

Log In

Join

Back To Course Home

Grokking Modern System Design Interview for Engineers & Managers

0% completed

System Design Interviews

Introduction

Abstractions

Non-functional System Characteristics

Back-of-the-envelope Calculations

Building Blocks

Domain Name System

Load Balancers

Databases

Key-value Store

Content Delivery Network (CDN)

Sequencer

Distributed Monitoring

Monitor Server-side Errors

Monitor Client-side Errors

Distributed Cache

Distributed Messaging Queue

Pub-sub

Rate Limiter

Blob Store

Distributed Search

Distributed Logging

Distributed Task Scheduler

Sharded Counters

Concluding the Building Blocks Discussion

Wrapping Up the Building Blocks Discussion

The RESHADED Approach for System Design

Design YouTube

Design Quora

Design Google Maps

Design a Proximity Service / Yelp

Design Uber

Design Twitter

Design Newsfeed System

Design Instagram

Design a URL Shortening Service / TinyURL

Design a Web Crawler

Design WhatsApp

Design Typeahead Suggestion

Design a Collaborative Document Editing Service / Google Docs

Spectacular Failures

Concluding Remarks

Course Certificate

Mark Course as Completed

Wrapping Up the Building Blocks Discussion

Get an overview of what we have learned and what is yet to be discussed.

We'll cover the following

- What’s next?

We have covered a good number of building blocks that will enable us to solve bigger design problems. In the coming chapters, we'll solve a variety of problems that will use various building blocks.

Since we've already covered the building blocks, we can focus on solving bigger design problems. From this point onwards, we'll assume that you're well acquainted with all the discussed building blocks when we use them in our coming design problems.

What's next?#

We'll learn and explore thirteen design problems in the next chapters. We'll study the following system designs:

1. YouTube
2. Quora
3. Google Maps
4. Yelp
5. Uber
6. Twitter
7. Newsfeed
8. Instagram
9. TinyURL
10. Web Crawler
11. WhatsApp
12. Typeahead
13. Google Docs

Each of these designs is an independent chapter, but we recommend that you go through these chapters in the assigned order. Some problems have background material that is

helpful in other design problems. For example, working through the Google Maps problem first can be useful for readers interested in learning about the Uber design problem.

At the end of the course, we'll conclude our course with the "Spectacular Failures" chapter, where we'll discuss how a minor bug or mistake led to a significant outage or failure of some of the most successful systems designed.

Back

Quiz on the Sharded Counters' Design

Next

The RESHADED Approach for Syste...

Mark as Completed

Report an Issue