LIVE CRYPTO TRACKER

Overview

This project is a Python-based desktop GUI application that tracks live cryptocurrency prices using the CoinGecko API. It displays multiple coin prices in real-time, auto-refreshes every few seconds, plots price history graphs, and triggers alerts when a coin crosses a specified price threshold.

The GUI is built using Tkinter, and the graphs use Matplotlib.

Features

- Track multiple cryptocurrencies (e.g., Bitcoin, Ethereum)

- Live price display (updates automatically)

- Matplotlib graph showing recent price history

- Price alerts (popup notification when price exceeds or drops below a limit)

- Beginner-friendly Python code with clear comments

- Uses free CoinGecko API (no API key required)

Requirements

Install dependencies using:

```
pip install requests matplotlib pillow
```

Tkinter comes preinstalled in most Python distributions.

How to Run the App

1. Ensure Python 3.8+ is installed.

2. Install dependencies.

3. Save the Python code as crypto_tracker.py.

4. Run the code:

How It Works

The app uses:

- Requests to fetch price JSON from CoinGecko.

- Threading so the GUI stays responsive.

- Tkinter for GUI labels and layout.

- Matplotlib for live graphs.

Future Improvements

We shall extend the app by adding:

- Dark mode

- More coins with dropdown selector

- Database logging

- Exporting graphs

- Telegram notification bot

Prompts used

1. Hello

2. I have a project for a short course I'm doing on using AI to code that I'd like your help with.

3. For my project I'll be using python and I'll be developing a live crypto tracker

4. CoinGecko

   GUI

   Track multiple coins, show price, Auto refresh, Graphs, alerts

   Beginner friendly

   I would also like comprehensive documentation that I can put into a word document for the presentation. It should include how to implement and use the app, and everything else relevant for documentation. Feel free to generate the documentation in text or as a downloadable file.

5. Now the code

6. failed to fetch prices from coingecko error

7. the modify fetch part of the fix is flawed