SWE INTERVIEW TIPS (2-4 YoE)

My learnings after interviewing at companies like DE Shaw, Google, Uber, Salesforce, Intuit, Linkedin during 2024-25

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Interview Rounds

- Online Assessment

- Screening round

- Onsite rounds

  - DSA

  - LLD

  - HLD

  - Hiring Manager

DSA

- Types of DSA interviews

  - Online Assessments

  - 1 Hard question to be solved in 45 Mins

  - 1 long story based question with couple of followup questions

  - 2-3 medium questions

- Tips

  - Most effort required to prepare

  - Very luck based

  - Okay to ask how many questions interviewer has in mind

  - Good communication

  - How to make notes (constant revision is needed)

- Resources

  - Common interview questions (Neetcode 150, Leetcode 150)

  - Company Specific questions (Leetcode premium)

  - DP and Graph extra focus (can refer my notes)

LLD

- Types of LLD interviews

  - Take home assignment (Can be over a weekend or few hours window, expectations are accordingly)

  - Expect running code in a single file

  - Expecting DB Schema diagram, API contracts, Classes, Services

  - Mix between DSA / LLD

- Tips

  - Easiest to prepare, closest to what we do as software engineers

  - Practise a few questions: Implement full project in IDE, Expose APIs, Setup DB, Write Junits, Add as many functions as you can (Will take around 1 day for 1 ques)

  - Trickiest interview in terms of expectations, Ask interviewer what is he expecting (as we cant do everything in 1 hour)

  - Expect to handle concurrency

- Resources

  - https://github.com/prasadgujar/low-level-design-primer

  - Youtube channel: Concept && Coding - by Shrayansh

  - Sample questions to prepare: Book My Show, Parking lot, Chess, Snake and Ladder, Twitter, Cache, Task Scheduler, Elevator, Google Doc, Google Sheets

  - Read about SOLID principles and Design Patterns (Use chat gpt or youtube)

  - Multithreading: Leetcode Concurrency Problems and Concept && Coding - by Shrayansh

HLD

- Types of interviews

  - Discussion about past projects

  - Deep Discussion about a small service in a large system (e.g. Discussing offline/online indicator in Whatsapp, displaying most popular hashtags on twitter)

  - Not so Deep Discussion on a large system (e.g. Design whatsapp or youtube) can go deep into a small piece towards the end.

- Tips

  - Lot depends on the interviewer, how he drives the round. Feel free to clarify expectations

  - Time management very important, better to practise some questions with friends

  - Practise your company projects well

  - Dont try to learn from too many resources

- Resources

  - Book: Alex Xu System Design Interview (Volume 1 & 2)

  - Youtube: Gaurav Sen, Jordan has no life, Concept && Coding - by Shrayansh, Arpit Bhayani)

Hiring Manager

- What to expect in HM round

  - Discussion about past projects and why you made certain design choices in those projects

  - Behavioural questions (Tell me about a time you had a conflict with your collegue and how you handled it)

  - Hypothetical scenarios (e.g what will you do if you are working on tight deadlines and a new urgent requirement comes)

- Tips:

  - A fixed set of 15-20 questions to prepare and you are done! I have never encountered a question beyond that set

  - STAR method to answer questions

  - Read about company's core values and align your answers to company values

  - Answer in a way that showcases my strengths

  - Answers should be transparent and have ton of integrity

  - Use Chat GPT to refine your answers

- Resources:

  - My question bank

Misc

- These things can be asked in any interview round, better be prepared

  - Core language concepts (e.g. garbage collections, implementing tree set of a custom class, Static / final keyword etc)

  - OOP concepts

  - Java generics

  - STL library functions

  - Multithreading

  - SQL queries

  - DBMS concepts (Clustered vs Non Clustered index)

  - Networking protocols

  - Operating System concepts (Deadlocks Semaphores)

- Resources

  - Chat GPT

  - Concept && Coding - by Shrayansh

A brief talk about my experiences

- DE Shaw

- Google

- Uber

- Salesforce

- Intuit

- LinkedIn

How to apply

- Referrals

- Linkedin premium

- Direct apply

- Insta Hyre