

CH3 A Framework For System Design Interviews

What is a System Design Interview?

The system design interview simulates real-life problem solving where two co-workers collaborate on an ambiguous problem and come up with a solution that meets their goals. **The problem is open-ended, and there is no perfect answer.** The final design is less important compared to the work you put in the design process. This allows you to demonstrate your design skill, defend your design choices, and respond to feedback in a constructive manner.

- **simulates** real-life problem-solving(mindset)
 - make preparations specific to the company
 - pay attention to real-life system design applications
- two or more co-workers **collaborate** on an **ambiguous** problem(mindset)
- come up with a solution that **meets their goals**(methods)

What does an interviewer look for in a system design interview(the indicators to help them make decisions)?

Green flags	Red flags
technical design skills	Answering without a thorough understanding of the requirements
collaborate	Over-engineering and ignoring trade-offs
work under pressure	narrow mindedness
resolve ambiguity	stubbornness

Green flags	Red flags
ask good questions	
make proper assumptions	
gather all information needed to build a system	

Note: these flags may be different in different companies

A 4-step process for effective system design interview

Step 1 - Understand the problem and establish design scope



Step 2 - Propose high-level design and get buy-in



Step 3 - Design a deep dive



Step 4 - Wrap up