masai.

Placement Handbook

Company name: Inspiron Labs   **Date**: 08/11/2022
Website: https://www.inspironlabs.com/
Role: Full Stack (MERN)
Interview Process: 2 Tech rounds + 1 Managerial round + 1 Hr round

Round 1: Technical Discussion-1

DSA - Topics

- Array
- 2D Array
- String
- Sorting
- Searching
- Binary Search
- Tree
- Queue

Platform: codeSandbox or VS code
Duration: 30 min - 60 min

CODING - Topics

- JS
- CSS
- React
- Redux
- Advance Js
- Frontend
- HTML
- Web questions
- Backend
- Database
- Asynchronous Js
- Node Js
- LinkedList

Some important questions to go through:

DSA

- Find the 2nd largest number in the array.
- Rotate the Matrix in a clockwise direction.
- Balanced parentheses Problem.
- Count the frequency of a given character in the given String.
- Explain the concept behind Circular Queue.

Coding

- What are closures with examples?
- What is meant by higher-order function?
- Difference between Var Let and const.
- What is call, apply and bind?
- What are the differences between call, apply and bind?
- Difference between map and ForEach.
- What is Hoisting?
- Find the mistake in the given code snippet.
- What are hooks?
- What are useEffect and useRef?
- What is the difference between useState and useEffect?
- What is a rest operator?
- What is the spread operator?
- What is Memoization?
- Make a react app in which whatever you type should be visible on the same screen.
- What is Redux?
- Difference between shallow copy and deep copy.
- What will be the output of [] === []?
- What is the difference between FrameWork and Library?
- What are callback functions?
- What do you mean by JSX?
- Explain the flow of redux.
- Create a timer on the codeSandbox.
- How does React work?
- Create a form and show the data in the database and display it on Screen as well (including images)
- Difference between React and Redux.
- What is the difference between redux and context API?
- Explain Async Await.
- What is Node Js?

- What are Promises and its states?
- What are hooks?
- Explain oops concept.
- How to Deploy a MERN project?
- What is LinkedList?
- Create a stopwatch having start-stop and Reset buttons.
- Create a todo application with create, delete and edit functionality.
- Create a counter app and manage States using Redux.
- Write a code to generate a Random Number.
- Difference between states and props.
- What is Mounting a component in react?
- What is Unmounting a component in react?
- What is Local storage?
- What is Session storage?
- What is the difference between local storage and session storage?
- What is useContext Hook?
- Write a program in which the background color of the input box changes Randomly on every button Click.
- What are the lifecycle methods in react?
- What is useMemo?
- What is useCallback hook?
- What is an Event loop?
- Create a React application that generates Random numbers between 5 to 9 on clicking the button.
- What is prop Drilling?
- Why use Redux?
- What is Virtual Dom?
- What are classes?
- How to manage a State?
- Class Components vs Functional Components.
- What do mean by controlled and uncontrolled components?
- Print the largest Number present in the array.
- Generate numbers from 5 to 9 with the click of a button.
- What is React-Router-Dom?
- Create an Accordion.
- Is it possible to create custom hooks in react, if yes then How?
- Is React a library?
- optimization techniques in React.
- What is middleware? explain with an example.
- What is javascript considered a single-threaded language?
- What are collections?

Round 2: Technical Discussion-2

Platform: codeSandbox or VS code
Duration: 25 min - 30 min

DSA - Topics
Same as round 1

Coding - Topics
Same as round 1

Some important questions to go through:
Coding
- What is React fiber?
- What are EventEmmitors?
- Create an Array of objects and map data in React.
- Create a react app such that on button click background color of body should change randomly.
- Generate a random Number.
- What is the difference between a block element and an inline element?
- What is Ref?
- Assign random numbers to the name given in the array.
  Example:-
  Array = [Anannya,suman,shreya],
  Output = [Anannya012,suman321,shreya453]

- **Go through round 1 questions as well**

Round 3: Managerial round (tech + cultural fit)

Platform: codeSandbox or VS code
Duration: 25 min - 30 min

- **Make sure you go through all the questions given in round 1 and round 2**

Round 4: HR Round
Duration: 30 min - 60 min

- Introduce yourself
- Briefly explain your projects
- What is your view on social media (discussion for 4-5 min)
- Situational questions like what will you do if your Teammate is not working properly?