Amazon Interview Experience for SDE-1 Intern (On-Campus)

Difficulty Level :\nMediumLast Updated :\n26 Oct, 2021

Round 1(Online Coding Round):

Five components (2.5 hours):

- 1. **Coding**: 2 LC Medium level story-based problems. One on **Binomial Coefficients** (use DP to avoid TLE) and another on **Heaps**. I passed 10/10 on Q1 and 9/10 on Q2. Practice the past year\xe2\x80\x99s archives extensively to get an overall idea.
- 2. **Debugging**: 7 questions. Not hard as long as you have a good understanding of any of the OO languages (preferably C++)
- 3. Workstyle Assessment (HR): 50 questions. You have to move the slider to your inclination for the particular question. Keep in mind the 14 Amazon Leadership Principles while attempting this section. \xc2\xa0
- 4. **Reasoning Ability (Aptitude)**: 24 questions. Try to solve as much as you can, as many of the questions are follow-ups of the previous question. \xc2\xa0
- 5. **Feedback Form:** I solved all the questions in the given time frame (and had 20 minutes to spare). Each section has an individual timer, so always check how long a problem is taking to be solved. You have to solve every question to get a chance to clear this round, as the competition was very high. Only **40/1000** candidates were selected from this round. \xc2\xa0

In 4 days, I received the invitation for the technical rounds. \xc2\xa0

Round 2(Online Round 1): Amazon Chime \xe2\x80\x93 45 mins

The interviewer was very strict on the timing. He stated that he would give two problems, and I was supposed to provide him with the optimized solution in the first go (unlike the usual method of starting from naive and reaching optimized)

- 1. https://www.geeksforgeeks.org/in-place-convert-a-given-binary-tree-to-doubly-linked-list/
- 2. Given an array of strings with each string denoting a number, find the second largest number without doing type conversion (as the string value can be extremely high, and converting will not be efficient). \xc2\xa0I gave him an answer using the strcmp() method. He gave me an edge case, and I fixed it by checking the string size also in the condition. There were only 5 minutes left, so I typed out the program as fast as I could while explaining the logic on the side. He asked the TC and SC, and I answered it right as well. \xc2\xa0

I asked him a question based on the culture at Amazon, and after answering it, he wished me luck on the following round, and the interview ended. After this round, I felt much more confident, and the second round was scheduled just 1 hour later. \xc2\xa0

Round 3(Online Round 2): \xc2\xa0Amazon Chime \xe2\x80\x93 45 mins

This time, the interview started with introducing ourselves to each other. The interviewer asked me about my previous projects and internships. As I had done Open-Source in the past, she asked me about my work\xe2\x80\x99s impact. \xc2\xa0I then talked about Javascript, Typescript, and React. She then asked in-depth about a project I put on my resume and about my current internship at a startup (responsibilities, progress in my work, etc.). After this discussion, I was given my first problem.

- Given a complex string with characters going up and down, what must be done to print it. For this, I decided to use a char matrix and figured out the standard pattern of the up and down traversals. I coded it up quickly as I talked through the logic and wrote the complexities within 10 minutes. \xc2\xa0
- 2. https://www.geeksforgeeks.org/a-program-to-check-if-a-binary-tree-is-bst-or-not/

This problem needed recursion, and I was able to code it up and tell the complexities pretty quickly. \xc2\xa0

Since I had completed both questions quickly, she spent the rest of the time asking about various sorting algorithms and their tradeoffs. She then asked me about my favorite data structure (Queue), and we had a long discussion on it. \xc2\xa0After this, I asked her a few questions, and we had a small discussion on the 14 Principles of Amazon. The interview ended on a good note.

I was expecting the 3rd round, but thankfully they had decided my candidature with two rounds. \xc2\xa0

Verdict: Selected

Only **8 out of the final 40** were selected for the internship, and gratefully I was one among them. \xc2\xa0

Quick Tips:

- 1. Be very strong with your DSA. I had solved around 400 questions in the past year, and 50 questions in the last one week before the interviews.
- 2. You have to solve both questions given in every interview and have enough time to answer follow-up questions as well
- 3. Maintain an aura of calm before your interviews. It can help your mind to think clearly and form connections with your previously solved problems.
- 4. Always keep the interviewer in the loop with your thoughts. Never stay silent. Only then can they help you if you lose track of the problem
- 5. Emphasize clean, modular code with comments. This demonstrates your ability as an engineer. Use appropriately named functions and variables.
- 6. As you code up, think about the edge cases. It will help avoid unexpected issues later on.
- 7. Know your projects, resume, and past experiences. Be ready to tell them in detail about everything.
- 8. Practise DSA with a coding buddy (pair programming). It helps you build the practice of explaining your code, and is a win-win situation.
- 9. If you are preparing for Amazon, the **14 Leadership Principles** are a must.

That will be all. Amazon is not difficult if you are confident in your DSA and development skills. All the Best!

My Personal Notes\narrow_drop_up
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