Google DeepMind

Software Engineer, GeminiApp

Mountain View, CA or New York City, NY

This guide covers what to expect from our front-end SWE interviews and includes some tips on how to approach these. If you have any questions or concerns after reading through this guide, please email your point of contact from our Talent Acquisition team.

If you have a disability or additional need that requires accommodation, please do not hesitate to let us know. Any information you provide us in this respect will only be used to accommodate your accessibility requirements and in accordance with the Applicant and Candidate Privacy Policy.

Process Overview

All interviews are conducted over Google Meet. The descriptions below provide a flavour of what to expect at each stage but are neither strict nor exhaustive. At every stage we want to learn about you, your experience, your interests and passions, and your strengths and development areas. We're looking forward to getting to know you!

- Coding Interview (2x)
- Domain Interview (Mobile or Web)
- Interview with Team Lead
- Design Take-home Assessment Interview

Process Timeline

We expect the process to take between 3 to 5 weeks, though can take longer due to interviewer bandwidth and other factors. If you have any urgent timing constraints, please let us know. **Please note that the above is open to flexibility and some ad-hoc changes to interviews.**

Interviews

Coding Interviews

What to expect: Each of the two 1-hour coding interviews are conducted via Google Meet, giving you an opportunity to screen share. These will involve writing code in your preferred language and working through a few questions and a specific problem with the end goal to come to a solution.

You will be expected to write, and in some cases, run the code to that problem. The questions asked in the coding interviews are to evaluate your coding, logic and fundamental CS knowledge.

How to prepare: There is not one set question or problem in this interview and we will pick from an extensive library of questions used to test engineers joining DeepMind. We will be assessing you on the following core elements:

- **Coding:** How clean, well structured and productive you are with your code. We are expecting you to know at least one coding language really well and preferably:
    - HTML/CSS, Typescript, Java, Javascript or Kotlin for web front-end candidates
    - Java and/or Kotlin for Android front-end candidates
    - Objective-C and/or Swift for iOS candidates
- **Data Structures & Algorithms:** We will be looking for good knowledge of both commonly used and more complex algorithms (e.g. Sorting, Trees, Graphs, etc).
- **Communication:** We are looking for people that can clearly communicate their knowledge, understanding and reasoning behind their choices. Your interviewer will ask you for some thoughts and observations as you go, and can work with you towards the solution(s). Treat your interviewer like a collaborator: feel free to ask them questions and share your thoughts.
- We recognize that coding during an interview is a little different than coding on the job. The coding question in this interview is not meant to test your typing speed or assess your knowledge of subtle language issues.
- The coding exercise is not intended to trick you. There will be multiple ways to successfully complete the exercise.

These interviews will be hosted on CoderPad which is a platform designed to host remote coding interviews, much like Google Docs or Collabedit, but it allows the code to be run in that session.

We encourage you to check out the Sandbox environment before the interview just to familiarize yourself with the UI and features - https://coderpad.io/sandbox. The Sandbox gives you a session that's identical to a real CoderPad interview - the only things it doesn't have are multiple users and saving the session. If you haven't done an interactive coding exercise before, practice with a friend, or do one online, e.g. with pramp or codewars.

Web Domain Interview

What to expect: A 60-minute technical interview with one of our engineers. You should be ready to cover topics like front end latency and implementation of standard CS algorithms.

You should be able to articulate Javascript strengths and shortcomings and ready to cover any of the following:

- Web security issues (XSS, XSRF)
- Prototypal inheritance
- DOM API & manipulation
- Experience with frontend frameworks (Angular, React)
- CSS manipulation
- Browser / DOM events & event handling
- XHR requests & HTTP headers
- Reactive programming and state management

How to prepare:

- **Solidify CS Fundamentals:** Be proficient in common Data Structures and Algorithms and be prepared to analyze their complexity.
- **Practice Trade-off Analysis:** For any design decision you propose, the most critical skill is your ability to articulate the "why" by clearly explaining the trade-offs of your chosen approach versus the other.

Mobile Domain Interview

What to expect: This is a 60-minute technical interview with one of our engineers. You should be prepared to cover a broad spectrum of mobile engineering topics, ranging from foundational concepts like memory and concurrency to application-level challenges like performance optimization and effective state management.

You should be ready to discuss:

- **State Management:** Modern design patterns for managing application data and UI states, and platform-specific frameworks.
- **Performance:** Strategies for building fast and responsive user experiences, through various optimization techniques and a solid understanding of view lifecycle and rendering pipelines.
- **Concurrency:** Management of background work using modern, platform-specific concurrency frameworks like Kotlin Coroutines or Swift Concurrency.
- **Memory:** Platform-specific memory models (e.g., Garbage Collection in Kotlin vs. ARC in Swift) and strategies for identifying and resolving memory leaks.

How to prepare:

- **Solidify CS Fundamentals:** Be proficient in common Data Structures and Algorithms and be prepared to analyze their complexity.
- **Focus on Application Architecture:** Prepare to architect a complex, user-facing application. This involves discussing your high-level approach to managing application state, designing the client-server communication layer, and ensuring a performant user experience.
- **Practice Trade-off Analysis:** For any design decision you propose, the most critical skill is your ability to articulate the "why" by clearly explaining the trade-offs of your chosen approach versus the other.

Team Lead Interview

What to expect: One 30-minute interview with a Team Lead. This interview is designed to understand your previous work experience and explore alignment to the team projects. Your interviewer will likely probe on technical problems you've solved and how you approach or navigate complex technical challenges. They may also ask you to describe your leadership capabilities & style. This is a great time to ask questions about the team, Google DeepMind, how we're organized, and other "why" questions.

This interview will also likely dive into your motivations and assess for alignment between your values and those of Google Deepmind. This interview will give you an opportunity to explore what you know, think and feel about Google DeepMind's mission. This interview is a tool to explore how potential Google DeepMinders may operate. It's also a chance to discuss how diverse opinions, experiences, and specialized skills enhance the team and the overall company culture.

How to prepare: Be prepared to discuss anything on your resume to showcase your technical depth. Preparation and reflection on past projects will help you effectively recall and articulate your experiences much more succinctly. You may want to ponder what daily life at Google DeepMind is probably like and what challenges you might face.

Google DeepMind is committed to solving intelligence, to advance science and benefit humanity. During this interview, your interviewer will likely probe on your career goals, missions, and values. Please be prepared to discuss your working style, career aspirations, and other important factors when it comes to what is important to you in a job and a company.

We encourage you to familiarize yourself with our mission and research before this interview.

Design Take-home Assessment Interview

What to expect: We have designed a task (not related to Gemini) to be completed within 3 hours. Please don't feel the need to spend more time than that—we are most interested in your execution and thought process within this focused timeframe. We also encourage you to be ready to discuss how you partner with cross-functional teams (UX, PM, and other engineers) to define and execute the final product. This ability to form strong partnerships is critical throughout the development lifecycle. Note, we will provide the task once we reach this stage of the process.

Please keep in mind: We want to see how you think about front-end design as an engineer. Feel free to bring your own UX sensibility and polish. Small, thoughtful touches (e.g., hover states, focus rings, empty/error states) demonstrate care and craft. You don’t need to over-engineer; prioritize simplicity and clarity over unnecessary complexity.