

How to Run the NLP2SQL Project

1. Clone the Repository

Open your terminal and run the following commands to clone the project repository:

```
git clone https://github.com/Ajaneeshwar/NLP2SQL.git
cd NLP2SQL
```

2. Set Up Environment

Create an environment file to configure the project:

```
# Create a .env file
cat << EOF > .env
```

Azure Configuration

```
LLM_PROVIDER=AZURE
OPENAI_ENDPOINT="https://[ENDPOINT_NAME].openai.azure.com"
OPENAI_API_VERSION="2024-08-01-preview"
OPENAI_API_KEY="YOUR AZURE OPENAI API KEY"
MODEL_NAME="YOUR AZURE OPENAI MODEL NAME"
```

Gemini Configuration

```
LLM_PROVIDER=GEMINI
GEMINI_API_KEY="YOUR GEMINI API KEY"
EOF
```

Replace placeholders with your actual Azure and Gemini API credentials.

3. Install Dependencies

Make sure you have Python installed, then execute:

```
pip install -r requirements.txt
```

4. Launch the Application

Run the Streamlit application:

```
streamlit run app/NLP2SQL.py
```

5. Access the Web Interface

Open your browser and navigate to the local URL displayed (usually `http://localhost:8501`).

6. Use the Application

- Enter a natural language query to generate SQL.
- View the visualizations and analytics presented on the dashboard.
- Export results in your preferred format.