React JS Application

1. **What React JS is ?**

**It is a library which used to build user interfaces and UI components and is developed by Facebook. It follows Component based Architecture which allows developers to re-use the UI components making complex web applications easier to manage and maintain. It is used to create SPA (Single Page Application).**

1. **How to setup React: Installation & Environment Setting**
2. **We have to download & install the Node.js**
3. **Using CRA(Create React App) command we can create the react application like**

**cmd>npx create-creact-app applicationname**

1. **Using npx instead of npm as npx will install all the required packages for the application.**
2. **Runing the react application using npm start command and seeing the output on** [**http://localhost:3000**](http://localhost:3000)

**React JS Components LifeCycle**

1. **Initialization Phase: This is the stage where the component is constructed with the given Props and default state. This is done in the constructor of a Component Class.**

**Methods in this phase:**

**Constructor**

1. **Mounting Phase: Mounting is the stage of rendering the JSX returned by the render method itself.**

**Methods in this phase:**

**Constructor**

**Static getDerivedStateProps**

**render()**

**componentDidMount()**

1. **Updation: As the name itself suggests that it is the phase in which application components will be updated as per the data or any even happening**

**Methods in this phase:**

**getDerivedStateFromProps**

**setState() Function**

**shouldComponentUpdate()**

**getSnapshotBeforeUpdate() Method**

**componentDidUpdate()**

1. **Unmounting: As the name itself suggests that it is the final step of the component lifecycle where the component is removed from the page.**

**Methods in this phase:**

**componentWillUnmount() function**