# **Aditya Ranjan** MCA (2019-2022)

### **Interview Experience (HashedIn by Deloitte)**

**Profile:** SDE-1 [6 month internship + FTE]

The process comprises of four rounds as follows:

**1. Round 1:** Online test (Codility Platform)

**2. Round 2 : (**Technical Interview 1) Computer Science fundamentals + DSA [45 min]

3. Round 3: (Technical Interview 2) DSA + project [45min]

**4. Round 4:** HR round [40min]

#### Round 1:: Online Test

#### There were 3 DSA problems -

1. You are given N numbers on a circle, described by an array A(circular array). Find the Maximum number of neighbouring pairs whose sums are even. Note that one element can belong to only one pair.

Input A =  $\{4, 2, 5, 8, 7, 3, 8\}$  Output = 2, pairs are (A[0],A[1]) and (A[4],A[5])

Input A =  $\{1, 1, 0, 0, 0, 0, 1\}$  Output = 1, only one pair (A[0],A[1]) or (A[0],A[6]).

- 2. Count of different numbers divisible by 3 that can be obtained by changing at most one digit
- 3. <u>Length of the longest substring with every character appearing even</u> number of times

**Note** - Try to come up with the best optimal approach.

#### **Result** - 19 got shortlisted for the 2nd round.

## Round 2:: Technical Interview 1 (Zoom) [45 minutes]

Firstly Interviewer asked me to introduce myself based on my technical skills then we have a small discussion on one of my projects followed by 3 DSA questions:

- 1. Detect loop in a linked list (only approach is discussed)
- 2. A Product Array Puzzle
- 3. Lowest Common Ancestor in a Binary Tree | Set 1

I was able to convey my approach to the interviewer for all three questions and have written code for questions 2 and 3. If you are stuck at any point then you might get some hints from the interviewer.

#### Rapid-fire questions on CS-Fundamentals:

- ACID properties
- Difference between a process and a thread
- Thrashing
- Why do we use normalisation in DBMS?
- Different keys in the database schema
- Oops pillars
- Difference between run-time polymorphism and compile-time polymorphism.

#### **Result** - Only 4 got shortlisted for round 3

# Round 3:: Technical Interview 2 (Zoom) [1 hrs]

Firstly Interviewer introduce himself then he told me to do so as well. He then said to explain all of my projects that I have mentioned in the resume, different tech stacks and ideas behind one of my favourite projects. then he jumped into the DSA problem:

- 1. Next Greater Element
- 2. Reversing the first K elements of a Queue

Firstly we discuss the approach of both the problems from naive to the best possible data structure to be used and why we use that data structure only instead of others and how it would impact the time complexity of the program. Thankfully I was able to do so. after this, he told me to write code for any one of the two above problems.

He asked me to differentiate between a class and an object with a real-life example.

Then he jumped into low-level design question:

- 1. he asked me to design a database schema for Swiggy (online food ordering app)
- 2. I gathered some information from the interviewer, what are the necessary features that he wanted me to implement in the database schema like different restaurants may have different items with different price tags.
- 3. he also wanted me to make use of discounts on food items and delivery attributes in my database.
- 4. A user can order multiple/different items at the same time(cart facility).
- 5. how will you retrieve the previous order history of a particular user?

At last, I was able to design this database schema not completely but up to the mark. Then he wanted me to write the class structure for Payment like which classes will be its parent class and which data members will be public, protected or private.

**Result** - Only 2 got shortlisted for round 4.

## Round 4:: HR Round (Zoom) [15 minutes]

- 1. We Introduce each other.
- 2. Interview experience throughout the selection process.
- 3. Family Background.
- 4. Hobbies and Interests.
- 5. Strength and Weakness.

**Result** - Finally, both of us got an offer from HashedIn by Deloitte (6-month internship + FTE])

#### **Some pieces of Advice:**

- 1. For LLD questions, always try to gather more and more information from the interviewer.
- 2. Always try to explain why are you using a specific data structure while optimizing a solution for the DSA problem.
- 3. Mention only the things that you know in your resume as you might be asked any questions from it.
- 4. Don't directly jump into the optimised solution.
- 5. Before any interview think that whatever will be asked you will be able to solve it with your prior knowledge.
- 6. Do prepare for Aptitude questions as well (medium level difficulty).
- 7. On-Campus placement is 90% of your luck as you might get the questions that you have previously solved.
- 8. Do Prepare for Behavioural/Situation based questions as well.
- 9. Before HashedIn, I got rejected in 13 companies so, please don't lose hope after getting many rejections as failures are part of your life and it always teaches you a lesson to level up your performance.
- 10.Try to give as many Mock Interviews to your friends and figure out your weakness.

#### **Contact Details:**

If you want to talk further about this experience or anything else, feel free to connect with me on the following:

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