|  |
| --- |
| **https://www.youtube.com/channel/UCTCfIFumvw06VZmMSce\_pSw/videos**  [**https://softwarearchitect.ca/**](https://softwarearchitect.ca/)  [**https://www.fullstack.cafe/interview-questions/api-design**](https://www.fullstack.cafe/interview-questions/api-design)  [**https://github.com/growthbook/growthbook**](https://github.com/growthbook/growthbook)  [**https://www.youtube.com/c/sudoCODE/videos**](https://www.youtube.com/c/sudoCODE/videos)  [**https://www.youtube.com/watch?v=07BVxmVFDGY**](https://www.youtube.com/watch?v=07BVxmVFDGY)  **API Headers**  **5 mistakes I made in System Design Interviews that you should avoid**  **Foundation of System Design Interview starting with Functional vs Non Functional Requirements**  **How to solve capacity estimation problems faster? | Thumb rules and quick tips**  **System Design Books**  **High Level (HLD) Vs Low Level(LL) Design**  **CDN** |

**5 mistakes I made in System Design Interviews that you should avoid**

**Foundation of System Design Interview starting with Functional vs Non Functional Requirements**

|  |  |  |  |
| --- | --- | --- | --- |
| **Twitter**  Latency – may take 1 sec or 2 sec  DAU – daily active user |  |  |  |

**How to solve capacity estimation problems faster? | Thumb rules and quick tips**

[**https://dev.to/ievolved/how-i-calculate-capacity-for-systems-design-3477**](https://dev.to/ievolved/how-i-calculate-capacity-for-systems-design-3477)

**https://www.codementor.io/@robinpalotai/back-of-the-envelope-calculation-for-system-design-interviews-z4ljbsp5l**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
|  | **Come from non functional required. So Ask interviewer** | **Estimation is the keyword. So focus on it – it’s approximations no accurate answer** | **Round to 17000 => 20000, so you can calculate fast manner** | Know of power of 12 up to 16. | don’t convert to laks to miilion, always remember million ..tri number, just easy |
|  |  |  |  |  | |

**System Design Books**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  |  |  |  |

|  |  |  |  |
| --- | --- | --- | --- |
|  |  |  |  |

**High Level (HLD) Vs Low Level(LL) Design**

|  |  |  |
| --- | --- | --- |
|  | Problem Statement Or Draw on white board Or  Code whole applications | Low level design  1)SOLID  2)Class Diagram – objects, classes, inheritance,  3)Data Flow Diagram  4)Pseudeo Code  5)Design patterns |
|  |  |  |

**CDN**

**How does a CDN work to improve page load time**

A web site that is hosted on a East Coast Server and a user who is accessing from the West Coast for everything that loads on the page whether it is the images, the JavaScript or the stylesheet a request goes from the users browser to the server and the server responds with a necessary file

let's assume that the distance between the west and the east coast is 2,000 miles so to receive a file will take approximately 500 milliseconds.

The general principle is that the longer the distance, longer it will take to get the response

Diagram

Description automatically generated

Now let's bring a CDN into the picture, the rest of the setup remains the same, however this time we are using a CDN Edge server closer to the user.

The request instead of directly going to the server first goes to the CDN, tries to check if it has that file available in storage or the CDN cache.

Since the file is not there in the CDN cache yet it goes with the same request to the server, gets response and sends it back to the user, the CDN now also stores the file on its own Edge server

Let's assume CDN Edge server just 50 miles away from the user, next time that the same request or a different user close to CDN, opens the same website, the request will go to the CDN and it will get completed from there itself because now the CDN has the file in storage

Every subsequent request except for the first one, the request and response would complete in a much shorter time let's say just 50 milliseconds therefore all the files get loaded really quickly improving the website's load time

A picture containing text, whiteboard

Description automatically generated