Timings {

<https://sagarkumargiri.graphy.com/sessions/Frontend-system-design-Session-1-65be31ea73f699668ace03cd>

Alternate Saturdays…

}

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System Design:

How application is build ? tech stack and design patter, why used ?  
  
  
Popular interview questions:  
  
Design fornt end apps => Flipkart, Book My show, Jira , google sheets, Google docs…

Doubts:

* System design question will be for 2+ experience people ( but currently including freshers too, but with less expectations )
* Donot need to code everything, but you code basic components architectures…. ( how logic is done, pseducode, don’t need syntax )
* HLD vs LLD => High Leve Design vs Low level design

HLD => What component using, how UI props transfer, how interact with state, api calls, servers…

LLD => Granular level things, what DS , architecture, performance algo for the task etc..

Tip:

* Be familiar with any one plateform like excalidraw.com … to show your system design to people..
* Don’t cover all , based on time constraints be things crisp
* Be full things about what you are saying, if you say one tech, know its advantages , disadvantages and usage areas..
* Things to prepare will be huge, so people don’t clear it mostly..

System Design example interview:  
  
Questions:   
Design a ecommerce site like flipkart… ( mostly 1hr round )

For namesake take Filpkart just Home page :

1) Start writing Requirements: ( take only 5mins )

Functional – user seeing / interaction requirements

Non func req – why are we doing something.. not seen to user, but make the app better..

\* Have clarifications in questions , ,please ask the interviewer… mostly interactive people are considered as talented…   
  
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2) Architectural design: ( 10mins )

An architecture diagram is a visual representation of all the elements that make up part, or all, of a system. Above all, it helps the engineers, designers, stakeholders — and anyone else involved in the project — understand a system or app's layout.

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Ref Paid course:

<https://www.greatfrontend.com/questions/system-design/news-feed-facebook>

Think before drawing, if you think anything .. jot it down and think twice before including things in architecture diagram:

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3) Api design: ( 10mins )

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Get real websites and inspire apis and design from them:  
  
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Note: large api response affects performance…

REST => GET, PUT => custom handling

Graph QL =>

* Query language generated by FB
* Based on input you provide -> give specific part of output
* Size of Api response is much smaller.. faster response

Socket , WebRTC => realtime calls…

4) Tech choices: ( 10mins )

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5) Coding standards ( 3mins ) :

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6) Testing :

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7) Miscellaneous:

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Can use Grafina and Kaban for logging…  
  
  
8) Offline experience: ( added to impress interviewer )

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9) Perf Optimisation:

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Lighthouse:

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10) Security:

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11 ) Design pattern:

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12) Accessiblity : ( not mandatory )

\* Localization

\* Internationalization

Upcoming sessions:  
\* Flipkart website  
\* Google sheets

Easiest question:  
Auto complete  
Toughest question:  
Code sandox