

Finding and Using APIs

15-113 – Monday 9/14

As you come in...

- Show each other your Hw2 games! Let them borrow your laptop (or send them to the right URL) and have them play it.
- Really, have them play it. Take note if they discover a bug or something interesting that you didn't realize.
- As a heads-up, for Hw3 this week we'll have TA checkins, so keep an eye out for emails from your TAs to schedule these.
- Guest lecture on Wednesday! Shruti from Google (and CMU Alum) is coming to meet all of you and share some of her experiences in software engineering and how AI is changing it.

We'll (anonymously) share these results

- Fill this out! <https://tinyurl.com/9ws2dxd4>



Check this out

<https://www.instagram.com/reels/DUQoZQLjvNp/>

- I haven't read enough yet to know if parts of this were vibe-coded, but...
- ...The rush to push out new products and bleeding-edge tech has been leaving security holes *everywhere*.
- Common levels of tech literacy mean many are not fully informed of the risks they accept when using technology

API intro

Let's try to implement a basic API call. APIs allow your code to get data from the web and/or use useful services.

Some options:

- Stocks / Finance data
- Weather
- Advice / Inspiration / Quotes

Some Python APIs:

<https://github.com/realpython/list-of-python-api-wrappers>

More general APIs by category:

<https://github.com/public-apis/public-apis>

HW3!

- This one's pretty open-ended
- Put in about 2-3 hours to create something interesting and interactive that uses an API
- This can be the start of a larger project if you wish, or a contained experiment
- It can be a standalone app or python program, or you can make a compelling feature for your website
- It should be more interactive than just “get the weather for Pittsburgh”

Let's come up with an idea and try it

- Think for a little bit about what sort of APIs you might like to use. What sort of info might you want to get from the internet, for instance?
- Let's keep security in mind. Making something that works on the web becomes tricky if you need to use a secret key to access the API.

OpenAI API Demo (30min)

- Inspiration: <https://www.instagram.com/p/DTUJ8-fEzR8/>
- First, can we implement a chatbot that calls us out on unhealthy behaviors?
- Can we print out the conversation in an app window?
- Can we make a little guy?
- Can we give the little guy a good voice?
- Let's do this one in Python so that we don't have to worry about building a backend.