Finding missing tickers using names - AI Coding

🏆 Objective

Become a master of "Vibe Coding" by enriching partial financial datasets using modern Python tooling and APIs. The goal of this exercise is to see how you build with AI. After you complete it, I'd love to chat about what you learned and walk through your workflow. BONUS if you use a multi-threaded workstream approach where you're building various parts in parallel.

TOOLS

Cursor, Claude Code, Codex, etc.

TASK

Your task is to take a spreadsheet of portfolio holdings, enrich any rows missing a ticker symbol by looking them up via the Finnhub API, and store the updated data.

You can create a **CSV file** with a single sheet. Each row represents a security holding with the following columns:

- `Name` (e.g., "Apple Inc.")
- `Symbol` (e.g., "AAPL") — **may be empty**
- `Price`
- `# of Shares`
- `Market Value`

  Some rows will have valid ticker symbols; others will not. Some might only have symbols without a description. Your job is to fill in the blanks where possible.

✅ Core Task

1. **Load and parse the Excel file** using Python.
2. For each row with a **missing or blank ticker symbol**:
    - Use the **Finnhub API** or other financial api to attempt to look up the correct symbol using the company name.
3. If found, populate the symbol.
4. Store the enriched data (with added tickers) in a **new CSV file**.
5. UI (elegant yet simple) is a plus!

🔒 API Usage

- You may use any free-tier or demo access provided by **Finnhub** or another API of your choice.
- Handle **API rate limits** and **edge cases** gracefully (e.g. ambiguous results, not found, errors).

Example Dataset

```
Name,Symbol,Price,# of Shares,Market Value
Apple Inc.,AAPL,189.89,10,1898.90
Microsoft Corporation,,326.12,5,1630.60
Berkshire Hathaway Inc. Class B,,362.55,2,725.10
Amazon.com Inc.,AMZN,130.25,8,1042.00
Alphabet Inc. Class A,,139.14,6,834.84
Tesla Inc,,255.25,3,765.75
NVIDIA Corporation,NVDA,470.11,4,1880.44
Unknown Tech Co,,12.00,100,1200.00
```

```
,GOOGL,139.14,5,695.70

,TSLA,255.25,4,1021.00
```

Please create more datasets to help you thoroughly test

SUBMISSION

Please submit a github repo, or zip file, and a demo video explaining how it works.