Lists, Hooks, Api Project

- 1) How do you render a list of items in React? Why is it important to use keyswhen rendering lists?
 - The key attribute helps React identify which items have changed, are added, or are removed. To give the elements in the array a consistent identification, keys should be assigned to them.
- 2) What are keys in React, and what happens if you do not provide a unique key?
 - React uses the index value of each item as a default.
- 3) What are React hooks? How do useState() and useEffect() hooks work in functional components?
 - ➤ Hooks allow function components to have access to state and other React features. useState is used to manage state within a component, allowing you to store and update data. useEffect is used to perform side effects in a component, such as updating the document title, fetching data, or subscribing to events.
- 4) What problems did hooks solve in React development? Why are hooks considered an important addition to React?
 - Hooks allow users to encapsulate and reuse logic across different components without using higher-order components or render props, leading to cleaner and more modular code.
- 5) What is useReducer? How we use in react app?
 - React useReducer() hook is a state hook used often as a versatile alternative to useState().
- 6) What is the purpose of useCallback & useMemo Hooks?

purpose of the useCallback hook is to prevent unnecessary renders in your React application.usememo used to communicate something of immediate importance to people within a business or organization.

- 7) What's the Difference between the useCallback & useMemo Hooks?
 - useMemo is used to memoize values or computations, helping to optimize expensive calculations or data transformations. useCallback is used to memoize callback functions, reducing unnecessary re-creation of functions and optimizing component re-renders.
- 8) What is useRef? How to work in react app?
 - ➤ React, useRef is a hook that allows you to create a mutable reference object. This object can be used to access and manipulate DOM elements, store values that persist across renders without triggering re-renders, and more.
- 9) What is the Context API in React? How is it used to manage global state across multiple components?
 - ➤ React Context API is a feature that allows you to share data across the component tree without having to pass props down manually at every level.
- 10) Explain how createContext() and useContext() are used in React for sharing state.
 - To share state across React Components with Context we will first create a context with createContext Method. We will be using the useContext() hook to access and modify the state in the child components.