Mukul Singh(MCS) - InfoEdge

Round 1: Online Assessment (7 Sections - 94 Mins)

- Section 1 (DSA Programming Ques Easy)
- Section 2 (DSA Programming Ques Medium/Hard)
- Section 3-7 (6 questions 6 minutes for each section)

Round 2: Technical Round (1 Hour)

The interviewer introduced herself and asked me to do the same. We then jumped right into DSA questions.

The first question was Find the length of the <u>longest valid parentheses</u>

The second question was to find the <u>nth node from the end of the linked list</u>

Other questions:

- Real life use cases of various data structures
- Because I had JWT in my project. She had an in depth discussion on it for 10 mins.
 Questions like why I used it instead of sessions. How to handle discarded tokens.
 How the JWT auth works. Difference between JWT based authentication and session based other authentication.
- How to ensure that a service is being used by only one process at a time.
- How does a lock work

Round 3: Technical Round (1 Hour)

Again we started with the introductions and he asked how my earlier round went and what I was asked. Next started with DSA questions.

<u>Max contiguous sum</u> (Just listened to the approach and gave another question)

<u>All permutations of a given string</u> (discussed the approach and then asked to write the code and execute on local IDE)

Had a little discussion on projects and then questions on CS fundamentals

- What is Normalization (1nf 2nf 3f)
- What is sharding
- Different types of indexing
- Difference between partitioning and sharding
- For making a school management system how would you make the database structure if there are 10,000 schools and possibly millions of students.

Round 4: Technical Round (1 Hour 10 Min)

This round was with a VP at the company. We both introduced ourselves and then started discussing my resume. This round was almost no dsa.

He also started with JWT (he told later they have been implementing it company wide) and similar to the first round had an in depth discussion on it. What was the authentication flow of

the OTP auth service I had implemented. How did I handle cases where OTP might not have been received by the user.

Next he asked me which other project I think was the best. He asked me about its architecture and about the reasons for picking that tech stack.

Next were 3 Puzzles:

- 9 coins, 1 odd one, 2 weighing
- 7L Jug and 4L Jug, Measure 5L
- 1 Man, 1 Wolf, 2 Dogs, Cross the river

In the end he asked to explain the approach of how to remove the nth node from the end of the linked list without creating any new nodes. He asked to give a walkthrough of the execution and was trying to derail my thought process by asking conflicting questions several times. Though being an easy problem he kept on discussing it for a while.

Round 5: HR Round (15 Min)

After initial introductions he asked me how my earlier rounds were. He asked me what and how I knew about Infoedge. After that he asked me what I do to stay updated with the current tech. Then he asked me which was my latest project and what difficult situation I faced in making it and how I overcame it. I gave a technical answer based on why I used Server Sent Events instead of Websockets for that.

Finally he asked if I had any questions for him which I did.