🥗 Amit's Nutrition Tracker

A Streamlit-based AI-powered nutrition assistant that analyzes meal images and recommends dishes based on your health goals using Google Gemini Pro.

🚀 Features

- Upload multiple meal images for nutrition analysis
- Set personal health goals (e.g., weight loss, digestion, muscle gain etc)
- Get meal breakdowns and calories
- Personalized dish recommendations
- Works for home meals or dining out (menu analysis)

📦 Tech Stack

- Python
- Streamlit
- Google Generative AI (Gemini API)
- PIL for image handling

Setup Instructions

1. Clone the repo

```bash
git clone https://github.com/yourusername/nutrition-tracker.git
cd nutrition-tracker
```

2. Create a virtual environment

```
python -m venv venv
source venv/bin/activate  # or venv\Scripts\activate on Windows
```

3. Install dependencies

pip install -r requirements.txt

4.Run the app

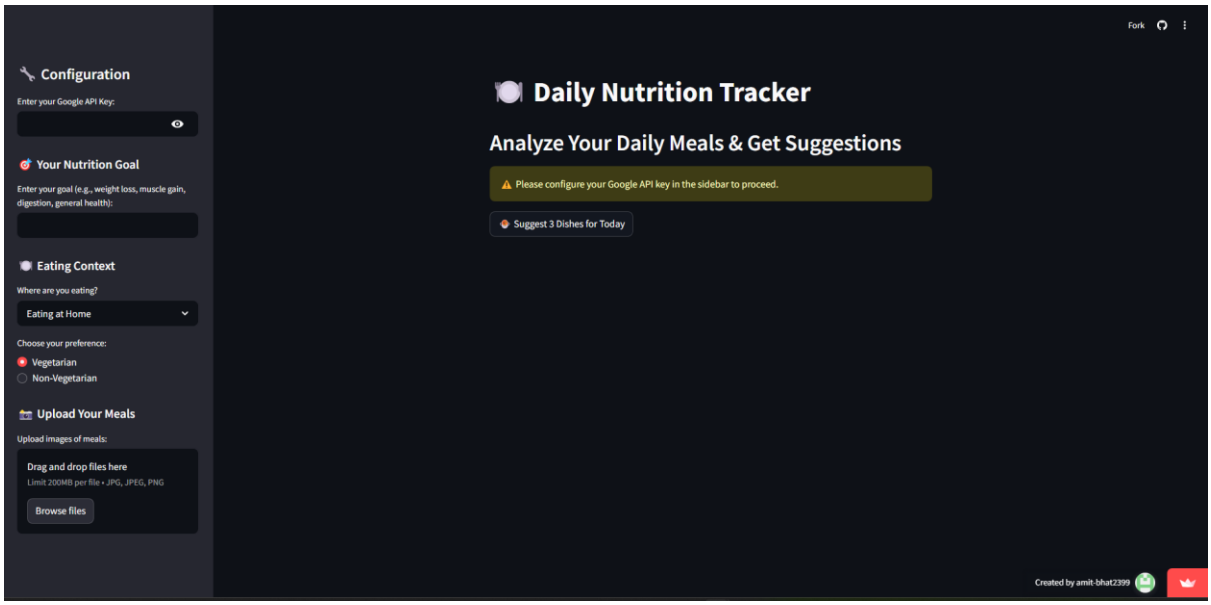
streamlit run app.py

5.Setup Your API Key

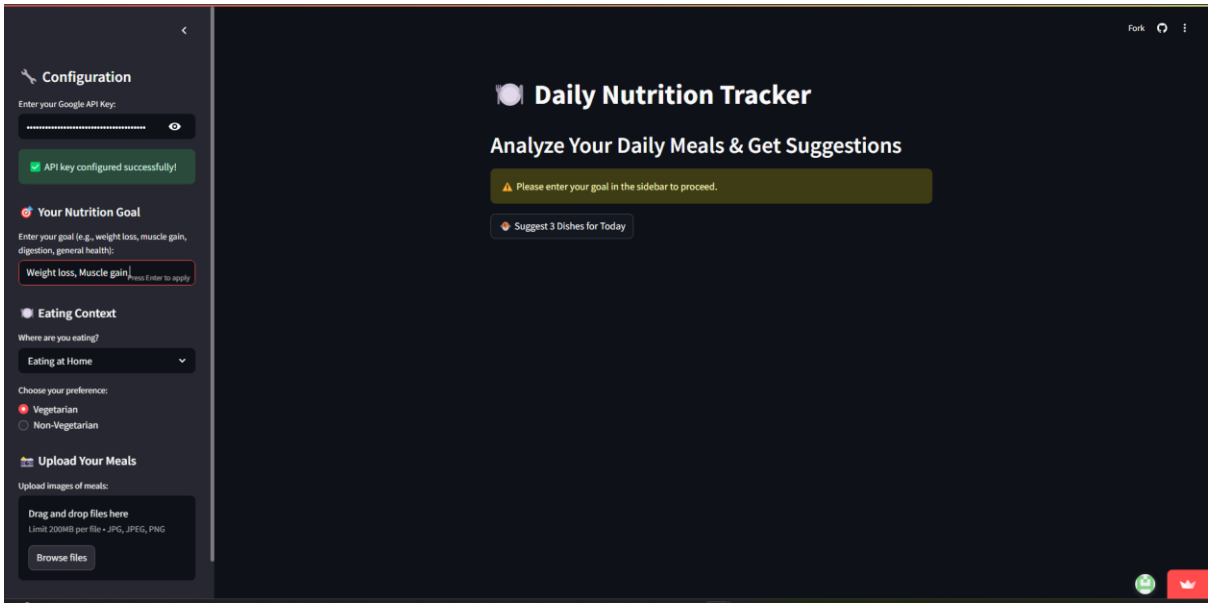
- Sign up for Google gemini - https://ai.google.dev/
- Get your API key.
- Paste it into the sidebar input field when the app runs.

Screenshots of the app

This is how the app will appear on streamlit

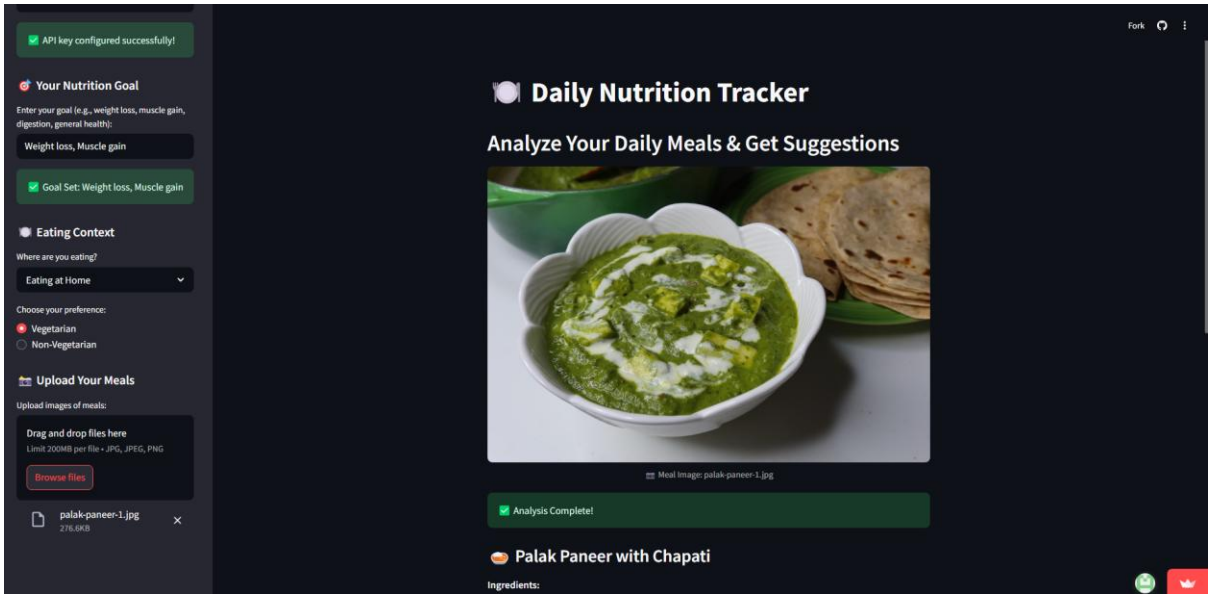


Enter your Google API key on the left side field, then enter your nutrition goal. I have used weight loss and muscle gain here

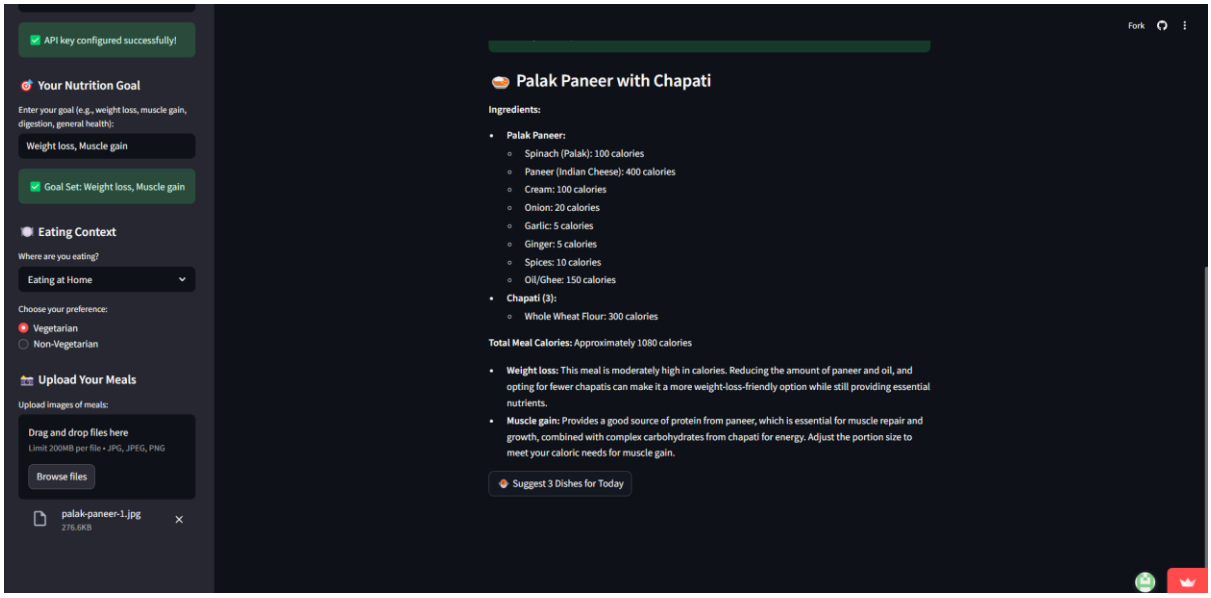


Then select the dropdown where you select if you are eating at home or going to a restaurantf. Here ill show both. We can also select if you prefer eating vegetarian or non-vegetarian food. (Ill choose vegetarian for now) .

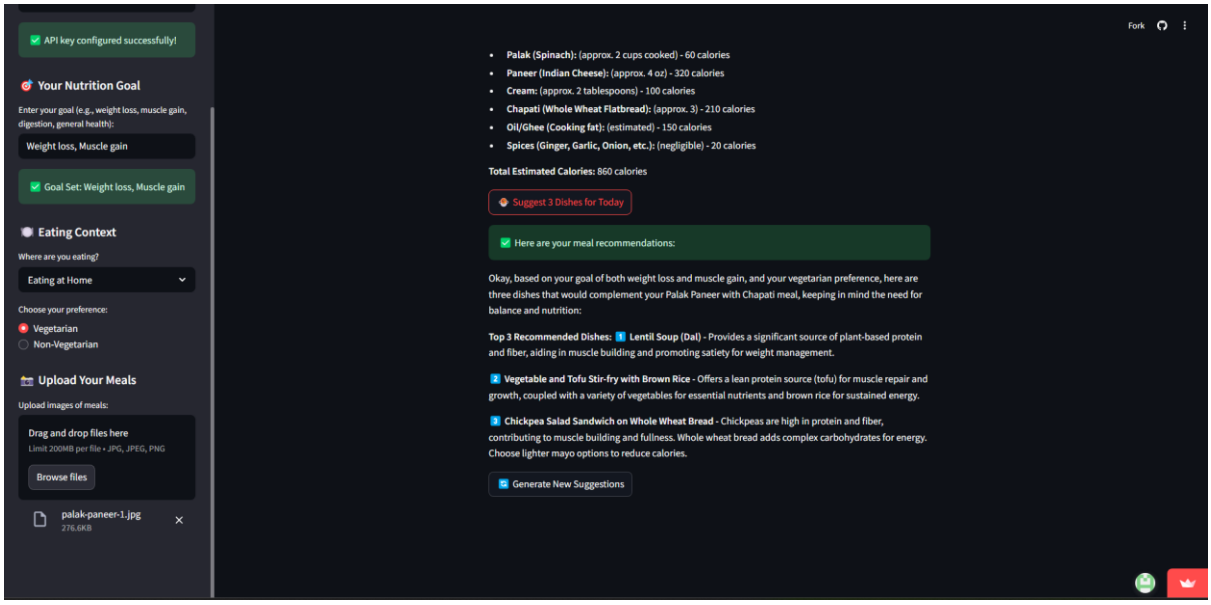
Now we upload the meals you had had today. If this is your first meal then leave the field empty.



I had palak paneer today. You just have to upload the image. The app detects your food from the image, gives you the name, ingredients from a sample cookbook that might be used. The app also gives you total meal calories, the nutritional information for the food you've had.



Then you get a option from the app where it suggests 3 meals for today which compliments your goal which we entered beforehand.

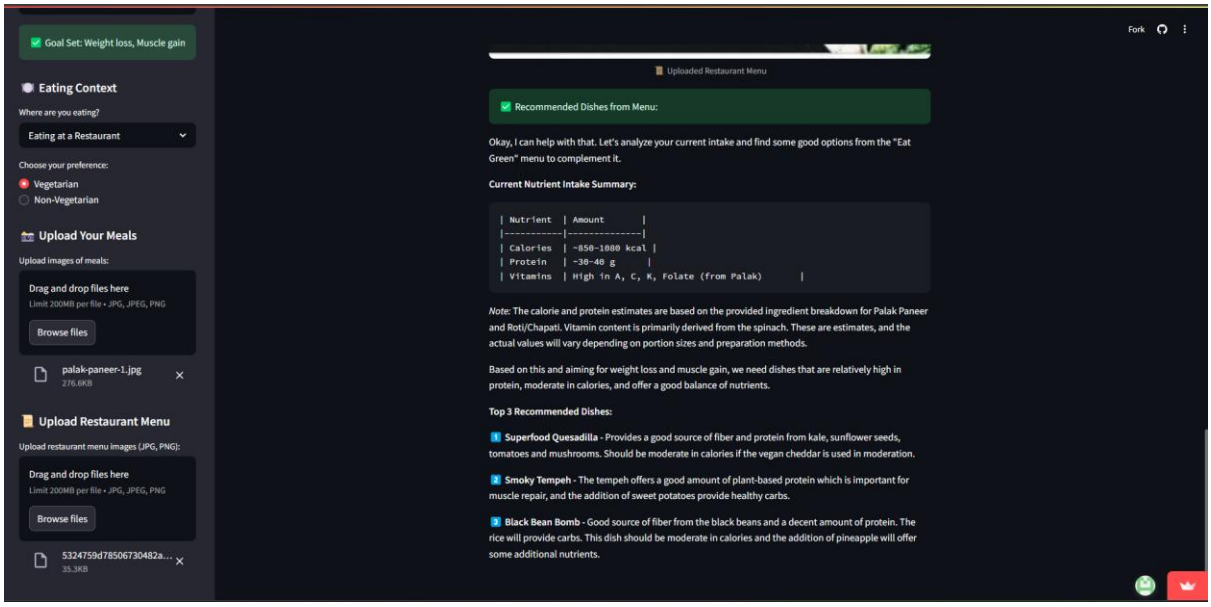


The app suggests 3 meals. You have the option to generate new suggestions if the recommended meals are not something you want to have.

Now lets see how the restraint menu analysis works. In this based of my previous meals the app goes through the restraint menu and suggests meals from the menu which fits our goals.

This is the sample menu we will be using.

This is the suggested items from the app



We can switch between veg and non veg options in the app. It will suggest us food accordingly