Read the document carefully and follow as instructed.

Machine Learning Roles (Chat GPT or LLM for Infrastructure Projects Database)

About the Task:

Important Points:

- (1) Please use separate .py files to harvest ONLY the data from API or scrap from websites.
- (2) Firstly, collect data from diverse and large datasets listed below.
- (3) Use Large Language Models and pre-trained ChatGPT4 or Jurassic and any others to do Q&A, Tagging for Keyword Extraction or Named Entity Recognition (NER) but integrating and customizing the results with some of the sources listed below.
- (4) Provide a report with succinct visualization or a simple website with custom Q&A bot with results and all your different .py scripts (class object oriented good scripting practices) and final Python notebook.

Natural Language Understanding Trial Task

Data Sources: Combine different data sources from the below list to (i) get data and (ii)
use Python harvester to scrape or download data from the sources. Evaluation will also
be based on the diversity of the data chosen.

World Bank Projects
SAM.gov
Open Contracting
Tenders Electronic Daily
Open Tenders
GI Hub Pipelines
<u>California Tenders</u>
<u>Florida Tenders</u>
<u>Texas Tenders</u>
FDOT
TXDOT
<u>Caltran Tenders</u>
Asian Development Bank (ADB) Projects
African Development Bank (AfDB) Projects
Asian Infrastructure Investment Bank (AIIB) Projects

- Learn more about Projects & Tenders standard data structure
 - https://developer.taiyo.ai/api-doc/ProjectsandTenders/
 - https://www.open-contracting.org/data-standard/

Modeling and Report

1. **Customize a GPT-3 Chatbot**. A chatbot for Q&A for custom dataset https://openai.com/blog/introducing-chatgpt-and-whisper-apishttps://www.ai21.com/blog/announcing-ai21-studio-and-jurassic-1

<u>More explanation on prompt engineering question</u>: Find data sources for road projects and tenders in the state of California. Prompt Engineering and Intelligent Question and Answering customized to the datasets mentioned above to answer questions such as How many projects (or tenders) in region X? Which company is winning most XXX (Sector like Transport or Road) project in YYY (Place like California or USA).