Future Opportunity Assessment Manager - FOAM

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Overview

The Future Opportunity Assessment Manager (F.O.A.M) is a dashboard designed to consolidate new government contract opportunities and past competitor successes into a single, accessible location. The dashboard aims to aid users in spotting relevant contracts and assist in crafting proposals using previously successful strategies. The project will be developed using Python and various libraries, with a focus on data manipulation, analysis, and interactive web application development.

Goals

1. Develop a user-friendly dashboard for accessing and analyzing government contract data.

2. Provide filters and visualizations to help users identify relevant opportunities.

3. Implement functionality to display past competitor successes and analyze competitor information.

4. Incorporate forecasting features to assess future contract opportunities based on historical data.

Loading Data

1. To get past awards data for this project, we will use the USAspending API, it provides various API endpoints to retrieve data based on user-specified parameters.

2. For current opportunities data, we will utilize the SAM.gov API. Users are required to create an account on the SAM.gov website and request an API key, which can then be used to access the necessary data.

Specifications

Current Opportunities:

Allows users to filter and analyze current government contract opportunities based on agency, opportunity type, ECS rating, set-aside type, and days remaining.

Competitor Info:

Provides analysis of past awards and competitors, allowing users to filter by agency, awardee, contract type, contract status, and award amount bins.

Forecast Recompetes:

Enables users to analyze future contract opportunities by filtering based on agency, incumbent name, contract status, and months until contract ends.

Technologies Used

- Python

- Pandas for data manipulation and analysis

- Streamlit for creating interactive web applications

- Streamlit Option Menu for creating option menus in Streamlit

- Various data visualization libraries for creating charts and graphs