Preparing for the Technical/Coding Challenge Interview with CapTech (Software Developer Associate Consultant)

What to Expect:

Introductions

We'll trade quick introductions, cover the agenda, and set expectations before getting started.

Coding Challenge

The meat & potatoes of the interview. You will be asked to solve 1-2 coding problems focused on programming fundamentals such as algorithms and data structures. The goal is to understand how you think through and solve problems, not to demonstrate rote memorization. This will be an 'open internet' format, meaning you can look up anything, as that's what happens in the real world. Perfect syntax is not required, so use pseudocode if you need it. You will be able to solve these problems using any language of your choosing. **This is not a race**, and the goal is not to complete the problems as quickly as possible. We prefer a clean, efficient solution that you can explain and defend rather than the first thing that came to mind.

DO

- Choose a quiet and comfortable place for the interview.
- Understand the problem before solutioning.
- Ask clarifying questions.
- Explain your thought process.
- If you get stuck, share what you are trying to resolve.
- Double-check your work.

DON'T

- Rush to finish the problem as fast as possible.
- Try for an optimized solution right away. Iterate to it.
- Make assumptions; instead, ask questions about ambiguities.
- Ignore edge cases, maintainability, readability, extensibility, and scalability.

Resume Review

This is the get-to-know-you part of the interview. We want to know about you, your technical experience, and your interest. We will ask questions about your coursework and some of the projects you have worked on. Be prepared to explain your contributions to those projects with an emphasis on the technical aspects.

Q&A

This is the get-to-know-**us** part of the interview. Use this as an opportunity to learn more about working as a developer at CapTech. Think about what you find interesting or the qualities that you value most in a company.

What We Are Looking For:

PROBLEM-SOLVING ABILITY:

We want to see how you comprehend the question and the reason for your solution(s).

COMMUNICATION SKILLS:

Talk it out! Ask for clarity when needed and explain what you are doing as you are coding.

CODING SKILLS:

We are assessing whether your code can be executed and repeated. Can your code be expanded or adapted to solve an even larger problem? Does it capture the right logical structure? Does your code run efficiently? Take edge cases into account. Are you using the appropriate data structures and figuring out why any bugs may be happening?

FOUNDATIONAL KNOWLEDGE:

We want you to be able to draw from your coursework and experience to expand upon solutions.

Tips on Preparation:

PRACTICE:

- https://leetcode.com/eetcode is a great website that you can use to practice solving coding problems. You should strive to be able to solve a medium-level problem within 20-30 minutes.
- Practice writing code in the same format as your interview, whether that will be via code.io or using a plain text editor.
- Take advantage of performing mock interviews with friends or classmates and practice explaining your code out loud.

STUDY DATA STRUCTURES AND ALGORITHMS:

- At the heart of solving EVERY coding problem is some type of data structure and understanding how to write an efficient algorithm.
- Cracking the Coding Interview is a great resource for reviewing data structures and algorithms and providing helpful tips and tricks for "cracking" the technical interview.

RELAX:

Much easier said than done, but just remember to breathe and stay calm. The point of this interview is not to trick you or trip you up. We just want to get an idea of how you think and solve problems. You've got this!

Next Steps:

FULL-TIME CANDIDATES:

Your interviewers will submit their feedback to the college recruiting team who will review it to determine if you are selected for final round interviews with CapTech.

INTERN CANDIDATES:

Your interviewers will submit their feedback to the college recruiting team who will review it to determine if you are selected for an internship at CapTech. We typically follow up with candidates within two weeks with our decision.