## Hack110 Sign-Up Form!

When? Saturday, April 5th from 10 AM - 12 AM (Midnight)

Where? In Sitterson Lower Lobby

<u>Who can join</u>? Anyone in COMP 110! No prior experience required. Bring a partner or come as yourself (we'll have team-building activities if you want a partner)

Come for a fun day of coding, workshops and events (food and CLE credit will be provided):

- Choose between web development or game development track
- Go to various <u>workshops & events</u> such as: Navigating the CS Major, Resume workshop, ice cream station, and kahoot trivia and MORE!
- Link: Sign-Up Here! Or via the QR code
- Sign-Up form EXTENDED TO Monday, March 31st at 11:59 pm
  - Spots are limited! So we'll prioritize interest!
  - If you have a partner, **ONLY ONE OF YOU** has to sign up you will just enter your partner's info in the form.

#### Sign-Up Here!





# CL25: Review!

### Announcements

- Please submit regrade requests for Quiz 02 by this Friday at 11:59pm
- EX03 due today!
- Quiz 03 on Friday
  - Review Session tonight at 6:15pm in Fred Brooks (FB) 009
  - $\circ$  Other ways to prep:
    - Review Quiz 02 to address your gaps in understanding
    - Finish EX03 and review your code try to diagram example function calls!
    - Practice Quiz (solutions and explanation video linked on the site)
    - Please visit us in Office Hours + Tutoring!

#### Match the Data Structure to its Application



### Match the Data Structure to its Application









Data structure	Allows duplicates?	Ordered?	Fast lookups?	Use Case
list [ ]			×	Ordered collections
set {}	×	×		Unique values, membership testing
dictionary {key: value}	(duplicate values allowed; keys must be unique!)	It's complicated		Mappings, fast lookups, counting

#### Memory Diagram

```
def group_names(names: list[str]) -> dict[str, int]:
    groups: dict[str, int] = {}
    first_letter: str
    for n in names:
       first_letter = n[0]
       if first_letter in groups:
            groups[first_letter] += 1
       else:
            groups[first_letter] = 1
    return groups
ppl: list[str] = ["Karen", "Emily", "Kris"]
output: dict[str, int] = group_names(names=ppl)
print(output)
output["I"] = 1
print(output)
```