**React JS Intro**

# What is React Js?

* React is a JavaScript library created by facebook.
* React is a User Interface library.
* React is took for building UI components.

# What is NPM in React Js?

* In React.js, NPM stands for Node Package Manager.
* NPM is a package manager for JavaScript that allows developers to easily install, manage, and share reusable code packages.
* It is commonly used in React.js development to install third-party libraries and manage project dependencies.

# What is Role of Node Js in react Js?

* NodeJS is a framework of JavaScript.
* Mainly used for working with the backend of our application or building the backend using JavaScript.

# What is CLI command In React Js?

* In React.js, CLI (Command Line Interface) commands are tools provided by frameworks like Create React App (CRA) or Next.js to streamline development tasks. These commands simplify tasks such as creating new projects, starting development servers, building production-ready code, and running tests. They help developers manage React.js projects efficiently through the command line interface, enhancing productivity and workflow consistency.

# What is Components in React Js?

* 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?

* A header is a section at the top of a page that displays site name and navigation.
* React is the most popular frontend library for developing component-driven user interfaces. It's used for developing single page, mobile, and server-rendered applications.

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

To install React.js on Windows, Linux, or any other operating system, you'll need to follow these general steps:

1. Install Node.js and npm: React.js development relies on Node.js and npm (Node Package Manager). Node.js comes with npm by default.

- Windows:

- Download the Node.js installer from the official website: [Node.js Downloads](https://nodejs.org/en/download/)

- Run the installer and follow the installation instructions.

- Linux:

- You can install Node.js and npm via package managers like apt, yum, or dnf.

- For example, on Debian/Ubuntu-based systems:

**sudo apt update**

**sudo apt install nodejs npm**

- For other distributions, consult your package manager's documentation.

2. Create a React.js project: Once Node.js and npm are installed, you can create a new React.js project using a tool like Create React App (CRA), which simplifies the setup process.

- Install Create React App globally (you only need to do this once):

**npm install -g create-react-app**

- Create a new React.js project:

**npx create-react-app my-react-app**

Replace `my-react-app` with the desired name of your project.

3. Navigate to your project directory: Once the project is created, navigate to the project directory using the terminal/command prompt:

**cd my-react-app**

4. Start the development server: Run the following command to start the development server and open your React.js application in a web browser:

**npm start**

To check the version of npm installed on your system, you can use the following command:

**npm -v**

This command will output the version number of npm installed on your system.

# How to check version of React Js?

* To check the version of React.js installed in your project, you can use the following command in your terminal or command prompt:

**npm list react**

# How to change in components of React Js?

* setState() enqueues changes to the component state and tells React that this component and its children need to be re-rendered with the updated state;