Hey There 👋
Hope you are Doing Well !

In this document I have covered
- Things to keep in mind while going for each topic
- My Interview Experience on each topic
- Video/articles/Resources are attached with each topic

Let's get started with Interview Preparation, All the Best

Generally I have seen there are 4-5 rounds for most of the **Product based companies**
1. Javascript
2. Machine Coding / React
3. DSA
4. System design
5. Managerial Round

Note **[Amazon, Easy] = [Company Name, level]**

JavaScript

1. **Common Questions -** These are some common conceptual questions asked during the first phase of the interview to understand your **fundamentals and core concepts.**
   a. Lexical Scoping
   b. Hoisting, Temporal Dead Zone
   c. Closure
   d. ES6 feature (let var and const, template literal, Destructuring, promises, class module ect)
   e. Is JavaScript Asynchronous Language?
   f. Events in js ? event bubbling and capturing ?
   g. Difference between web worker and service worker.
   h. Write a Memoization function?
   i. 'this' in Js
   j. Prototype and Prototypal inheritance
   k. How Browsers work when you hit on a URL ? ([Solution](#))
   l. Local Storage vs Session Storage vs Cookies ? ([Solution](#))
   m. Web APIs like setTimeout & setInterval
   n. Infinite Scroll

2. **Polyfills/ Implementation based Questions**
   a. Promise.All(), Promise.any()
   b. Clear all timeout
   c. flat array Array.flat() in both recursive and iterative ways.
   d. flatten Object
   e. pipe and compose
   f. Higher Order Functions like Map, Reduce, Filter, Sort
   g. Call, apply, bind
   h. **[ShareChat, Easy]** - Print numbers 1 to 10 in a time interval of 1 sec and update on UI.
   i. **[Publicis sapient, Easy]** - Debouncing and Throttling Solution
   j. **[Tekion, Easy]** polyfill which gives us the count of vowels in a string.
   k. **[Tekion, Medium]** - Implement virtualization table in js.
   l. **[Pubmatic , Medium]** Method Chaining Solution
   m. **[Tekion, Hard]** Implement Promise class with handling of error bubbling upstream.
   n. **[Swiggy, Medium]** - polyfill for JSON.stringify Solution
   o. **[Meesho, Medium]** - Implement Lodash polyfill groupBy
   Question
        Follow up Questions
        👉 What if arguments are functions.
        👉What if arguments is mixture of (function + string + number + promise)
        👉 How will you handle async call in group by Solution

Code snippet - If you are good with the above parts like (this in js, hoisting, temporal dead zone, execution flow in js) you can easily answer the code snippet part but **read the question carefully** and ask for hint If you feel stuck. Best way to practice these questions is either by dubbing or discussing. You can **read others' interview experience from LeetCode** and get some questions from it. LeetCode Interview Experience
Resource -
   1. Lydia Hallie
   2. Sudheerj JS

Resources -
1. Namaste javascript (Best one to start) - [Here](#)
2. Learns bucket - [Here](#)
3. FrontEnd Master - [Here](#)
4. Big frontend - [Here](#)
Don't follow so many resources at the same time else you will be diverted.

HTML/CSS (Frequently asked questions)

1. Difference between (Display:none visibility:hidden opacity:0)
2. What are ways to hide elements in DOM.
3. Pseudo class/ pseudo selector.
4. What is a box model?
5. Semantic element vs non semantic element.
6. Focus on layouts, positioning, responsive design techniques, CSS preprocessors (e.g., Sass, Less), and any frameworks like Bootstrap or Material-UI.
7. Web accessibility
8. SEO
9. How rendering works (Reflow v/s Repaint)
10. Centring of div
11. Async and defer [Solution](#)

Resources
a. W3 school - [Here](#)
b. CSS - [Here](#)
c. Code with Harry (With Basics) - [Here](#)
d. Best way to **Learn** HTML/CSS using Build 2-3 web projects, you can start with your portfolio

Machine Coding Questions

Whether you are a junior or senior developer they will give you a small module to build it from scratch either on react or on Js.

Things to keep in mind while doing Machine Coding round
1. Understand requirements clearly, ask doubts if any then and there.
2. Take some time to think about complete flow and folder structure.
3. Focus majorly on the logic part, **don't waste your time on CSS and HTML** first ,complete the **minimum basic requirement**.
4. Make it **interactive** as much as you can.
5. Freshers can include clone for Youtube, Netflix, Medium [Resource](#)

1. **Common Questions**
   a. Design popover on click of any product
   b. Design Accordion
   c. Movie application
   d. Star Rating
   e. **[Commonly asked]** Listing product details(infinite scroll), searching, sorting, pagination
   f. **[Amazon Assessment]** Design Carousel
   g. **[Google domain specific round]** Nested checkbox / Nested comment box
   h. **[Commonly asked]** [Flash card](#)

2. **[Sharechat, Medium]**
   a. Build login form and store data in local storage.
   b. Build a signup form and if the user exists go to HOME page else show error on UI.

3. **[CRED]** - Build feature google search + Auto suggestions [Here](#)
   A. How can you make search more performant ?

4. **[Amazon , Medium]** - File management system
   a. Directory might contain files with different extensions (xml, pdf, json and size) or nested directory till n level of hierarchy.
   b. Design interface how it looks like then follow up questions asked-:
      i. Find all file having xml extension
      ii. Find all having sizes greater than 5mb.

      iii.   If I want a file having xml extension and size greater than 5 mb. how will you make your function reusable?

5. **[Amazon , Medium]** - Display all products on UI (data coming from api) which can be filtered based on tags (rendered as checkbox)

//Api

allImagesApi – [

{link : imageURl1, id:1, title: image1 tags:[nature, bird]},

{link : imageURl2, id:2, title: image12, tags:[nature], }],

]

ImageByIdAPI = {id:1, title: image1,toTake: "Date format" content: blabla, }

   a. And onClick on any image model should display image title and image and date in MM/DD/YY format.
   b. Display all tags in the form of checkbox and if I check multiple tags then images should be filtered on that basis.
   c. Then comes to how you will handle event delegation (on each image or on the parent container).

6. **[Media.net, medium]** Shopping Cart Application- [Here](#)

7. **[Uber, Hard]** Interviewer asked me to build a calculator using html css and js with basic functionality like addition, subtraction, multiplication, division, bracket, equal button. Build an eval function on top of it.

8. **[Atalassian ,Medium, Commonly Asked] -** Build Page tree/ Nested folder

- Office Map
- ▼ New Employee Onboarding
  - Onboarding Materials
  - Training
- ▼ Office Events
  - ▼ 2018
    - Summer Picnic
    - Valentine's Day Party
    - New Year's Party
  - ▼ 2017
    - Company Anniversary Celebration
- Public Holidays
- Vacations and Sick Leaves

Resources - React/Machine Coding
1. [Namaste React](#)
2. [Dev Tool](#)
3. [RoadSide coder](#)
4. [Learners bucket](#)
5. [Sudheerj_React](#)
6. [Js Cafe](#)
7. Sadanand Pai Git - [Here](#)

DSA Strategy

If you are trying for reputed product based companies then **don't ignore DSA** it is a game changer.
1. Focus majorly on **Array, String, linked list, Sliding window, two pointer Recursion and tree**.
2. You can practice for daily 3 questions in which two of them should be of Array and String and third one you can choose from other topics with initially **EASY and MEDIUM level** only and be consistent on this part . Don't directly jump for hard questions, else you will feel frustrated and lose confidence at the initial stage itself.
3. Focus majorly on questions which are **highly Voted and liked** on leetcode as probability of those questions in interview is very high.
4. As a FE Engineer you will be asked to solve problems in **JAVASCRIPT** language. practice DSA in JS Only.

5. During Interview , take a moment to understand the problem completely and start with brute force to an optimized level. If you get stuck, ask for hints without hesitation.
6. Again I recommend go and read others **interview experience on leetcode** you will find a pattern that there are some question which are very frequently asked for initial level like
   a. Remove duplicate elements from an array.
   b. Sorting of an array.
   c. 3 Sum problem
   d. Find the first and second and third maximum element in an array.

Here are some of my interview experience DSA questions
   1. **[ShareChat, Medium]** Here
   2. **[ShareChat, Easy]** Print left view of tree Here
   3. **[Tekion , Easy]** - Reverse a linked list
   4. **[Dream 11]** - 3 Sum
   5. **[Freshworks]** Remove Duplicate from sorted Array
   6. **[Google Phone interview]** - CRUD operation on doubly linked list.
   7. **[Freshworks]** Letter combination
   8. **[Apple]** Here

System Design Guidelines

Here are some of the things you should think before jumping into the solution
1. Gather the requirements and ask for edge cases if any.
2. Write **function and non functional requirements**.
3. Be Interactive during the whole session.
4. Important topics to touch while designing solution
   - CDN
   - Performance
   - Deployment
   - Analytics Monitoring/Logs
   - PWA
   - Data Recovery
   - accessibility
   - Cross-browser compatibility
   - Single Point of Failure
   - Scalable
   - Security
   - Micro-frontends
   - Database/ Design APIs/ Storage - S3, EC2, EBS
   - SEO
   - State management

5. **[Amazon , Medium level]** -
   Design a newspaper application
   a. Requirements
   b. Design Component structure
   c. User authentication and authorization
   d. Sharing news to other people
   e. How will you make sure it is accessibility to most of people
   f. performance related issue
   g. If there is any hot news about how client side interacts with server side.
   h. How will you show related articles to hot news?

      i. how data will flow from frontend to backend and asked to create the interface of each api.

6. **[Appsmith, Medium]** Build functionality for an application like Twitter
    a. How can I add or remove users?
    b. If User posts anything, to whom it should be visible and follow up, what if I blocked some user.
    c. How will we handle if a particular post is reported spam by so many users?
    d. How can I suggest mutual friends to a user?
    e. Nested component or chat ect.

Resources
1. Chakde System Design [Here](#)
2. JS Cafe [Here](#)
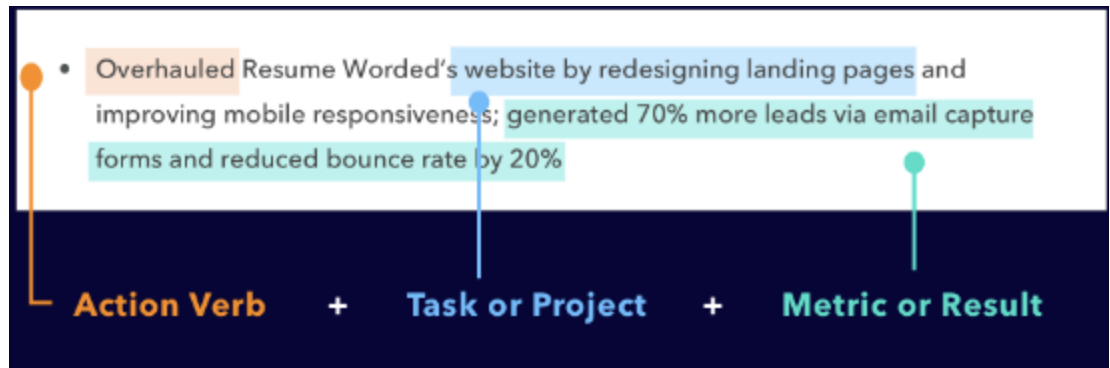3. FrontEnd Engineer [Here](#)

Managerial Round

This round generally for **team fit or behavioral** round

1. This round will be more on project discussion and situation based question like
   a. What do you do when you get critical feedback from a client/managerial?
   b. What was the biggest tech problem you have faced and how did you approach that problem?
   c. Share an instance when you took ownership for any project or module ?
2. Tech related questions
   a. Browser related questions
   b. Project discussion
   c. Optimisation and performance
   d. Your previous role and contribution
   e. Js and framework related stuff

Resume
Old Resume Here

1. Keep your resume **simple and straightforward** which technically sounds good.
2. Resume should be one page only, it is easy to read. Don't go for a two column resume, it is hard for ATS (**Initially I made it in 2 columns but later I realized**).
3. Make it ATS friendly like always try to include keywords like **Developed, Exceeded expectation, Delivered Result, performance, Reduced ect** and add some data point For eg.
   a. Increased performance from X to Y%.
   b. Reduced Initial time load from 3s to 2s.

Action Verb + Task or Project + Metric or Result

c.

4. Try to use **bullet points** and avoid colorful templates.
5. Upload resume in Google drive, and share link.
6. Highlight/Bold the topic which you want **eye catchy for the interviewer**.
7. Best resources for one pager resume is overleaf [Template 1](#), [Template 2](#) or you can try [jobScan](#)
8. For **Fresher** - Internship Project/ personal project > Technical skills > Education and achievements
9. For **Experienced** - Work experience projects > personal project > Technical skills > Education and achievements

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EXPERIENCE
_____

Pubmatic – Present
UI developer, pune

● Contributed to PMCC-library to create custom components to **increase code reusability** which could be used across all pubmatic products.
● Revamping complete documentation for PMCC library and onboarding process of publisher for OpenWrap product using **Angular, typescript.**
● Following Test Driven Development practices. Writing unit tests **using Karma and Jasmine** and helping define the overall testing strategy to achieve 100% code coverage.
● Build and design a complete **Microservice architecture** for openwrap product on client side
● Involve in technical analysis, UX discussion, API design discussions, and collaborate with the backend team to develop integrations that are both secure and performant.

Infosys – Oct 2021
System Engineering

● Worked on Augmented reality-based web-application **(XR-Platform**) which provides remote maintenance operation and helps to bridge the gap between services technicians and experts thereby effectively decreasing repair and downtime on Angular.
● Solely developed Admin Portal from scratch for XR-Platform which is used for access management, User management, Password recovery systems and to perform usages analysis
● Analyzing front-end site performance using light house tool and **reducing initial load time** of application to **2sec.**
● Implemented common **security patterns (e.g.: JWT)** and **performance patterns (e.g.: Lazy loading, Pre-Loading)** to improve performance.
● Well-versed in SDLC, Agile methodology, Version control system (GIT), Defect Tracking tool (Jira).
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Technical Skills
Language - JavaScript, TypeScript, Java
Web Development: Angular, Rxjs, NgRx, Gulp.js, Jest, Node.js, Express.js, AJAX, HTML, CSS
Testing: Jasmine and karma, protractor for end to end testing
Other: Data structure and Algorithm
*****Leetcode profile or Git profile *** [Include these only if your confident and good profile]
_____

ACHIEVEMENTS - ● Hackathon winner - [Attached certificate If you want]

Education and Hobbie - xyz [Include only If you have good marks]

10.

How to approach for Job on LinkedIn and Referral strategies

1. For me three platforms worked very well - **LinkedIn (Best one), Naukri.com, instahyre** but don't leave other platforms like tophire, cutshort , Hirect.
2. Create list of your target companies [Resource](#)
3. Find connections related to each company on linkedin around 30-40+ people and send them requests with a personalized note.This will definitely increase change for accepting requests.

> **Shubham Soni** · 12:49 PM
> Good Day Kusum
>
> I was delighted to come across your profile and would be honored to connect with you on LinkedIn.
>
> Your expertise and achievements inspire me, and I believe we can mutually benefit from connecting.
>
> Looking forward to networking with you 😀

> **Shubham Soni** · 12:47 PM
> Good Day Nilesh
>
> I'm excited to connect with like-minded professionals on LinkedIn to share insights, exchange ideas, and collaborate on exciting projects.
>
> Love to be part of your community 😀

4. Build a common referral message and send them to connections in office hours so chances of getting referral will be instantly else they might ignore.

5. Ask for a referral to as many people as you can as the **general ratio of getting responses is 1:10**
6. Provide a heading **Frontend Engineer Referral, Amazon (Job Id)** and **link to your resume in advance** and straightforwardly ask for referral.
7. For freshers you can attach your personal project or portfolio link.
8. Your initial **4-5 words will play a crucial role** , generally it will decide that the person will find interest in you and to get you referred.

Shubham Soni · 2:34 PM

Hello Nilesh

Referral (Fronend Engineer, Amazon, {JobId})

My name is Shubham Soni having 2+ years of experience as a Frontend developer.

Technical skills -
Strong hands on Angular, React, Javascript, Material-UI, HTML, CSS, Three.js, Data structures and Algorithms etc.

I have built several projects on the MEAN stack and good at problem-solving skills and have done more than 400+ questions on leetcode.
Leetcode profile - {LeetCode Profile}
Git profile - {Github Profile}

This is brief about me You will have more data points from my profile and resume.
Could you please help me with referral for based on my skills.
Job Id - {URL}

Looking forward for your response 😀

Thanks Shubham Soni

PDF	**shubham_soni_resume...**
	47 KB

9.

10. Now If you don't get any reply just send a **follow up for a gentle reminder.**

Shubham Soni · 12:55 PM
Hey Sweta

Gentle reminder!

It would be helpful If you could provide me with a referral for the above message.

Thanks

11. Still no response , go to the career page and apply for companies.
12. Update your **LinkedIn profile professionally** means each section like About , Skill, Recommendation ect as it gives more confidence to the person giving you a referral.
13. **LinkedIn is your First resume** and present it wisely. Try to show your visibility on Linkedin via **posting technical related** stuff so people might recognize your activity . It might happen that the recruiter/manager might reach you out when they have demand.

You are Good to Go for interview preparation 🙂

You can connect me here [LinkedIn](#)

Thanks
Shubham Soni