


Assignment no :- 09

Topics covered :- ReactJS features

- React attribute JSX
- JSX comment styling
- Application.

Date of performance :- 14-10-22

Evaluation Criteria	Marks (out of 3)	Date	Signature of Instructor
Punctuality	03	20/10/2022	
Problem solving technique	03		
Attainment level (out of 3)	03		



Assignment No :- 09

Q. 1) What is ReactJS, explain the feature of it along with advantage of ReactJS

⇒ React is a JavaScript library for building user interfaces.

React is used to build single page applications.

React allows us to create reusable UI components.

Feature

JSX :- JSX stands for JavaScript XML. JavaScript syntax extension, it is an XML or HTML like syntax used by ReactJS. This syntax is processed into JavaScript React code.

• Component :- ReactJS is about components. ReactJS application is made up of multiple components, and each component has its logic & control.

• Virtual Dom :- A virtual DOM object is a representation of the original DOM object. It works like a one-way data binding.

• Simplicity :- ReactJS uses JSX HTML which makes the application simple & code is well understood.

• Performance :- ReactJS is known to be very performant. This feature makes it much better than other frameworks out there today.



## • Advantage of ReactJS

### ① Easy to Learn

ReactJS is much easier to learn & use. It comes with good supply of documentation, tutorial & resource.

### ② Creating dynamic web App.

! To create a dynamic web application with HTML strings was tricky before it required a complex coding. But ReactJS solve that issue and make it easy. It provides less coding & give more fun.

### ③ Performance Enhancement

ReactJS improve performance due to virtual DOM. The DOM is cross-platform & programming API which deal with HTML, XML or XHTML.

### ④ Scope of Testing

ReactJS application is extremely easy to test.

### ⑤ Benefit of Having JS library

• ReactJS is choosing by most of the web application. It can be used with other rich javascript library.

• The javascript library provide more flexibility to the web developer to choose the way to work.



- Q.2) What is JSX. enlist the use of it, explain the attributes of JSX?
- React JSX for Javascript XML
  - JSX allow to write HTML in React
  - JSX makes easier to write and add HTML in React
  - The Syntax is used to preprocess to transform HTML-like Syntax into standard JS object that a javascript engine will parse

### Use

- JSX is allow us to write HTML element in Javascript and place them in the DOM without any `createElement()` or `appendChild()` method.
- It faster than other Javascript
- It makes easy to create template
- It is type-safe so most of the error can be found.

### JSX Attribute

JSX Attribute with HTML element same as regular HTML. JSX use camel naming convention for attributes rather than standard naming convention HTML such as `class` in HTML. `class` name in JSX become the `className` in the regular JSX. `become` the `class` in the regular keyword in Javascript.

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- we can also use unown attribute in JSX.
- we need to use data-props

Ex.

import React from 'react';

class App extends Component {

render ()

return

<div> Hello </div>

</div>

};

}

export default App



Q.3) Explain JSX comment & styling?  
JSX comment

JSX allows us to use comment that begin with `/*` and end with `*/` and wrapping them in curly braces `{}`. Just like in the case of JSX expression.

Ex.

```
import React, { Component } from 'react';
```

```
class App extends Component {
```

```
  render() {
```

```
    return (
```

```
      <div>
```

```
        <h1> {this.props.name} </h1>
```

```
        /* This is a comment */
```

```
      </div>
```

```
    );
```

```
  }
```

```
}
```

```
export default App;
```



## Jsx Styling

React always recommends to use inline style style. To set inline style, you need to use camel case syntax. React automatically allow appending px after the number value specifies element.

Ex

```
import React, { Component } from 'React';  
class App extends Component {
```

```
  render() {
```

```
    var myStyle = {
```

```
      fontSize: 80,
```

```
      fontFamily: 'cursive',
```

```
      color: 'red',
```

```
    };  
    return (
```

```
      <div>
```

```
        <h1 style={myStyle}>Hello World</h1>
```

```
      </div>
```

```
    );
```

```
  }
```

```
}  
export default App;
```



Q.2 What are the simple application of JSX?

→ Step ① install create-react-app

To install tool we have use the following command in the command line

`npm install -g create-react-app`

Step ② Create the application

Now, if you want to create the first application using create-react-app tool. Run this command to name of your application

`npm create-react-app - react app`

Step ③ Start application

`cd reactapp  
npm start`

Step ④ Create API call

Open app with your favourite code editor like VS Code  
for main `comp.js` (App.js). Let's open it and take a look  
what's inside. We can find the code which is

`http://localhost:3000`



```
import React from 'react'
import logo from './logo.svg'
import './App.css'
```

```
function App() {
  <div className = 'App'>
    <header className = 'App-header'>
      <img src = {logo} className = 'App-logo' alt = 'logo' />
    <p>
      Edit <code>src/App.js</code>
    </p>
  </div>
```

```
    className = 'App-link'
    href = 'https://react.js.org/'
    target = '_blank'
    rel = 'noopener noreferrer'
  </a>
  </header>
  </div>
```

Learn React

</a>

</header>

</div>

);

};

} export default App;



Let's start by modifying the component to change it into a class component, which will be much more convenient in our 'C24'. We want our APP.JS component look in the following way.

```
import React, { Component } from 'react';  
class App extends Component {  
  render() {  
    return ?  
    <p> Hello world </p>  
  }  
}  
export default App;
```

20/10/2022  
03