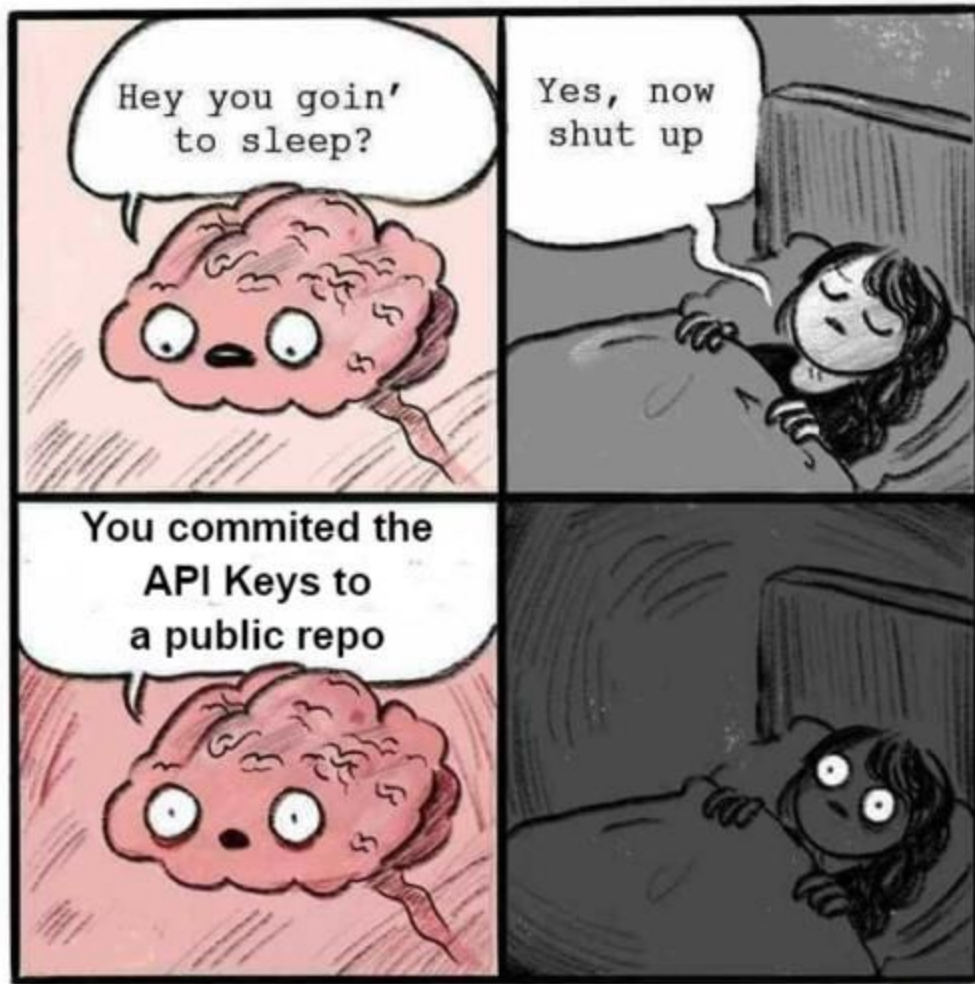# 8. Career Day: Roles in Tech

…and hiding your API keys

Agenda 📅

1. Hiding API Keys
2. Guest Speakers
   - Michael Roussell (Data Engineer)
   - Nana Krampah (Cybersecurity)
   - Naomi Iwata (Product Manager)

Logistics ⚙️

- **Registering for classes next semester?** I don't know how Capstone 2 is going to work (but I'm working on it). We'll get you registered somehow, even if it's not through PAWS.
- Just announced: **CSC Showcase, November 2nd** from **11-3**.
  - TBA incentive to present a poster of your project concept.
- I forgot to formally announce this, but homework deadlines are now **Fridays** at **midnight** (as of HW7).

Recap: Web Requests

When we used the New York Times API, we sent a request to
https://api.nytimes.com/svc/search/v2/articlesearch.json. Which of the following
terms best describes that URL?

1) Base URL
2) Endpoint
3) Query Parameter
4) Request

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Recap: HTTP

What is the difference between a GET and a POST?

Recap: HTML Forms

- What does the argument we pass to "@app.route()" do?
- How do we use that in an HTML form to pass data to the backend?

Keep your API Keys secret 🔑 🤫

- Putting these API keys up on the internet can result in people hijacking your keys, doing illegal things with them, or running up your cost on their app.
  - Example 1: Someone uses your API keys to search for violent videos on Twitter, and they suspend your account.
  - Example 2: Someone uses your API keys to do 1 million searches per hour, and it costs you $10000.
- Most of the time, companies will not forgive you or give you a second chance if you are irresponsible with your keys!

.gitignore

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- For example, if .gitignore contains a line that says file.txt, then file.txt won't be recognized by Git, and adding it (even by calling git add file.txt) won't work.
- **How can we use .gitignore to hide our API keys and other secret information?**

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- **How can we use .gitignore to hide our API keys and other secret information? Think .env**
- **BEWARE: if your API key appears in ANY commit, it will be visible in your repo's commit history.**
  - Possible fix if you accidentally `git add` your .env: use 'git reset' and re-stage/commit your changes.

.gitignore CFU

Suppose you use .gitignore as described before to hide your API keys, which are necessary for your app to work. Can someone else clone your repo and get your app to run out of the box?

It's demo time! ⏰
Hiding API Keys

Some other roles in tech to be aware of

- Data Scientist vs. Data Engineer
  - Research vs. implementation, roughly. Data Scientists create and test hypotheses on data, and data engineers create tools that make that easier to do.
- QA or Test Engineer
  - Responsible for the "verification" part of the SDLC. These positions don't exist at every company.
  - It can be hard to switch from here to software engineering.
- Product Manager vs. Project Manager
  - One sets the vision for a product, one is more responsible for allocating work on a team and making sure a team is hitting its goals. Think talking to customers vs. talking to engineers. These can easily blur together.
- UX Designer/Frontend Designer/Frontend Engineer
  - Pure design vs. some design, some implementation vs. pure implementation
- Content Strategist/Technical Writer

Until next time… ✌🏼

- HW8 is due next Friday
  - IMO the hardest homework so far! PLEASE reach out to me if you have questions!
- Let's take the last 10 minutes to do a midpoint check-in:
  - https://forms.gle/dbLwUWtVnYPGphqf6
- Have a great weekend!