Solutions Engineering Tech Screen Interview

Facebook's Solutions Engineering (SE) team is unique in that it merges engineering and business into one team focused on building technical solutions to address the business challenges of clients. It requires strategic problem solving, creativity, and technical prowess. Thank you for taking the time to participate in our interview process.

What you need

- 45 minutes for the interview uninterrupted in a guiet location (+15mins for Q&A)
- Access to a computer with camera and internet (you will code in https://coderpad.io/)
- Headphones or a headset so you are able to speak while being hands free to code.

Technical Coding Interview

There will be one technical interview lasting 45 minutes. It will be with a Solutions Engineer from the team – a potential future colleague. You will be presented with one or two coding problems during the interview and asked to produce clean, efficient code in a reasonable timeframe resulting in a solution. Within this interviews:

- You will code on a whiteboard (Coderpad)
- Be prepared for technical questions involving Computer Science fundamentals with algorithms & data structures as a focus
- You can code in any language you wish
- The Engineer will be looking for you to code quickly, cleanly, clearly and concisely whilst communicating your thought process

Coding Tips and Practice

- It is imperative that you review your core computer science concepts(algorithms, data structures, OOA/D, design patterns etc.) as well as subjects pertaining to the large scale nature of our environment
- It is better to discuss initial ideas and solutions with your interviewer, which will help you to clarify any ambiguity in the question you are posed; we don't use 'trick' questions, but some of them are purposefully ambiguous
- When you are mentally working through a solution, think out loud, as the Engineer will want to know how you approach and troubleshoot problems
- It is much better to code quickly, make mistakes, and pick them up yourself as you go, than code slowly and perfectly. A working solution is better than a more efficient non-working solution
- If the interviewer gives you hints to improve your code, take them and run with them. There is a high probability they have seen a bug or error that you have not noticed. It is good to adjust and work through the problems with the interviewer to show your problem solving ability

• You should also check for edge cases and test your code to ensure it is as bug free as possible

Areas That Will Be Covered

- Memory constraints
- The complexity of the algorithm you are writing (and it's running time O(N))
- Whether your solution can be improved and optimized

<u>In addition to reviewing the CS fundamentals, these tips and links may be helpful:</u>

- Make yourself familiar with algorithms and algorithmic techniques (sorting, divideand-conquer, dynamic programming/memorization, recursion)
- Make yourself familiar with commonly used data structures: (Array, Stack/Queue, Hash set/Hash map/Hash table/Dictionary, Tree/Binary Tree, Heap, Graph, Bloom Filter, etc.,
- Practice is key Please practice questions that deal specifically with Algorithm's on <u>HackerRank</u>, and <u>LeetCode</u> (Be sure to practice questions in a variety of subjects and difficulty levels)
- Cracking the Facebook Coding Interview The Approach (Password: FB IPS)
- <u>Cracking the Facebook Coding Interview</u>- Problem Walk Through (Password: FB_IPS)

THINGS TO KNOW

There will, hopefully, be time at the end of each interview for you to ask questions. It's good to have some questions prepared that relate to the Interviewer and the interview. This is a good opportunity for you to learn more about Facebook, the role and a potential colleague!

The Interviewers are not able to see any notes from any previous Interviews you've had with us and will be meeting you having only read your resume. If they ask a similar question to another interviewer they are not trying to trick you or trip you up in any way. Each Interviewer has their own style & line of questioning. Please do let your Interviewer know if you have been asked the same technical question however.

The Star Method



As a general rule the STAR method is a great strategy for ensuring you are able to give strong and effective responses. It is a structured manner of responding to a behavioral-based interview question by discussing the specific situation, task, action, and result of the situation you are describing.

- <u>Situation</u>: Describe the situation that you were in or the task that you needed to accomplish. You must describe a specific event or situation, not a generalized description of what you have done in the past. Be sure to give enough detail for the interviewer to understand. This situation should be directly related to the work you will be asked to do or have similarities in what your new role will entail
- <u>Task</u>: What goal were you working toward?
- <u>Action:</u> Describe the actions you took to address the situation with an appropriate amount of detail and keep the focus on YOU. What specific steps did you take and what was your particular contribution? Be careful that you don't describe what the team or group did when talking about a project, but what you actually did. Use the word "I," not "we" when describing actions.
- Result: Describe the outcome of your actions and don't be shy about taking credit for your behavior. What happened? How did the event end? What did you accomplish? What did you learn? Make sure your answer contains multiple positive results.

Preparation Summary

- Refresh yourself on the job advertisement for the role
- Research Facebook as a company, our values, and recent news
- Research the Facebook platform and products in relation to this role
- Prepare and practice for the hands on coding technical interviews
- Prepare to talk about your previous experience & have specific relevant examples of where you have added value and impact
- What would you bring to this role & team? What impact will you have? It's important for us to not only understand your previous experience but what you would like to do if given this opportunity
- Know your Interviewers understand who they are & what their roles are

What do you want to know? Have your questions prepared and ready to ask

More Information On SE And General Preparation

Helpful Links

More Info On Solutions Engineering

Building Tools that Drive Impact
The Solutions Engineering Team
One Solutions Engineers Take On Being an SE
One More

Links on Interviewing at Facebook

"Get that job at Facebook" engineer post Facebook

How should I prepare for a Facebook interview?

Some sample interview questions and solutions

Business Insider Article, A Facebook developer shares 7 secrets to acing an engineering interview

General Technical Coding Practice

Leetcode.com
Hackerrank
Career cup
Geeks for Geeks
Code Chef
Project Euler