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Grokking Modern System Design Interview for Engineers & Managers
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Course Structure for Modern System Design

Get an overview of the structure and strengths of this system design course.

> **We'll cover the following**

- Structure of the course
- Strengths of the course

Structure of the course#

This course consists of forty chapters. These chapters can be segmented into four different sections given below.

1. **Introduction:** The introduction section is composed of four chapters. The first chapter introduces the course and its key features. The second chapter talks about different types of abstractions. Next, we discuss some indispensable non-functional characteristics that every large-scale system should have. We wrap this chapter up with back-of-the-envelope calculations that enable us to estimate resources during our design problems.

2. **Building blocks:** The "Building Blocks" chapter starts with an introductory lesson presenting sixteen different building blocks. Each of these building blocks is explained in an independent chapter. We conclude this section with the "Conclusion" chapter, which also serves as an introduction to the next section.

3. **Design problems:** This section is the meat of the course and is carefully crafted from thirteen design problems.

4. **Epilogue:** The "Epilogue" section wraps up this course and is made up of two chapters. The first covers spectacular failures that show how, in the real world, even a small mistake can bring down a large and successful application. Such failures may be inevitable, but we highlight some measures to mitigate such failures. We conclude the course with the concluding remarks chapter.

> **Note:** Although we did our best to keep the chapters independent, our readers will find it useful to read them in the given sequence.

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Concluding remarks

Spectacular failures

Design Google Docs

Design Typeahead

Design WhatsApp

Design Web crawler

Design TinyURL

Design Instagram

Design Newsfeed system

Design Twitter

Design Uber

Design Yelp

Design Google Maps

Design Quora

Design YouTube

Concluding building blocks

Sharded counters

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Introduction

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Abstractions

Introduction

How to perform well

How to prepare for success
What is System Design Interview
Epilogue
Design Problems
Building Blocks
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System Design Interviews
This course

    The structure of this course

Strengths of the course#

While filling some important gaps in other available courses, we believe this course has some key strengths to offer. We summarize the strengths and the advantages this course has over others in the table given below.

Strengths	Advantage
Building blocks	This is a modern approach to system design where we construct bigger artifacts using smaller building blocks.
Building blocks as design problems	We'll treat each one of our building blocks as a stand-alone, mini design problem.
Incremental improvement to design	Layer-by-layer design solution addresses added bottlenecks, designing and incremental solutions to complex systems.
Evaluating the design	Accountability of the provided design solution shows the performance of design.
Solving the traditional problems with updated designs	This course is up to date with the latest industry demands.
New design problems added	This course contains updates to decades-old system design courses.
Careful collection of design problems	Each problem has its unique aspects in terms of problem-solving and designing.
Contributions by experts from FAANG	Learn from the best.

Let's start our system design journey!

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Introduction to Modern System Design

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Why Are Abstractions Important?

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