SAP Labs Interview Experience

@ok-ape

Difficulty: Easy-Medium

Total Rounds: 5

Round 1: CGPA + Resume shortlisting

40/200+ shortlisted for Round 2

Round 2: Technical Round 1

The interviewer was very humble with me. She first saw my resume and was impressed by my career path going from BE Civil to MCA.

I'd like to know why choose MCA after BTech?

Ans: That's the definition of passion in my dictionary. I am not motivated by incentives of a job but the purpose drives me. I am incredibly passionate about CS and I wanted to pursue it full time so pivoted my career from Civil Engineering to CS.

Introduce yourself.

Ans: My name is Amrit Pandey; I am final year MCA student at NIT Warangal. I have previously completed my bachelors in Civil Engineering from Jabalpur Engineering College. My current CGPA stands at 9.11. For past 1 year I've been serving software needs of the university, I am currently also a developer at WSDC which is centralized hub that provides various service to the students and faculties on the campus such as admission registrations, fee payments. I have been part of two modules viz. open elective and CTS module. But my biggest contribution at the university has been Cura 2022 registration app that I developed for an event of national importance. It had 149 registrations and had over 4000 site visits over a span of two weeks. I am also currently the placement coordinator and last year also been facilitated 30 days of Google Cloud campaign. That's all about me and today I am very excited to have this interview with you and learn from this experience.

Great! The feeling is mutual Amrit, ok, tell me what's your most comfortable programming language, which language do you use for development and programming purposes?

Ans: For programming I use Java but for development I have used Python mostly and JavaScript in past.

What about C/C++?

Ans: I didn't code in C/C++ after my first semester.

Ok, do you know about exceptions in Java?

Ans: Yes. (I was in for a treat!)

Explain exceptions.

What are types of exceptions in Java?

Do you know about checked and unchecked exceptions?

How do you create customized exceptions in java?

What are synchronized exceptions?

What is synchronization in Java?

How do you achieve synchronization?

What are threads?

Do you know about Data Structures and Algorithms?

Ans: Yes (obviously … din bhar leetcode pe hi bitata hoon).

What is stack?

Where have you used stack?

Where in OS stack used?

Ans: I told her about recursion stack for function call. She wasn't satisfied so I gave her undo operation in word editor which is application use not OS but she was somewhat convinced.

Tip: Always heed attention if interviewer is not satisfied. Try every way to satisfy by asking questions.

What is Queue?

Same questions as Stack.

I see you have used MySQL in your project, can you talk about Triggers in MySQL?

Types of triggers in MySQL?

Ok Amrit I am quite satisfied with your answers, now moving on to your projects, tell me how many projects have you worked on and pick one project out of it and tell me in these terms:

1. **What was the project about.**
2. **Stacks used.**
3. **Business application.**

Ans: I have worked on close to 20 projects. My best project was Cura2022 application because it was used by real people and I learnt a lot from this experience.

About: An app where participants can register for the event. Admins can cross-verify the payments and it generates ticket for each successful registration.

Stacks: Flask, SQL-Alchemy(ORM), MySQL, Gunicorn and Bootstrap.

Business application: An interface that provides user to register for an event. Admins to verify payments and generate ticket.

That's impressive Amrit, is it deployed now?

Ans: It used to be but it's not anymore as it was incurring cloud charges. I can start it up on my local development machine and show you right now if you want.

That's awesome. I am giving you the screen right. Please present your screen.

Great Job Amrit! That's impressive work given that it had that many registrations. Can you tell me what challenges you faced?

Ans: Testing, database crash, deployment crash.

How did you overcome them?

Ans: I was weak in software testing at the time so I logged every error on a file in server and I checked the file at an interval. Fortunately, I did not have that many errors and the app worked flawlessly on my machine. And I was glad that finally we as team saved the name of Cura2022 to be a worthy event of National importance.

Great! Ok Amrit, that's a wrap of interview. Is there any question you would like to ask me?

Ans: Yes, can I know what are some the engineering challenges you are facing at SAP right now?

She was very happy to get that questions and finally answered.

Ans: Can I ask one more?

Of course, go ahead.

Ans: Can you give feedback on how I conducted myself?

Then she gave feedback.

Verdict: Shortlisted for Technical Round 2 (Round 3).

Round 3: Technical Round 2

The interviewer in this round was kind of tired. He was not in the mood to take the interview. Which is not a good thing for candidate. But what should you do if face such situation? You get him/her involved!

Hi Amrit, can you explain me difference between Semaphore and Process in OS?

Ans: Yes sir. Completely two different topics but … (I explained him the concepts).

2 mins pause.

Ok, you have worked on cloud right, can you tell me what all you learned in the google cloud campaign?

Ans: I explained him about the various products offered by Google such as Compute engine, App Engine, Cloud functions etc. Gave few use-case scenario.

20 sec pause again.

Am I audible sir?

Yes, you are.

Ok, can you explain me what is cloud computing?

10 sec pauses.

At this point I was getting scared that this is not going in the right way.

How would you convert a string to number in Java? How would you design your algorithm?

Ans: I first explained him that the string simply can't be converted to number. First, I need to normalize string and sanitize to check if the string can convert to biggest available datatype such as long in Java.

1. Validation string if it's a number or not.
2. Normalize to remove leading zeros.
3. Sanitize the string to remove any spaces.
4. Then I'll check if the string is exceeding a certain length that will lead to overflow.

If case 4 fails then we have to use something like Big Integer in Java else I'll use simple algorithm to convert string to long.

1 min pause.

I was getting really anxious at this point so I asked him "do you think it's correct solution and would you like to add anything?"

No Amrit, it's good.

Ok, can you tell me about how to remove deadlocks?

Ans: In context of what sir? DBMS or OS?

OS.

Ans: I explained him four ways: prevention, detection, recovery and ostrich algorithm.

Then he asked me few questions on Machine Learning. (What is CNN, when to use KNN and Keans)

Ans: I just simply gave definition of these and told application wise I have only used Spacy and NLTK as ML applications and nothing else so I am not that into ML.

2 min pause again.

Ok Amrit, I am ok with your presentation. Best of luck for further rounds.

Ans: Can I ask you one question?

Yes, sure.

Ans: How was my conduct in the interview?

It was good. I liked how you approach the problems and answered.

Verdict: Selected for Round 4 (Managerial Round).

Round 4: Managerial Round

Hi Amrit! How are you today?

Ans: I am great sir, how are you?

I am good Amrit.

Ans: Did you had lunch sir?

Yeah! Thanks for asking. Sorry for keep you waiting. We'll start asap.

Ans: It's ok sir, I have had a great time with other interviewers and learned about SAP so I am up for all the waiting to get such valuable experience.

Wow ok, I feel the same way on interviewing candidates like you.

Ok Amrit, before starting the managerial round, can you just share your screen and design Stack for me? You cannot use Array, Array list or any library function.

Ans: I asked then can I use linked list for it?

Yes, but no collections.

It was very simple problem; I just typed the entire code in 5 mins.

That's great Amrit, was checking your technical skills it's very good. Let's start with the round now.

So, Amrit, let's say you are working in a team and you are faced with a conflict, how will you handle?

What if your colleague is not listening to you?

What if he complains to your manager?

Where do you see yourself in 3-5 years from now? (He was laughing after this, because it is such a cliché question)

Ans: I'll see myself fulfilling a grander purpose.

Ok, you are given a Stack, how will you reverse it?

Ans: Gave him a recursive solution.

What's the time and space complexity of this solution?

Is there any project where you faced a problem and how did you overcome?

I don't think we'll be able hire you because you are from non-technical background and you shouldn't have switched from Btech to MCA how would you respond to this news?

Ans: I told him, sir! we don't discard an algorithm if it doesn't work for one input. SAP is a good opportunity but if I get rejected today, I won't see it as failure rather a start-point to work on edge cases. I'll see it like my career path could be an algorithm where I wasn't a good fit for SAP.

So, SAP could be an edge case? (He laughed again)

Ans: Only if I don't make it to HR round … but I hope it's only a hypothetical question.

Great, actually I too came from BCom background and was looking for such answer. You answered it quite well.

Ok Amrit, I think I am done and I'd congratulate you for are proceeding to the HR round. I hope that we work together some day 😊

Ans: It would be an honour sir.

You can ask any question if you want?

Ans: Yes sir, you have gone from being an individual contributor to a manager. How has the responsibilities changed over the course of time?

Then he gave a detailed answer.

Ok Congrats Amrit, let's meet you in person soon.

Ans: Thank You sir.

Verdict: Proceed to HR round.

Round 5: HR Round.

It went really fast.

Hi Amrit, my name is X, I am senior HR at SAP.

Ans: Good Evening mam, it's great to talk to you and had great time …

Ok, great. So, did you attend our PPT yesterday?

Ans: Yes mam.

Ok, so you know what role you are applying for?

Ans: Developer Associate.

Sure, here is the compensation, is it ok for you?

Ans: Yes

Are you flexible to work location?

Ans: Yes, but mostly I want location in South.

Ok, tell me one initiative you took last year.

Ans: I told her my experience in GDSC.

Ok Amrit, that's good. We'll communicate with you the details by EOD and I am looking forward to meet you in person next year. Thank you, Bye.

Ans: Thank you Mam.

Call dropped.

Verdict: FTE offer.

9/40 were given FTE offers. 🎉

Tips to succeed in SAP Interviews
1. Expert level Soft-skills
2. Strong communication skills
3. Good CGPA
4. Strong CS fundamentals
5. Know everything on resume (don't underestimate how deep the interviewers can go)

My Feedback

1. Lite interviews
2. Interesting conversation
3. Pleasing interviewers
4. Development focused