

## Cracking the GAMAM technical interviews

Strategies, Tips, and Preparation resources

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#### Table of Contents

Coding Interview	01
System Design Interview	02
Object-Oriented Design Interview	03
Schema Design Interview	04
API Design Interview	05
Behavioral Interview	06
Resume Tips	07
Preparation Strategy	08
GAMAM Progress Tracker App	09

## **Coding Interview**

#### **Preparation resources**

- 1. Solve <u>LeetCode Medium</u> level problems (at least more than 300+ covering different topics).
- I have created an xlsx on top/important <u>500 LeetCode questions</u> and a video on <u>How to Crack The Coding Interview?</u>
- 3. <u>AlgoExpert's</u> 160 handpicked question (In case you want to prepare fast and only good questions)
- 4. I watched my <u>DSA playlist</u> to revise concepts. (2x speed).
- 5. Important DSA topics Array, Binary Search, Sliding Window, Matrix, Two Pointer, Intervals, Hash Map, String, Recursion, DP, Trees, Graph, Linked List, Stack, Queue & Heap

#### Do's

- Keep a smiling face, and look confident/positive attitude person.
- Ask good clarifying questions about the coding problem e.g. size/range of the input, are there any duplicates, does input contain negative values, etc.
- Make the interview process a team effort. The more collaboration you do with your interviewer the more idea they get about how good a team player you are.
- Think out loud. Always try to explain what you are thinking about the current state of the problem.
- Always be open to saying that you don't know how certain things work.
- Always start thinking about the simpler version of the problem. Try to come up with a naive solution at first and later go for optimizing it.

#### Don'ts

- Never dive into solving a problem as soon as it's thrown towards you. Understand the problem, and resolve ambiguities.
- Never assume anything. Always clarify the assumptions you have with your interviewer.
- Avoid any technical jargon or famous words you know. If you do be prepared for the follow-up question.
- Never try to skip any idea or communication on which the interviewer wants to focus more.
- Not be too defensive about the mistakes that the interviewer tells you.

#### When you code

- You are expected to write production-level code.
- Check for edge cases.
- Validate input and throw meaningful exceptions.
- Modularize code into different functions.
- Write meaningful variable/method names.
- You are expected to dry run your code with the example given.

#### When you code

— Try to clean up code - check for any edge cases, refactoring, remove unwanted comments (in case you comment anything), check for conditions, etc.

#### When you are stuck

f you are stuck and unaware of any logic, just make/call a helper function (explain it will do XYZ)

If you are stuck anywhere, your interviewer is the best person to help you out. Ask them about any hint or any question that clarifies your doubt. Remember the interviewer is not there to make you fail, they want you to succeed.

f you are stuck in logic try to apply some coding patterns - like can two pointer help, can sort help, can binary search be applied, etc.

# System Design / High Level Design Interview

#### **Preparation resources**

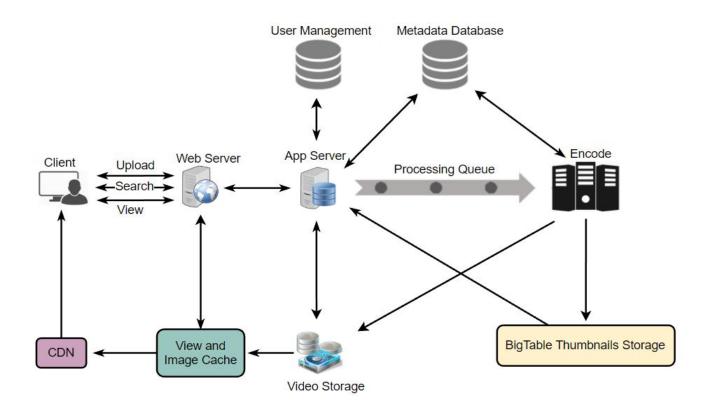
- Grokking the System Design Interview The course has step by step discussion and good case studies.
- Alex Xu's System Design Interview course on <u>ByteByteGo</u> The course covers all the content from his famous book (Vol 1 and Vol 2) System Design Interview.
- 3. SystemsExpert videos to know how real life System Design Interviews go.

#### **Time Management in System Design Interview**

- **Requirement Clarifications (3-5 min)**
- **Estimations** (3-5 min)
- API Design (3-5 min)
- **☑** Database Schema Design (3-5 min)
- **✓** System's Detailed Design (20 25 min)
- **Resolve bottlenecks and follow-up questions (2-3 minutes)**

System Design template that landed me to Google

#### Below kind of diagrams are expected in System Design interviews



# Object Oriented / Low Level Design Interview

#### **Preparation resources**

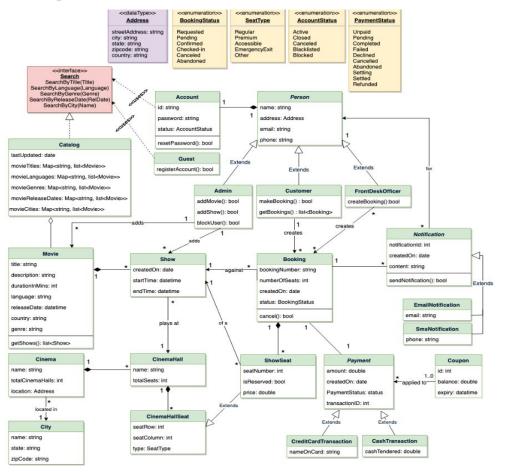
1. <u>Grokking the Object Oriented Design Interview</u> - A very detailed and step by step approach to various object oriented design case studies.

#### **Time Management in Object Oriented Design Interview**

- ✓ Requirement Gathering (3-5 mins)
- ✓ Use Cases (3-6 mins)
- ✓ Identify the Core classes (3-6 mins)
- ✓ Identify the fields of each class (5-10 mins)
- ✓ Identify the Relationship between the classes (5-10 mins)
- ✓ Identify the Actions of the classes (5-10 mins)
- Code (5-8 mins)
- ✓ Follow-up questions (3-4 mins)

Object Oriented Design template that landed me to Google

#### Below kind of diagrams are expected in OOD interviews



## **API Design Interview**

#### **Preparation resources**

- 1. <u>Best Practices</u>, <u>Implementation</u> and <u>Guidelines</u> to follow for API Design.
- 2. Look for use cases like Stripe and Twitter API Documentation.
- 3. <u>SystemsExpert</u> also has few case studies on API design as well.
- 4. Follow the <u>link</u> to understand how an ideal apis looks like.

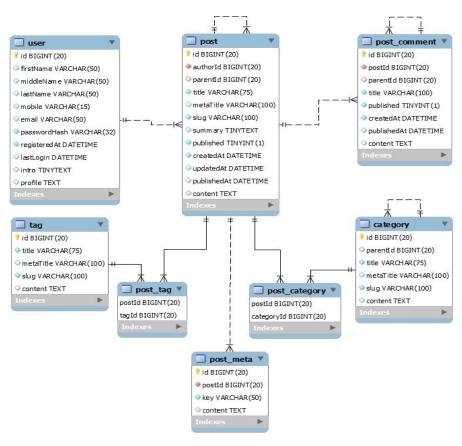
## Schema / Database Design Interview

#### **Preparation resources**

1. <u>Grokking the Object Oriented Design Interview</u> - Take the case studies and try to apply Objects to the Relational Mapping strategy.

Below kind of diagrams are expected in Schema Design

interviews



### **Behavioral Interview**

#### **Preparation resources and Tips**

- 1. Watch Jeff H Sipe's <u>YouTube channel</u> for behavioral questions.
- 2. Check out a list of good <u>Behavior Interview</u> questions.
- 3. <u>STAR</u> Pattern Situation, Task, Action, Result
- 4. Prepare questions and career stories around <u>Amazon's leadership principles</u>. It will cover every aspect of Behavior interviews.
- 5. Apply STAR pattern to write experience stories around various questions. Do not prepare for this kind of interview a day before. Keep the stories handy for all such interviews.

## **Resume Tips**

- Provide a valid resume name for your file e.g. Dinesh\_Varyani\_Resume.pdf and avoid names such as MyResume.pdf, Resume.docx, etc
- ← Keep resume in multi-color format. Using single color will make important parts of your resume look the same. e.g. links become hard to recognize from normal text.
- f you have done great things in your professional career you can showcase it in a more than 2-3 page resume. Making a one-page resume is not always preferable.
- Showcase your skills/technologies in one place rather than scattered with every project you have worked on.
- Provide a good introductory summary of yourself at the top.
- ← Keep important things first in the resume like introduction, skills, projects, achievements, certifications, education, etc. Things like hobbies, and contact info can come at the end.

- Provide project impact via numbers and percentages rather than normal text.
- Avoid → Implemented the project with XYZ feature that helped in the productivity of the users.
- Use → Implemented the project with XYZ feature that increased the productivity of the users by 30%.
- Use → Implemented XYZ feature that reduced the manual time from 3 weeks to 10 mins.
- Use → Reduced the client onboarding duration from 1 month to 1 week etc.
- Highlight the things you do apart from normal work like Training, KT, sessions, etc.
- Showcase your achievements, certifications, and recognitions.
- Showcase the innovative things you have done throughout your career like working on cool projects, YouTube, Blogging, etc.

### **Preparation Strategy**

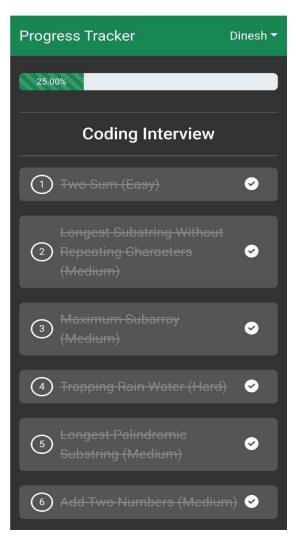
- Try to solve at least 1 medium / 2 easy-level coding question(s) every day. Follow this <u>link</u> for 100 days of preparation.
- Try to prepare at least 2 (System / Object Oriented Design) case studies every week.
- Consistency is the key (You break, You fail)
- Apply Pomodoro Technique (Plan, 25 mins of focused prep, 5 mins of break, repeat)
- Give equal importance to Behavioral Interviews as well.

## **GAMAM Progress Tracker App**

Follow the below app for GAMAM-level companies preparation. It has the best resources which will cover various topics of interviews. The app will help you in keeping track of your progress for interview preparation.

Follow the resources (links), understand the concepts behind them, and mark them complete. Once you reach over 80-100% progress you are well prepared for the GAMAM-level company interviews.

https://progress-tracker-5b3b0.web.app/



- All the best for your preparation.
- If you find it useful, then follow Dinesh Varyani on LinkedIn.
- Subscribe to my YouTube channel.

## Thank you.