

Day 28

React based apps -

- ① Facebook
- ② Instagram
- ③ Netflix
- ④ Airbnb
- ⑤ New York Times

When meta released the react library, it included the concept of something called component-based-architecture.

* Component-based architecture :-

- Build software based on reusable component of code.
- Reusable : Used multiple times and easily inserted anywhere when needed.
- Independent : Component can exist within the same space independently from each other.

* React is powerful tool for

- ① Build and compose components
- ② High performance rendering
- ③ Component rendering

• Spaghetti code - A term use in web development to describe code that is complex, convoluted and difficult to understand.

- React prevents the spaghetti code by avoiding any manipulation of DOM
- Instead React provide something known as virtual DOM

Virtual DOM:-

- An in memory representation or clone of the real DOM which minimizes updates to the DOM itself
- React uses the virtual DOM to update the browser DOM only when needed.
- This insures that the update is as minimal as possible, increasing the application speed and performance.

* React provides two types of components

- ① Functional components
- ② Class components

① Functional components

```
function Welcome () {
  return <h1> "Hello" </h1>
};
```

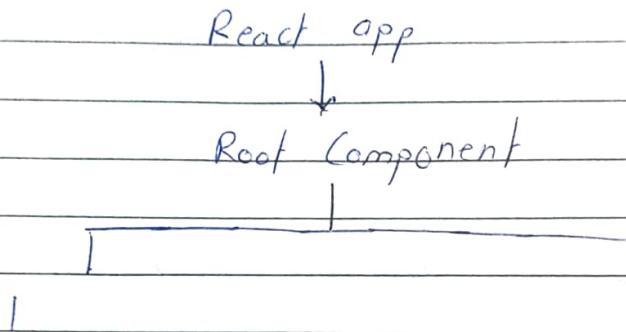
② Class components

```
class Welcome extends React.Component {
  render () {
    return <h1> "Hello" </h1>
  }
};
```

1. functional component

Render syntax

`<Component/Name />`



* React is scripted using special syntax called javascript XML or JSX

JSX :-

- Allows to write javascript code HTML elements
- Allows to make website dynamic

All component names in React must be capitalized because react treats lowercase components as regular HTML elements

* Transpiling - Interpreting a programming language and translating it to a specific target language.