https://make-school-courses.github.io/SPD-1.4-Engineering-Careers-Communication-And-Interviewing/#/Lessons/01-Interviewing-Communication

Slides: https://docs.google.com/presentation/d/1qBL_ySjDahIzPG-3mtFGY_qP_dLqhhub5YPZp0V9RxY/edit?usp=sharing

Interviewing Communication

Learning Outcomes

By the end of this session, you will be able to describe and practice each of the communication-focused steps of the technical interviewing process:

- Restate the problem
- Ask clarifying questions
- State your assumptions
- Think out loud
  - Brainstorm solutions
  - Explain your rationale
  - Discuss tradeoffs
  - Suggest improvements

Warm-Up

With a partner, recall *one* technical interview you have done in the past (at Make School or elsewhere).

- What was hard about it?
- How could you have done better?

Activity: Practice Interview Communication

Interview Problem: *Write a function that takes two lists named a and b, and returns a list of common values that are in both lists.*

Part 1: Restate the Problem

1. Write down your restatement of the problem

"If I heard you right...." //39m

1. You *heard* the interviewer's words correctly and didn't miss anything
2. You *interpreted* the interviewer's words as they intended
3. You're able to *articulate* the problem in a way that makes sense to you
   - ***Do not*** simply repeat back the *exact same words* the interviewer just said or wrote down. It's important to restate the problem ***in your own words*** to confirm your understanding.

4. You *understand* what the inputs and outputs are
5. You're able to *relate* the problem to similar ideas
    - "So you want me to define a function with two parameters, **a** and **b**. Oh, the inputs are *lists!* And I need to find all the elements that are in *both* of the lists. Do I print them out…? *No, wait!* I think you said *return a list* with those elements. Is that right? Is that the problem you asked me to solve?
        - **Bonus points:** And I'll run it on a few small test inputs to make sure it works as I expect it to."

2. With a partner, share your statement with them
3. Compare and contrast your statements to ensure you both fully understand the problem
4. Give each other feedback on problem statements

Part 2: Ask Clarifying Questions

1. On your own, list 3+ clarifying questions to ask the interviewer.
2. Once you're done, compare with a partner, and refine your questions based on their feedback.

Part 3: State your Assumptions

1. Write down your own assumptions
2. Share your assumptions with a partner, and refine based on their feedback.

Part 4: Think out Loud (throughout the whole interview)

1. Solve the problem aloud to a partner. As you work through your solution, make sure you hit all of these steps:
    a. Brainstorm solutions
    b. Explain your rationale
    c. Discuss tradeoffs
    d. Suggest improvements
2. Let your partner present to you, and listen to their solution
3. Discuss what you liked about each other's approach, and what could be improved

"This may be a naive solution... and I may not see it at the moment" //1h26m

Homework

Complete the Homework #1 video & worksheet on **Gradescope**. https://

gradescope.com/

Wrap-Up

Fill out the **Vibe Check Form** https://forms.gle/3tCpS457XudkypmSA with any thoughts & feelings from class today that you'd like your instructors to know.

Practice

Given an array *a*, write a function that executes *n* left rotations on the array. E.g. [1,2,3,4,5] => [2,3,4,5,1]

1. Restate the question

- Given an array, append the first element to the end?

2. Ask clarifying questions

- Is the list sorted?
- If n = 2, should it return [3,4,5,1,2] or [3,4,5,2,1]?

3. State your assumptions

- Can I assume that n will always be less than length of a?