Instruction Manual for Qualitative Data Analysis

Overview

This software is designed to facilitate qualitative data analysis for Institutional Research. It supports processing Word and PDF documents and provides tools for advanced text analysis such as LDA, NER, NMF, and sentiment analysis.

System Requirements

- Python 3.8 or higher
- VS Code (Visual Studio Code)
- Python libraries (install using requirements.txt in the Project development folder)

Setup Instructions

1. Download the project files.
2. Ensure all dependencies are installed.
3. Open the Project development folder in visual studio code.

Running the Software

1. **Start the Application:**
   - Execute main.py to initialize the backend:

     "python main.py"

   - Execute gui.py to launch the frontend graphical interface:

     "python gui.py"

2. **Upload Data:**

   - Click the **"Upload File"** button in the interface.
   - Select a Word or PDF document for the analysis.
   - Click the **"Process Text"** button in the interface to preprocess data.
   - Then select the available features (LDA, NER, NMF) to analyze the theme.
   - Next, click on the sentiment analysis button to get the sentiment insights of the data as positive, negative or neutral.
   - There is also a button to preview results to view the results of analysis after performing any of the above steps.
   - You can also download the results in csv or docs format by clicking the download results button, here one can also set the name of the result file and it shows the real time processing time in the processing bar.