Could add region codes for geographic filtering