



REACT

React is a UI library, which helps us to write SPA(single page application) which is efficient.

React application comprised of multiple components.

all these components are organized in the tree structure format

In react babel compiler will convert JSX code into javascript code.

To check online compiler

https://babeljs.io/repl/#?browsers=defaults%2C%20not%20ie%2011%2C%20not%20ie_mob%2011&build=&builtIns=false&corejs=3.21&spec=false&loose=false&code_lz=FAHgJglgbgfMAE8QAsCMMASBTANjg9vAO74BOOYIA9GnCAK45ylg4Qz4B2W1bzSfAC4le7BAPaDkpLDyp9QVRnSqRYQA&debug=false&forceAllTransforms=false&modules=false&shippedProposals=false&circleciRepo=&evaluate=false&fileSize=false&timeTravel=false&sourceType=module&lineWrap=true&presets=env%2Creact%2Cstage-2&prettier=false&targets=&version=7.24.5&externalPlugins=&assumptions=%7B%7D

In react components are of 2 types

1. Functional component(Stateless component)
2. Class Component(Stateful component)

Functional compnent	class Component
<pre> const myfunctionalComponent={()=>{ return(<div> <h1>Hello word!!</h1> <h2>Welcome to React programming</h2> </div>) } </pre>	<pre> class MyClassComponent{ render(){ return(<div> <h1>Hello word!!</h1> <h2>Welcome to React programming</h2> </div>) } } </pre>

export default myfunctionalComponent;	} } export default MyClassComponent;
It is a javascript function which returns a JSX(Javascript extension)	It is a javascript class, which has render function, Which returns JSX.
functional components are light weight as compared to class component	class components are heavy as compared to functional componet
In older version state was not accessible in functional components, but in new version, we may use useState hook, to access the state.	we can store state, state is built in object to store members of a class.
in functional component we cannot use lifecycle methods But in new version useEffect hook is added, which behaves like a lifecycle methods	In class component lifecycle methods are used

To create a react application we use a tool create-react-app

1. to install create-react-app, to install it globally use -g flag

open command prompt

c:/system32>npm install create-react-app -g

2. to create react application

c:/mydata/reactdemos>create-react-app myapp1

To create a application without installing create-react-app

c:/mydata/reactdemos>npx create-react-app myapp1

Every user defined component name should stat with capital letter

To use conditional rendering in component

```
{
  this.state.count>0?<h4>You clicked {this.state.count} times</h4>:""
}
```