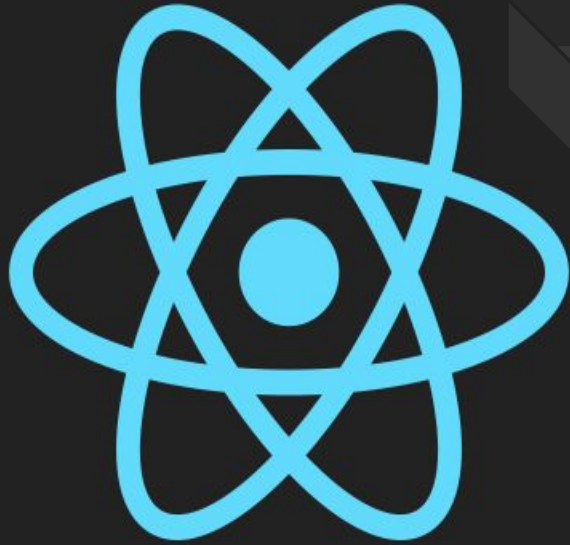




REACT.js



Nabin Kumar Adhikari
11617707
B. Tech. CSE



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Introduction

React is an Javascript Library for developing responsive Graphical User Interface. Developed by Jordan Walke, a software engineer at Facebook, React is described to be declarative, efficient and flexible.

React was first deployed in Facebook in 2011, after that, it is being increasingly used in various web technologies. React is maintained by Facebook and a active community of developers. Not only limited to web development, React can also be used in Android and IOS application development through its framework called React Native.



Starting with React

React is perfunctory to use and easy to learn. We can either set up a local server on our machines or any online development environments to write and run our react code.

Locally on our machines, we can use react by installing NPM and then react. This requires Node.js installed. Alternatively, we can just download the starter pack provided by Facebook in Github and get started by editing the HTML document from the downloaded pack. Rather, we can also import the required react javascripts in our HTML file and run them in the browsers.



Features of React

React is a feature packed library with many features. Some of its main features are :

- Virtual DOM; ReactDOM
- Speedy Development and Deployment
- JSX extension
- Component Based Design
- Props and States
- Data Management
- Responsive and Dynamic Application Development
- Multiplatform Support
- Flux in react for unidirectional data flow

DOM vs ReactDOM

List of Items

List Item 1
List Item 2
List Item 3
List Item 4
List Item 5
List Item 6

It's the List of components.
Here, item 2 needs to be updated.

Rendering for the
update in item 2

The DOM renders the whole Component list including item 2, even if only item 2 needs update.

The ReactDOM renders only the 2nd component in the list if item 2 needs update

List Item 1
List Item 2
List Item 3
List Item 4
List Item 5
List Item 6

List Item 1
List Item 2
List Item 3
List Item 4
List Item 5
List Item 6



Components in React

```
class Main extends React.Component {  
  render() {  
    return (  
      <h1>Hello world!</h1>  
    );  
  }  
}
```

Code For a Component Creation in react

Hello world!

Result in browser after rendering the component.

The text here, is a single component and can be manipulated in isolation.



Scope and Future Prospects

The scope of react is huge. After it was first deployed in Facebook news feed, it was then adopted by Instagram. Following this, was a surge in popularity and usage of react. It's today deployed by the industry pros like Netflix, Yahoo Mail, Dropbox, Whatsapp Web, NY Times, Codecademy, Vivaldi Browser, BBC and many more either partially or completely. This shows that react has huge scope and heavy use across web technologies. Even in mobile platform react native is used heavily.

React is taking the front end development by storm and is dominant on other front end development libraries. The future, sure, is secure for react.



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