

INTERVIEW PREP

Front End Engineer



WHAT DOES A FRONT END ENGINEER DO AT AMAZON?

Build, operate, and deliver delightful user experiences to our customers at a global scale to millions of users in dozens of languages. As a Front End Engineer, you'll specialize in building accessible, responsive and elegant applications for web and native mobile applications that meet our customer and business needs.

We own the front-end software development life cycle, design solutions, and work on coding, testing, implementing, maintaining and iterating on solutions. We are stewards of good branding and design and hold a high bar for the customer's experience.

Want to become a Front End Engineer? Let's walk through some helpful tips for the interview process.



Interview tips

We want to understand how you think. Be sure to explain your thought process and decision making throughout the interview.

Questions are open-ended to provide insight into your problem solving ability. Make sure you narrow the scope and clarify your expectations. Be sure to talk through your thought process and ask questions along the way.

Think of ways to improve or scale the solution you present. In many cases, your first answer may need some refining or further explanation. If necessary, start with the brute force solution and improve on it. Be sure to let the interviewer know your approach and be explicit about the tradeoffs you make.

Practice writing code. You won't have access to a full fledged IDE, so practice writing in a text editor or piece of paper.

Don't stress about small syntax errors. We know you aren't coding in your natural environment, minor syntax errors or spelling mistakes will not count against you. We're looking for code that is logically sound.

Review our Leadership Principals and be prepared to provide examples of each using the STAR method (situation, task, action, result).

Web and Mobile tips

Web

Demonstrate your familiarity with common front-end tools and languages, including JavaScript, HTML, and CSS.

Be ready to discuss web security issues (XSS, XSRF), DOM API and manipulation, browser/DOM events and event handling, XHR requests, and HTTP headers.

Be prepared to write idiomatic JavaScript, semantic HTML, and talk about differences or limitations of various CSS layout techniques.

Provide examples of how you would manage asset loading, deal with asynchronous requests. And discuss memory resource management.

Mobile

Demonstrate your familiarity with languages like Swift, Objective-C, Kotlin or Java, along with knowledge of platform and device API's, touch interactions and security issues.

Be familiar with common platform patterns like the publish and subscribe, delegates and the usage of synchronous or asynchronous code in a multi-threaded environment.

Talk through view hierarchy, layout approaches (constraint based or Stack View).

Demonstrate your understanding of application, controller, view lifecycles and a good understanding of the multi-threaded environment you work in.

Functional assessment tips

Demonstrate the implementation of standard algorithms using your preferred language, and be able to show that you can write maintainable, performant code.

When working on problems, focus on translating your ideas to code. Discuss how you will test your solutions, work to ensure regressions are not introduced, and cover other steps necessary to make your solution ready for customers to use.

Be ready to discuss front-end related technical topics including front-end domain knowledge, system design, data structures and algorithms.

Articulate strengths and shortcomings for your solution and be able to describe technical details of the tools and strategies used.

Be able to recognize common front-end design patterns (such as MVC, MVVM, publish/subscribe). Be ready to discuss memory and resource management.

Show how you keep customers in mind when building user experiences by writing view-layer code that's semantic, accessible, and responsive. Your solution should take into account components rendering, and what styling will be applied. Show ability to write code for client/server interactions and understanding of limitations and system behaviors.

System design questions are designed to assess your ability to combine knowledge, theory, experience and judgement toward building scalable solutions and solving real-world engineering problems. Expect to discuss the different application layers (application, network, persistence, routing, model, views), and userimpacting concerns like accessibility, application performance, latency, and analytics.

Be prepared to discuss how you will manage your application's state, and pass data through your system. Talk about how the whole system works together, and clarify any tradeoffs and assumptions you are making.

LEARN MORE

Dive into our <u>Leadership Principles</u>
Interviewing for a tech role? Explore our common <u>technical topics</u>
Explore Interviewing at Amazon for FAQs, prep guides and more

