TECH INTERVIEWING 101

http://www.interviewcake.com/

Purpose of the Tech Interview

➜ Focus on skills rather than Education
➜ Practical testing a must
➜ Thinking on your feet
➜ Problem-solving techniques in the interview

The Tech Industry is redefining the traditional job interview

Most Common Stages of Interviews

1. Non-Technical Phone Screen
2. Virtual Technical Interview
3. "On-sight" Final Interview
4. Take Home Code Challenge

1.
NON-TECHNICAL
PHONE SCREEN

Phone Screen Overview

➜ Length: 10 – 20 minutes
➜ Who: Recruiter/HR Rep
➜ Types of Questions: Non-Technical/Behavioral
➜ Purpose: Understand your job search and wants to assess suitability

Phone Screen: Some Things They Will Cover

➜ **Your timeline.** Do you need to sign an offer in the next week? Three months?

➜ **What's most important to you in your next job.** Great team? Flexible hours? Interesting technical challenges? Room to grow into a more senior role? Mentorship?

➜ **What stuff you're most interested in working on.** Front end? Back end? Full Stack?

➜ **Salary Expectations.** You do not need to answer at this point! Say, *"I'd rather talk about compensation after figuring out if you and the company are a good fit."*

2.
VIRTUAL TECHNICAL INTERVIEW

by phone or video

Virtual Technical Interview Overview

➔ Length: 1 Hour
➔ How Many: 1 -2 Interviews
➔ Who: Developer or Engineer
➔ Types of Questions: Technical/Coding Related
➔ Purpose: Watch you code in real-time

Virtual Technical Interview: Typical Schedule

➜ Beginning chitchat (5–10 minutes)
   ○ A Warm-Up and chance to relax.
➜ Technical challenges (30–50 minutes)
   ○ Meat of the Interview; one - several challenges
➜ Your turn to ask questions (5–10 minutes)
   ○ Always have some prepared from your prep

Chit Chat: The Warm-Up

➔ Questions They May Ask
  ○ Tell me about yourself (2-minute pitch?)
  ○ Tell me about something you've built that you're particularly proud of.
  ○ I see this project listed on your resume, tell me more about that.

➔ What They are Looking For:
  ○ **Awareness about coding** Why as well as the how? Thinking about one's thinking
  ○ **Ownership/leadership** Do you see your work through to completion? Do you fix things that aren't quite right, even if you don't have to?
  ○ **Communication** Would chatting with you about a technical problem be enlightening?

Technical Challenge: Questions

→ Start-Ups:
- Questions aimed towards **building code** OR **debugging**
- Care about **Progress** over Perfection
- eg Write a function that takes two rectangles and figures out if they overlap

→ Larger Companies:
- Questions aimed towards general knowledge of **data structures** and **algorithms**
  https://youtu.be/JehbJ9s5zow
- Care about how you **solve** and **optimize the problem**
  - finding the best solution from all feasible solutions

How to ace technical interviews

Tips During the Tech Interview

1. Communication
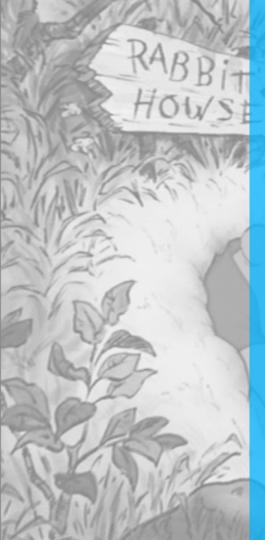2. Getting Unstuck
3. Get Thoughts Down, Then Tidy Up

Tech Interview Tip #1: COMMUNICATION

1. Understand what kind of question was asked
- → Coding – Clean efficient code
- → Chitchat – High-level system design or trivia; Twitter clone?

2. Make it feel like you're on a team
- → Wants to know what its like to solve a problem with you
- → Use "We" instead of "I"

3. Think Out Loud
- → Say: "Let's try doing it this way"
- → Say what might work
- → Say what you're thinking when stuck
- → Say what you thought could work and why it doesn't work

4. Slow Down and Say You Don't Know
- → Take your time
- → Don't try to appear to know something if you don't
- → Say: "*I'm not sure, but I'd guess X, because…*"

Communication is KEY

Tech Interview Tip #2: GET UNSTUCK

1. Draw Pictures

2. Solve a Simpler version of the problem

3. Write a naïve, inefficient solution and then optimize
- Use brute force. Do whatever it takes to get *some kind* of answer

4. Keep Thinking Out Loud
- Say what you know.
- what you thought might work and why it won't work.

5. Wait for a hint

6. Apply a common *algorithmic pattern*
- As you get more experience, you will see a few *patterns* that come up again and again in the answers to these questions

Tech Interview Tip #3: GET THOUGHTS DOWN & CLEAN UP WHEN YOU'RE DONE

1. Don't worry about syntax
- Revert to plain English if you have to. Just say you'll get back to it.

2. If stuck, use placeholders to move on and check later

3. ALWAYS walk through your solution by hand, out loud, w/ example input

4. Look for off-by-one errors
- should the program perform an operation 10 times, but it ends up performing 9 or 11 times?

5. Test Edge Cases
- These might include empty sets, single-item sets, or negative numbers.
- Bonus: mention unit tests!

6. DON'T BE BORING!
- always ask if clean-up and next steps are necessary
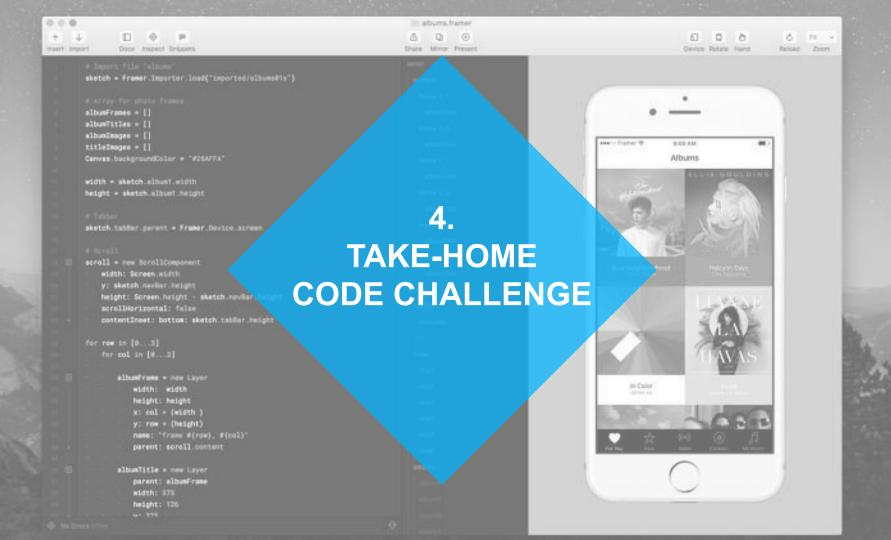- "I would…"

3.
"ON-SITE"/FINAL INTERVIEW

"On-Site" Interview Overview

➔ **Length:** 2-6 Hours
➔ **How Many:** 2-7 Interviews
➔ **Who:** Developers, Engineers, HR, CTO/CEO
➔ **Types of Questions:** Technical/Behavioral; Whiteboard
➔ **Purpose:** Meet team, assess fit, final interview

"On-Site" Interview Sample Schedule

→ 10am-12pm: two back-to-back technical interviews, each about an hour.

→ 12pm-1pm: one or several engineers will take you to lunch, perhaps in the company's fancy office cafeteria.

→ 1pm-4pm: three back-to-back technical interviews, each about an hour.

→ 4pm-5pm: interview with the CEO or some sort of director.

4.
TAKE-HOME
CODE CHALLENGE

Take Home Code Test Overview

➜ Length: 1-5 days
➜ How Many: 1 Code Challenge
➜ Who: YOU – Reviewed by Dev Team
➜ Types of Questions: Technical - Coding
➜ Purpose: To assess your code quality and skill and creativity

Take Home Code Test Questions

➜ What can be included:
  ➜ Description of an app or service
  ➜ Rough time constraint to write your code
  ➜ Deadline to turn it in (usually negotiable)

➜ Example Question:
Write a basic "To-Do" app. Unit test the core functionality. As a bonus, add a "reminders" feature. Try to spend no more than X hours on it, and send in what you have by Friday with a small ReadMe.

Take Home Code Test Questions

➜ What can be included:
  ➜ Automated
  ➜ Time (around 4 hours; starts ticking
  ➜ Deadline to turn it in (usually negotiable)

➜ Example Question:
    "Build a web page with social widgets"

Resources

Interview Prep

https://www.interviewcake.com/

https://www.producthunt.com/posts/tech-interview-prep-guide-by-speak_

speak.careers

https://exercism.org/

https://www.filtered.ai/blog/take-home-coding-challenge-examples-fd

Videos

https://youtu.be/JehbJ9s5zow

https://www.youtube.com/watch?v=GBp0yIdJtUk

Tech Interview Tip #4:
GETTING OVER IMPOSTER SYNDROME

Everything you *could* know
(This is a **HUGE** area)

Everything you *do* know

Everything you *could* know

Tech Interview Tip #4:
GETTING OVER IMPOSTER SYNDROME