

Earning.ly

Team Peppermint

01

Purpose

Why Did We Build Earning.ly?

A Natural Language Financial Advisor

Modern day finance and balance sheets are often filled with jargon and other convoluted terms. We made [Earning.ly](#) to simplify that and pull data out of:

- 10-Ks
- 10-Qs
- 8Ks

So that [everyone](#) can understand finance.



What Makes Us Different?

We integrate directly with the SEC's EDGAR system via API in order to get financial data and filings directly from the companies. This data allows our LLM to fully contextualize based on the company's balance sheet.

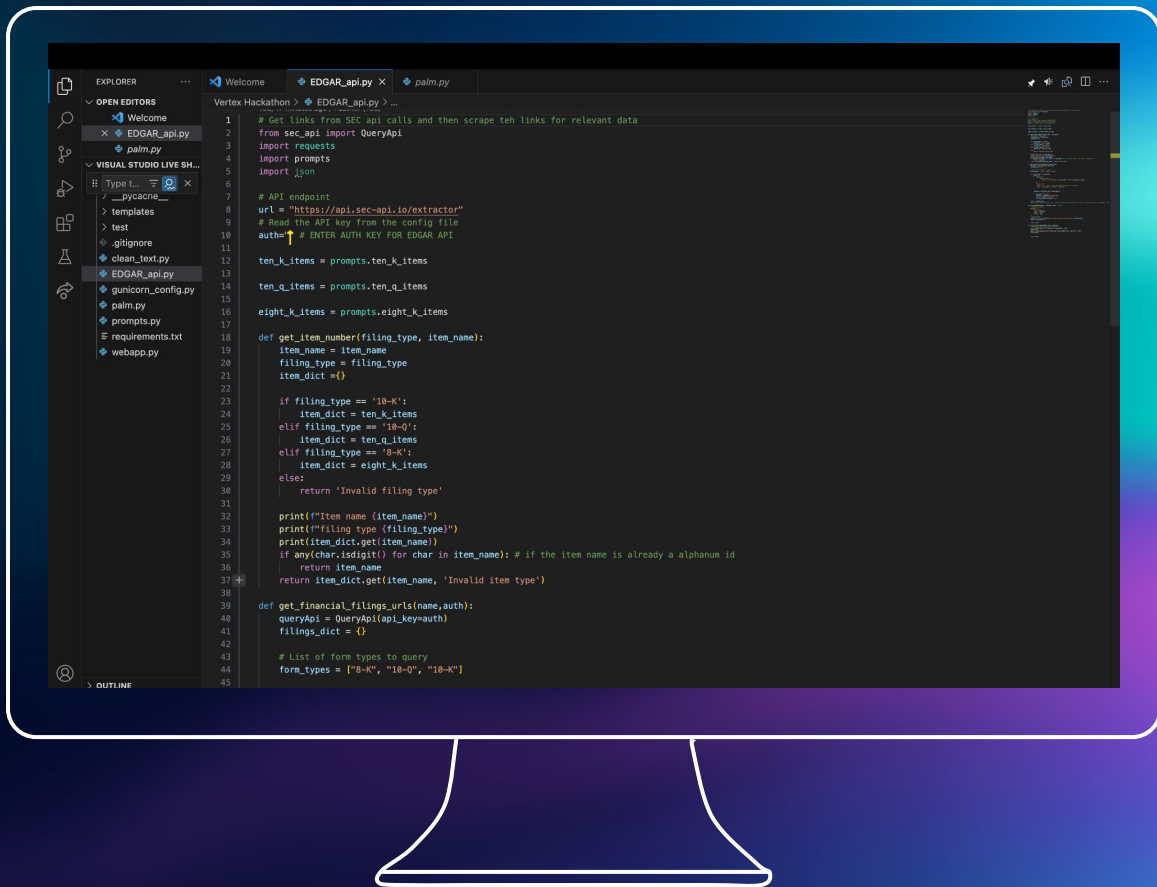


Function

How Does Earning.ly Work?

SEC EDGAR

As previously mentioned, we fetch information from the SEC's EDGAR via API to pull data.



```
EXPLORER ... Welcome EDGAR_api.py X palm.py
OPEN EDITORS Vertex Hackathon > EDGAR_api.py > ...
Welcome
EDGAR_api.py
palm.py
VISUAL STUDIO LIVE SH...
Type L... X
__pycache__
templates
test
.gitignore
clean_text.py
EDGAR_api.py
unicorn_config.py
palm.py
prompts.py
requirements.txt
webapp.py

1 # Get links from SEC api calls and then scrape teh links for relevant data
2 from sec_api import QueryApi
3 import requests
4 import prompts
5 import json
6
7 # API endpoint
8 url = "https://api.sec-api.io/ext/actor"
9 # Read the API key from the config file
10 auth = # ENTER AUTH KEY FOR EDGAR API
11
12 ten_k_items = prompts.ten_k_items
13
14 ten_q_items = prompts.ten_q_items
15
16 eight_k_items = prompts.eight_k_items
17
18
19 def get_item_number(filing_type, item_name):
20     item_name = item_name
21     filing_type = filing_type
22     item_dict = {}
23
24     if filing_type == "10-K":
25         item_dict = ten_k_items
26     elif filing_type == "10-Q":
27         item_dict = ten_q_items
28     elif filing_type == "8-K":
29         item_dict = eight_k_items
30     else:
31         return 'Invalid filing type'
32
33     print(f"Item name {item_name}")
34     print(f"filing type {filing_type}")
35     print(item_dict.get(item_name))
36     if any(char.isdigit() for char in item_name): # if the item name is already a alphanus id
37         return item_name
38     return item_dict.get(item_name, 'Invalid item type')
39
40
41 def get_financial_filings_urls(name, auth):
42     queryApi = QueryApi(api_key=auth)
43     filings_dict = {}
44
45     # List of form types to query
46     form_types = ["8-K", "10-Q", "10-K"]
```

Google's PaLM2

We use Google's PaLM2 LLM to help parse through data and answer user requests.

```
Welcome | EDGAR_api.py | palm.py X
vertex Hackathon > palm.py > ...
1 from fastapi import FastAPI
2 from fastapi.middleware.cors import CORSMiddleware
3 from google.auth import credentials
4 from google.oauth2 import service_account
5 import google.cloud.aiplatform as aiplatform
6 from vertexai.preview.language_models import ChatModel, InputOutputTextPair
7 import vertexai
8 import json # add this line
9
10 # Load the service account json file
11 # Update the values in the json file with your own
12 p_service_acct = "service_account.json"
13 with open(
14     p_service_acct
15 ) as f: # replace 'serviceAccount.json' with the path to your file if necessary
16     service_account_info = json.load(f)
17
18 my_credentials = service_account.Credentials.from_service_account_info(
19     service_account_info
20 )
21
22 # Initialize Google AI Platform with project details and credentials
23 aiplatform.init(
24     credentials=my_credentials,
25 )
26
27 with open(p_service_acct, encoding="utf-8") as f:
28     project_json = json.load(f)
29     project_id = project_json["project_id"]
30
31
32 # Initialize Vertex AI with project and location
33 vertexai.init(project=project_id, location="us-central1")
34
```

Earnings.ly

What was Nvidia's EPS last quarter?

The last EPS for Costco was \$2.94 on a basic basis and \$2.93 on a diluted basis.

What's Tesla's Outlook?

Tesla's outlook is positive. The company is focused on increasing vehicle production, capacity delivery capabilities, improving developing battery technologies, improving FSD capabilities, increasing affordability, efficiency vehicles, and bringing new products market expanding global infrastructure.

What are Tesla's assets, liabilities, and market cap?

As of March 31, 2023, Tesla's total assets were \$86.833 billion and total liabilities were \$37.598 billion. This means that the company has a net asset value of \$49.235 billion. Tesla's stock price was \$799.20 on March 31, 2023, which gives the company a market capitalization of \$942.79 billion.

Ask a question

Submit

Demo

Here's how it works:
Users input their
financial questions into
Earning.ly and receive
responses that provide
the best possible
financial advice.

Thanks!

A lot of effort went into this [project](#), and if you have any feedback, please feel free to reach out at any of the following below:

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