

QUESTIONNAIRE

FEBRUARY

Here are the questions asked in February

GENERAL QUESTIONS



1. About the current company & Reason for leaving the Previous employer (Relevant if you have worked before)
2. Self-Introduction
3. What is your strength as a developer?
4. Rate yourself in all tech stacks out of 10

5. What are your salary expectations
6. How much relocation time is required
7. Tell me about your group projects and your contribution towards it
8. If the company did lay-off you after five years, what would you do in this situation?
9. Where do you see yourself in 5 years

HTML/CSS



1. HTML CSS task: Create a box and center it in the viewport
2. What is a css preprocessor?
3. Clone some static part of the given web page
4. Types of @media rules in CSS

5. Create a html page using only html and css. There should be four html tags and by default the color of the tag should be blue. When we hover on the tag only that a tag color should change to green and the other three a tag color should change to red. use only html and css.

- Build canvas
- Make a responsive page with React framework that has
- A canvas element
- A color picker that can enable the change of color of the canvas.

HTML/CSS



6. Create HTML page for a 2D element overlayed on the canvas which is a 2-digit number that can be dynamically changed. Page should contain:
 - Associated dropdown which has a specific color palette to the selected background. We should be able to resize the canvas in both the x and y-axis.
 - If we hover on the 2D overlay digit, we should be able to see a zoomed-in view beside the cursor.
7. Create a simple yet elegant Login page with parameter as login and password.

1. What are the methods of debugging and testing
2. What is the Var, let and const
3. What are the methods of debugging and testing
4. What are the Ways to create objects
5. Create a object using constructor
6. What is Hoisting in javascript
7. Difference between Normal function and arrow function
8. write the number in words
9. Print prime numbers up to n numbers.
10. Program to add two binary numbers
11. Factorial of n
12. Sum is equal to k or not
13. What is a higher order function?
14. What is Ref?
15. Create a function to return the longest word in a string
16. Input: dummy text of the printing and typesetting industry
17. Output: typesetting
18. Write a program that accepts an email string and validates that email. If email is valid must display success message and If email is not valid must display error message
19. Explain Javascript Data Types
20. What is recursion?
21. What is time complexity?
22. Find the smallest negative element in array





23. Remove duplicates from unsorted array Given an unsorted array of integers, Print the array after removing the duplicate elements from it. We need to print distinct array elements according to their first occurrence

- Input : arr[] = { 1, 2, 5, 1, 7, 2, 4, 2}
- Output : 1 2 5 7 4

24. You have an array of strings. Each string is of the type AAAADDDAAA where A means alphabetic and D means numeric. You cannot make any assumptions about how many A or D they might be / there could be 0 to N. so all these are valid strings ASDF12334HJ, 1, X, ASD123, 3456QWDRT, etc etc . The only guarantee is that the numeric section will be all together and occur only once. Write a function that collects or maps all the strings that have the same numeric sections So if your strings are

123QWERTDDDFRG456uuuuKOSSSS123QWETRTHELLO8888FGBHJJUMP888WHYNOT you want to map like this 123-> 123QWERT , SSSS123QWETR888 -> JUMP888WHYNOT, HELLO8888FGBHJ456 -> DDDFRG456uuuuKO

25. Write a program that returns the first unique character from a string

26. Given a string that finds the longest substring such that after repeating it n times (n>1) it should result in the input string as it appears.

For eg: \"ababababab\" should return \"ababab\" bcoz after repeating it twice we will get the input string.

27. Find LRU cached data.

28. Find the largest substring which can form the string if repeated.

29. Finding the most frequent character in a string javascript

30. 0.1+0.2===0.3 is it true or not? And why?

31. Find maximum occurrence(single number & multiple number)

32. Find the serial number of students from their number

33. Validate rectangle

34. Find the first character with no repetition.

35. Fibonacci Series

36. Coding question to check if a valid rectangle exists

37. Coding question to check if the String contains a valid US phone number

38. Explain Async await, callback, memo, props, Event, fetch

39. Show Registered user's list and chat between the two users. (Use socket framework for Chat implementation) Guidelines to be Followed: Use Git to manage the source code. A clear Git history showing your process is required. Structure your code according to industry best practice design patterns. You can use any third-party library if required. Good to Have Test cases

40. Difference between java and javascript.



REACT



1. What is React? Why do we use React?
2. Create a react app where count should start adding on the page load and on stop button click, count should stop adding
3. What is useState?
4. What is useEffect?
5. Clone some static part of the given web page.
6. What is the context API in ReactJS?
7. What is the purpose of using super constructor with props argument in react?
8. What are Higher-Order Components in React?
9. What are props in React?
10. How to access DOM elements in React?
11. When rendering a list what is a key and what's its purpose?
12. What are React Hooks?
13. What are the limitations of React?
14. What are refs used for in React?
15. What are stateful components in React?
16. What is the difference between a Controlled and an Uncontrolled component?
17. What is state and props? difference between state and props?
18. A react template is provided, you will have to write code on top of that. There was a form after filling which the data should be appended to a table.

19. How does redux work?
20. How to call the loading function with react useEffect only once?
21. What is HOC?
22. Explain Types of hooks in react.
23. React phonebook.
24. Simple Todo in react.
25. React form input and append it to table.
26. Explain Class-based component, Stateless components, and components with states.
27. Create One react app with list search functionality along with details page.
28. How to avoid re-rendering?
29. Write a code to validate the email in react.
30. Lifecycle methods of React.
31. Data validation and data verification in react.
32. Data screening in react.
33. React Panel to register with:
 - Name
 - Email
 - Phone number
 - Password All Rest APIs should be supporting Auth 2.0

REACT



NODEJS



- 1.Explain the difference between local and global npm packages.
- 2.Why does Node.js prefer error-first callback?
- 3.Explain Types of hooks in node.
- 4.What are benefits of node js?
- 5.Explain Git commands.
- 6.How do you find a node developer if you are a hiring manager?
- 7.Lifecycle methods of nodejs.
- 8.Data validation and data verification in node.

1.Possible target sum

2.Find LRU cached data.

3.Explain Hashing in DSA.

4.Explain Push and Pop in queue.

5.Tree construction.

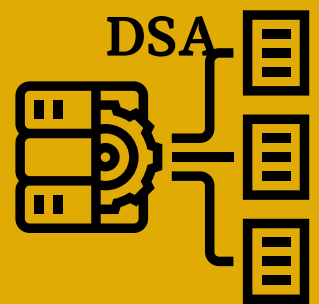
6.Binary Search (search index) .

7.Search an Element in Circular Linked List Given a circular linked list. The task is to find the position of an element in the list.

8.If the given array can be converted into a tree or not?

9.An array was given with each integer denoting the height of the bar and each bar having 1 unit, finding the max area of the continuous bar.

10.What is Histogram area?





MongoDB

mongoDB

1. Create a object using constructor.
2. Merge two arrays having same length w.r.t index.
3. Create array.alternate().
4. Create JSON object for any detail.
5. Apply CURD operation on that JSON Data.

6. Create a class that accepts two numbers.
7. Create another class that fetches the last digit of those two numbers
8. Create a third class that multiplay that last two digits
 - Class A: Accept two numbers.
 - Class B: Fetches the last digits of the numbers
 - Class C: Multiplay the last two digits
9. Fetch data from a json file and show it on the webpage.
10. When should we embed one document within another on MongoDB?
11. What is BSON in MongoDB?
12. What's the difference between replaceOne() and updateOne() in MongoDB?
13. What is Replication in MongoDB?
14. What is time complexity in MongoDB?
15. SQL user login
16. Difference between mongodb and mysql
17. What is inheritance? How many types of inheritance?
18. What is primary key and secondary key?
19. What is a unique key?

1. There are two water tanks A and B, A is much smaller than B. While water fills at the rate of one liter every hour in A, it gets filled up like 10, 20, 40, 80, 160... in tank B.(At the end of first hour, B has 10 liters , second hour it has 20, and so on). If tank B is $\frac{1}{32}$ filled after 21 hours, what is the total duration required to fill it completely?
2. There are two boxes, one containing 10 red balls and the other containing 10 green balls. You are allowed to move the balls between the boxes so that when you choose a box at random and a ball at random from the chosen box, the probability of getting a red ball is maximized. This maximum probability is?
3. What challenges did you face in the project other than technical?

APTITUDE



Express

1. How to run a server through express?