**React for front-end developers**

React is a framework for building user interface (UI). React is a single page application.

At the core of react application is components, components are pieces of (UI)

PROPS

props allow users to pass argument or data to children components helps to make components dynamic(#note) props are passed from parent to child components props in a (child ) component cannot be changed

STATE

A state is an object that stores the values of properties belonging to a component that could change over a period of time a state can be modified based on the user action or network changes.Everytime the state of an object changes, React re-renders the components to the browser The state object is initialized in the constructor The state object can store multiple objects set State () function performs a shallow merge between the new and the previous state.

EVENT

When a user click an element like button with the help of event handler enables you to call a function and trigger an action.

STATE

The state is a built-in react object that is used to contain data or information about the components. A component state change over time, whenever it changes, and the components re-renders.

HOOKS

Hooks are the functions that use react features in functional components.in other words hooks make functional components work like class components.

The useState hook is a function to add state in functional components.

State is nothing but just values or variables of your components.

UseEffect is used to perform side effects in our components.

Side effects are actions which are performed with the “outside world”

We perform a side effect when we need to reach outside of our React components to do something.

Example

-fetching data from API

-updating the DOM document & window

-Timer functions , setTimeout & setInterval

UseEffect (callback, dependencies)

Callback-side effect logic->what to run

Dependencies- array of variables (Optional) =>when to run

1. UseEffect without dependencies –it runs with first and also run on anything changes.

2. UseEffect with empty array-it means only on first render

3. UseEffect with variable-it runs on first render and runs with that variable changes

UseContext

UseContext Hook is used to manage global data in react application

Like:

-Global state – services – themes – User settings

Create context requires 3 simple steps:

1. Create the Context
2. Providing the Context
3. Consuming the Context

UseRef

useRef allow us to access DOM elements

For creating mutable variables which will not re-render the components

UseReducer

UseReducer is used to manage state in our react application.

In other words, useReducer work s like a state management tool.

State Management is used to manage all state of application in a simple way.

Always use the UseReducer hook when you have a lot of state and methods to handle