INTERVIEW QUESTIONS-

- 1) Box-model positions based , one box at top and other box should in right bottom in a container
- 2) reverse a string
- 3) anagrams question, to print anagrams in a array of strings
- 4) constructor definition, closure definition
- 5) what is meant by protocol
- 6) call bind apply methods with examples
- 7) how to pass data from child to parent component
- 8) how to fetch data from api in javascript
- 9) form validation for first name , last name only strings are accepted not numbers
- 10) adding a node in linked list
- 11) const let var output questions
- 12) prototypical inheritance example based question
- 13) connect in react
- 14) closures related question multiply(1)(2)(3)
- 15) how will u design bootstrap, how grid works, sm-6 xm-6 means what ?
- 16) array.push and array.multiply methods implement in a given array

First round:

- 1. Vertically and horizontally align an item using only css? (ans:- transform: translate(-50%, -50%), there are many ways to answer this ques but interview keeps looking for this answer)
- 2. Box model and Box sizing
- 3. Ways of creating objects in JS
- 4. What is a closure?
- 5. How does the bootstrap grid work?
- 6. CSS specificity rules

Second round:

- 1. null == undefined; //true or false?
- 2. null === undefined; //true or false?
- 3. Many questions were the same from the 1st round with slight variations in framing the question.

JS fundamentals (OOJS, prototypal inheritance, closures, promises, ES6 features, output type questions, etc.)

Angular concepts, VueJS concepts, etc

few HTML CSS questions (box model, positioning, etc) browser concepts like async vs defer, how to optimize and preload images, etc.

1 logic question - how to return 2 indices from an array such that the sum of their corresponding elements is equal to a specified number?

JumboTrail - Frontend -

- 1. What is react explain to HR?
- 2. What is redux?

- 3. What is the difference between window object and redux state?
- 4. Why can't be stored json data into local storage, and why redux is necessary for storing data
- 5. some general questions on: latest technology.

Jumbotail - Front-End Developer - - Explain how redux works,

- Why don't you mutate the state in the reducer and in react,
- Why do you use setState in react,
- Find the largest number to the right of a particular index in the given array and optimise it,
- Replicate google search box with the drop down and rearrange the search button when the

value is changed using vanilla js(did it using react),

- What is event delegation, Implement event delegation,
- Around 10 questions regarding 'this' keyword in javascript

Jumbotail - Tech Lead - DS Problem Statements on white board:

- A). Given a String, we have to make it a Palindrome by adding the characters. Constraints:
- 1. Characters can be added at any end of the given string.
- 2. Characters can be also added in middle of the given string.
- 3. You should add minimum number of characters.
- 4. Lexicographical it should me small.
- 5. Input string char order should stay same.
- B). Given a n*n array and x. It can be of any size. 'x' denotes the number of clockwise rotations (90 degree at a time). We have to find out the final array after rotating for x times.

Khatabook - Tech Lead -

Python Code to get Bank Details and Address Details of given User Name from following three different CSV files.

File 1 contains user id, user name, gender.

File 2 contains user id, address, pincode.

File 3 contains user id, bank name, Account no.

Asked to write code on White Board.

Khata book - Backend engineer -

Promises, hash table bs bst , when sql is better than mysql.

Mpl - Front end -

Css animation, basic js , react redux working, refreshing a component at definite intervals

Small Case - Backend DEveloper - Small Case Interview questions

- -> closures
- -> How to handle Promises, writing and using
- $\ ->$ Which DB will you use for a given app and why? NoSQL vs SQL
 - -> How to handle the databases, sharding, backup databases
 - -> Given a scenario design a shema:
- -> implement indexing for quicker querying
- -> implement data range for aggregation of data
- -> LLD for Uber, how to handle the matching the user request to nearby drivers, how to handle driver locations

Zest Money - Full Stack Developer -

- 1. Given an array with repeated elements, with the constraint of increasing a number by 1, calculate the minimum sum for the unique array formed by this array.
- 2. Given an 2-D matrix consisting of 1 and 0, find the largest square sub-matrix containing only 1s
- 3. Given an array of numbers in a range, and one element repeating in it, find the number which is repeating

- 4. Find if a Linkedlist contains a loop
- 5. Find the mid point of a LinkedList
- 6. Create a LinkedList
- 7. Given a square matrix, the position of queen and the position of horse, find if the horse can reach the queen and the smallest path to do so.
- 8. Given an array, calculate the sum of (indices * values). find the largest sum among all such sums ex:

```
[1,2,3,4]
x1 = 0 * 1 + 1* 2 + 2 * 3 + 3* 4
x2 = 0 * 4 + 1* 1 + 2* 2 + 3 * 3
```

ZestMoney - HR - DS Hackerrank round (90 mints , 2 Questions) :

- A). Given a String, we have to make it a Palindrome by adding the characters. Constraints:
- 1. Characters can be added at any end of the given string.
- 2. Characters can be also added in middle of the given string.
- 3. You should add minimum number of characters.
- 4. Lexicographical it should me small.
- 5. Input string char order should stay same.
- B.) Given a list of products with there expected production cost and worst case production cost. We have to find out minimum amount owner should own before starting the production.

Constraints:

1. Can't skip any product. Production of 1 unit of all products is mandatory.

Wheelseye - Front-end Developer -

1. You are given a nested object with keys and values. Print all the values. (Use help of recursion and typeof keyword). Below is the exact object I was provided.

```
Var a = {
firstName: 'Sumedha',
lastName: 'Poddar',
address: {
state: "Maharashtra",
```

```
city: "Aurangabad",
phone: {
mobile: '9246367350',
landline: '123456'
}
}
2. Implement following function:
Sum(1)(2)(3)() = 6;
Sum(1)(2)() = 3;
Sum(5)() = 5;
Sum(5)(4)(3)(2)(1)() = 15;
(Can be done using closures, depending on the number of input
parameters)
3. Given an array, write a function to find the elements that have
an equal average:
1 5 7 2 0
1 + 5 = 6 \text{ avg} = 3
7 \ 2 \ 0 = 9 \ avg = 3
(can be done using 'leftSum and rightSum' question that Aman had
given us to solve)
(Note: I had done it using separate leftSum and rightSum
functions. Interviewer asked me to do it all using just a single
piece of code, e.g. inside my for loop, without making and calling
external functions.)
4. Given an array of n elements and a target value, find out if
any two values exist in the array whose sum is equal to the target
value:
1, 4, 45, 6, 10, -8
x = 7
O(n) should be the time complexity
```

(Can be done using the 'Two-Pointers' approach. Aman had given us a similar(exact) question in one of the DS sessions.)

5. Explain the algorithm how react works and how is it different from Javascript.

(Interviewer wanted to ask about how diffing and hot reloading works in in react and what are the performance implications / improvements)

- 6. What is the difference between Class based components and Functional components in React.
- 7. Do you know about SEO? (Search Engine Optimizations)
- 8. Can you name a few parameters that affect the SEO Ranking? (page load time, page size, etc.)
- 9. What are the React lifecycle methods. Explain the order in
 which different invocations happen in react.(Constructor -> render
 -> componentDidMount() -> componentDidUpdate).
- 10. What do you usually use componentDidMount for ?
- 11. What will happen if you make those api calls in render() method? (Infinite loop due to constant rerendering on state updation)
- 12. Suppose you updated a value/state in react and the re-rendering doesn't happen for some reason. How would you force it to re-render? (use the componentDidUpdate or forceUpdate).
- 13. How would you do the same (force re-render) for 'Functional Components'?
- 14. Do you know about useState and useEffect ?
- 15. What do you know about react hooks ?
- 16. Do you know about redux?
- 17. What is redux used for and why is it useful? What advantages does it have over React state management

Influx Media - Software Engineer -

Have you worked/ Know SQL injection ?

Explain the approach followed in solving the problem?

Was asked to explain the flow diagram that I had drawn during the Problem Solving.

What Relevance is the flow diagram if it is not being used to design front end?

Explain the schema designed.

Rationale /logic behind the schema design and db columns considered. Tell me why you feel you should have those columns.

Sql join : Inner Join left Join.

why used nested query and the approach to the logic .

Tell me about yourself

Why did you choose to become FSD?

What is your salary expectation?

Are you willing to come to Chennai for two months of training ?

React : State and Props

Routing : Explain

Redux- Why you use state variables in React

Rev Sales - - -> Reverse Linked list

- ->Trees
- ->How json works
- ->reversing a number (pure math)
- ->function for reverse
- ->Slab question calculating total score
- ->Reverse a linked list
- ->placing all zeros at last without taking array(you can use temp variable)
- ->tree mirror
- ->asked about how you're journey started
- ->space each datatype takes
- ->optimize each code

Revv Sales - developer -

what is the teaching style of masai school? what you will do after the zoom session? write the function for filter in react? what is closure? what is lexical scope?

```
what is bubbling up?
what is hoisting?
write the function for bubbling up?
fizz buzz problem
write the function for push, pop and for finding maximum value from the array?
write the program for Inorder traversal
write the program for reversing the linkedlist
explain the DOM rendering
what is the lifecycle of the component in react?
how will you handle the dynamic routing?
what is the difference between list and tuple?
why you did't get placed in the college?
how you know about masai school?
why did't get placed in the college?
why there is no proper placement training in the college?
did you know about the linked list before or after joining masai school?
what is pass by value and pass by reference?
what is OOPS concept?
how the DOM work in the localhost ?
what happens when you run the local server?how will the elements gets rendered
in the localhost?
when you are typing yahoo.com and press enter, what will happen?
what is server?
how does browser works?
what all the process between web server and web browser?
what are the data structures you know in python?
what is your dream job?
where you are going to work in the future?
do you need anybody to teach the new technology or you can read it by own?
what is your goal?
python is a interpreter language or compiler language?
why python is a interpreter language?
Rev Sales - -
```

to loop through an array of objects and match the keys to an array containing a sequence to create an excel sheet.

to make 3 columns of excel sheets pinned and others scrollable.

->how to chain together functions in an array, the first one is a pure function, the second being an axios call depending on the previous function, the third

being another pure function getting parameters from the second and the fourth being another function which takes the parameter from the 3rd function -> axios call to handde the errors how to handle similar errors across the code (redux I guess)

Rev Sales -

Front end developer - Working of react , parallel api calls vs serial api calls, html positions ,css pseudo class, class and inheritance, basic ds question, promises, how html ,css works internally

Revv Sales - Software Developer - 1. Solve Mirror Image of binary tree on paper in following ways:

- a. using JS
- b. using Python
- C. with comparing node positions
- D. without comparing node positions
- 2. Write the logic to verify whether the given JSON structure in string form is a valid JSON or not.
- 3. Difference between Array and LinkedList in other languages and in Python.
- 4. Brief explanation about Dictionary in Python.
- 5. How words suggestion of your phone's keypad works ? (Algorithm for that)

Revv Sales - Tech Lead -

- 1. N number of teams are playing a knockout tournament, so to decide the winner team how many matches should this tournament will have?
- 2. Angle between hour hand and minute hand at 6:20 ?
- 3. Difference between Stack and Queue.
- 4. Write Logic for a given stack which should work like a queue when user performs any operation like enqueue and dequeue (We can use another empty stack to solve this).
- 5. Detailed explanation about how user authentication works in a CRUD application. Why is it important? What methods and libraries we use for that in Python.

Revv Sales - Co-Founder -

- 1. About Myself.
- 2. Transition story from CIVIL to MASAI.
- 3. Experience in MASAI. What I learned, What I could have done better.

- 4. Plans with this profile in next 5 years.
- 5. Basic hobbies and Ambitions related question.

Rev Sales - -

- 1) Mirror of binary Tree
- 2) No. of matches of a Knockout matches
- 3) Most 5 word repeated in an essay
- 4) What is Rest API in brief?
- 5) Which port is used in frontend (React) and backend (Flask)?
- 6) What is CORS Error.
- 7) Push all the Zeros in the array in O(1) space and O(N) time.
- 8) Reverse a singly linked list
- 9) Make queue data structure with the help of stack
- 10) What is Sqlalchamy?
- 11) Some puzzles related to math

15:25

15:26

Revv Sales - Software Engineer -

Knock out test match, how to search the maximum occurrence of the word in a paragraph, why we use redux, a registration form is there a how to segregate the people who are below 30 years, fundamentals of java-script, deep knowledge about each and every words used in react.

Paytm money - Tech -

what is closure?

what is Prototype?

what is hoisting?

he gave an array and said to flatten that

gave an array and said to find count of pairs which is equal to sum

gave two strings and find whether it is anagram or not

Reverse a linked list?

Doubly linked list
what are the type of Comparison operators in JS?
why you use redux?