VoiceDetectiveAI: Setup and User Guide

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Abstract

This document provides a comprehensive guide for setting up and running the **VoiceDetectiveAI** project. This project is designed to transcribe audio files and perform an intelligent analysis to uncover truths from testimonies. Follow the steps below to get the project running on your local machine.

1 Prerequisites

Before you begin, ensure you have the following software installed on your system:

- Python 3.8 or higher.
- Git for version control.

2 Step 1: Clone the Repository

First, clone the project from its GitHub repository to your local computer. Open your terminal or command prompt, navigate to the directory where you wish to store the project, and execute the following command:

```
git clone https://github.com/Taran-0107/VoiceDetectiveAI.git
```

Once the repository is cloned, you must navigate into the project's root folder:

cd VoiceDetectiveAI

3 Step 2: Install Required Libraries

The project relies on several external Python libraries, which are listed in the requirements.txt file. To install all dependencies, run the following command from the project's root directory:

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

4 Step 3: Configure Your API Key

The analysis core of this project is powered by the Gemini API. You must provide your own API key to proceed.

- 1. In the root directory of the project, create a new file named .env.
- 2. Open the .env file with a text editor and add your Gemini API key in the exact format shown below. Replace "your_api_key" with your actual secret key.

GEMINI_API="your_api_key"

Note: This file ensures that your sensitive API key is kept secure and separate from the main source code.

5 Step 4: Run the Analysis

With the setup complete, you are now ready to run the VoiceDetectiveAI. Execute the main script from your terminal:

python main.py

The script will begin processing all audio files located in the designated directory. Upon completion, two output files will be generated in the project's root folder:

- final_analysis.json: A structured JSON file containing the in-depth analysis for each subject.
- transcripts.txt: A text file containing the raw transcription for each audio file.

Thank you for using VoiceDetectiveAI.