

ReactJs is front end library used to design B2C type applications. The application is SPA(Single page Application)

It uses javascript with JSX (javascript extension).

MVC pattern we use(model, view, controller)

Component---- smallest unit of react program

To use react we need to install

1. Nodejs and npm
2. React and react DOM
3. Webpack
4. Babel

To install all these we use a cli tool creat-react-app

```
npm -g install create-react-app
```

To create a new application, the name of the application should be in small case letters only.

```
Create-react-app myfirstapp
```

To create react application without installing creat-react-app, but then network should be available

```
npx create-react-app myapp
```

user defined components are of 2 types

1. Class component-----> slower and heavier
2. Functional component---> faster and light weight

Functional component	
<pre>function Header={()=&gt;{   return(     &lt;div&gt;       &lt;h1&gt;In heard component&lt;/h1&gt;     &lt;/div&gt;   ) }</pre>	<pre>Class Header extends React.Component{   render(){     return(       &lt;div&gt;         &lt;h1&gt;In heard component&lt;/h1&gt;       &lt;/div&gt;     );   } }</pre>
Stateless component	Stateful component

### Difference between state and props

props	state
Props are used to transfer data from parent component to child component	State are used for storing and using data within component
Props are read only	State can be changed by using setter method only, prev state is always retained and new state will get generated while changing
These can be access buy child component	State is used only within component
Props are used for component communication	States are used for displaying dynamic data