

Project Documentation

AI Chemist

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Project Overview

The **AI Chemist** project is an interactive web application designed to assist users in analyzing pharmaceutical tablets from uploaded images. Leveraging advanced AI models, the application provides detailed descriptions and functionalities of each tablet depicted in the uploaded image. The app aims to be a reliable resource for users seeking information about medications and their uses.

Features

- **Image Upload**: Users can upload images of tablets for analysis.
- **Input Prompt**: Users can provide a specific prompt to guide the AI in generating responses.
- **Detailed Responses**: The application provides clear, concise information about each tablet, including uses, functionalities, and specifications.
- **User-Friendly Interface**: The app features an intuitive design using Streamlit for easy navigation and interaction.

Technologies Used

- Python
- Streamlit
- Google Generative AI (Gemini 1.5 Flash)
- dotenv (for environment variable management)
- PIL (Python Imaging Library)

Getting Started

To run the AI Chemist application locally, follow the steps below.

Installation

1. ****Clone the Repository****:

```
```bash
git clone https://github.com/Chandu0394/MyProject.git
cd MyProject
```

#### 2. **Create a Virtual Environment** (optional but recommended):

```
python -m venv venv
source venv/bin/activate # On Windows use `venv\Scripts\activate`
```

#### 3. **Install Required Libraries**:

Create a `requirements.txt` file if you haven't already and include the following libraries:

```
streamlit
google-generativeai
python-dotenv
pillow
```

Then, install the libraries using:

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

#### 4. **Setup Environment Variables**:

Create a `.env` file in the root directory of your project and add your Google API Key:

```
GOOGLE_API_KEY=your_google_api_key_here
```

## Usage

#### 1. **Run the Application**:

Start the Streamlit application using the following command:

```
streamlit run app.py
```

## 2. Interacting with the App:

- Open your web browser and go to `http://localhost:8501`.
- Upload an image of a tablet.
- Enter an input prompt to guide the AI's response.
- Click the "Tell me" button to receive detailed information about the tablet.

## Folder Structure

```
AI-Chemist/
|
├── images/ # Folder for storing UI images
├── .env # Environment variables file
├── app.py # Main application file
├── requirements.txt # List of required libraries
└── README.md # Project documentation
```

## Images Folder

The `images/` folder is designated for storing any images utilized in the user interface. This may include logos, background images, or other graphics that enhance the application's appearance.

## Contributing

Contributions are welcome! If you would like to contribute to this project, please fork the repository and submit a pull request with your improvements or bug fixes.

## License

This project is licensed under the MIT License - see the [LICENSE](#) file for details.

```
Additional Notes
- **Replace the placeholders** (like `your_google_api_key_here`) with actual
 values specific to your project.
- You might want to add a License section if you're planning to share your
 project publicly. Consider using the MIT License or any other license that
 suits your project.
```

- Adjust the instructions as needed based on your project's specifics, such as any additional features or requirements.

This template should give you a solid foundation for your project documentation! Feel free to customize it further based on your project's needs.