• What is React Js?

Ans :- The React.js framework is an open-source JavaScript framework and library developed by Facebook. It’s used for building interactive user interfaces and web applications quickly and efficiently with significantly less code than you would with vanilla JavaScript.

In React, you develop your applications by creating reusable components that you can think of as independent Lego blocks. These components are individual pieces of a final interface, which, when assembled, form the application’s entire user interface.

React’s primary role in an application is to handle the view layer of that application just like the V in a model-view-controller (MVC) pattern by providing the best and most efficient rendering execution. Rather than dealing with the whole user interface as a single unit, React.js encourages developers to separate these complex UIs into individual reusable components that form the building blocks of the whole UI. In doing so, the ReactJS framework combines the speed and efficiency of JavaScript with a more efficient method of manipulating the DOM to render web pages faster and create highly dynamic and responsive web applications.

• What is NPM in React Js?

Ans :- NPM is short for node package manager, an online directory that contains the various already registered open-source packages. NPM modules consume the various functions as a third-party package when installed into an app using the NPM command npm install .

• What is Role of Node Js in react Js?

Ans :- NodeJS is a framework of JavaScript which is mainly used for working with the backend of our application or building the backend using JavaScript, whereas ReactJS is a JavaScript front-end library. It is mainly used for building the user interface or the frontend of our application.

• What is CLI command In React Js?

Ans :- create-react-app used to generate the boilerplate version of a React application thru command line. npx create-react-app my-app. create-react-app has taken care of setting up the main structure of the application as well as a couple of developer settings.

• What is Components in React Js?

Ans :- Components are independent and reusable bits of code. They serve the same purpose as JavaScript functions, but work in isolation and return HTML. Components come in two types, Class components and Function components, in this tutorial we will concentrate on Function components.

• What is Header and Content Components in React Js?

Ans:- Headers are compositions that extend standard navbar functionalities. They contain additional components like a jumbotron, sub-navbar, or image covers which serve as a containers for extra navigation elements - usually links, forms, or call-to-action buttons.

• How to install React Js on Windows, Linux Operating System? How to install NPM and How to check version of NPM?

Ans:-

Install the latest version of Windows 10 (Version 1903+, Build 18362+) or Windows 11

Install Windows Subsystem for Linux (WSL), including a Linux distribution (like Ubuntu) and make sure it is running in WSL 2 mode. You can check this by opening PowerShell and entering: wsl -l -v

Install Node.js on WSL 2: These instructions use Node Version Manager (nvm) for installation, you will need a recent version of NodeJS to run create-react-app, as well as a recent version of Node Package Manager (npm). For exact version requirements, see the Create React App website

Open a terminal(Windows Command Prompt or PowerShell).

Create a new project folder: mkdir ReactProjects and enter that directory: cd ReactProjects.

Install React using create-react-app, a tool that installs all of the dependencies to build and run a full React.js application:

This will first ask for your permission to temporarily install create-react-app and it's associated packages. Once completed, change directories into your new app ("my-app" or whatever you've chosen to call it): cd my-app.

Start your new React app:

PowerShell

npm start

This command will start up the Node.js server and launch a new browser window displaying your app. You can use Ctrl + c to stop running the React app in your command line.

When you're ready to deploy your web app to production, running npm run build will create a build of your app in the "build" folder. You can learn more in the Create React App User Guide.

• How to check version of React Js?

Ans:- To check which React version is your project using you need to open the package. json. Take a look under the dependencies section. It should list all of the dependencies of your project and one of those should be React.

• How to change in components of React Js?

Ans :- You can achieve this by using conditional rendering. You want to create a boolean var in App (myBool) and a function (toggleBool) that flips that var. Then you can pass this function as a prop to each component to use as an event for your button. Then you can conditional render these components in App.