

## WEEK – 6

### 1) ReactJS-HOL

```
JS App.js ×
src > JS App.js > App
1  import React from 'react';
2
3  function App() {
4    return (
5      <div>
6        <h1>Welcome to the first session of React</h1>
7        <h2>Welcome to the first session of React</h2>
8      </div>
9    );
10 }
11
12 export default App;
13
```

### Output



**Welcome to the first session of React**

**Welcome to the first session of React**

## 2) ReactJS-HOL

```
JS App.js X
src > JS App.js > ...
1  import React from 'react';
2  import Home from './Components/Home';
3  import About from './Components/About';
4  import Contact from './Components/Contact';
5
6  function App() {
7    return (
8      <div className="App">
9        <h1>Student Management Portal</h1>
10       <Home />
11       <About />
12       <Contact />
13     </div>
14   );
15 }
16   (alias) function App(): JSX.Element
17   export default App
18   export default App;
```

```
JS About.js X
src > Components > JS About.js > ...
1  import React from 'react';
2
3  function About() {
4    return (
5      <div>
6        <h2>Welcome to the About page of the Student Management Portal</h2>
7      </div>
8    );
9  }
10
11  export default About;
```

```
JS Contact.js X
src > Components > JS Contact.js > ...
1  import React from 'react';
2
3  function Contact() {
4    return (
5      <div>
6        <h2>Welcome to the Contact page of the Student Management Portal</h2>
7      </div>
8    );
9  }
10
11  export default Contact;
```

```
JS Home.js x
src > Components > JS Home.js > ...
1  import React from 'react';
2
3  function Home() {
4    return (
5      <div>
6        <h2>Welcome to the Home page of Student Management Portal</h2>
7      </div>
8    );
9  }
10
11  export default Home;
12
```

## Output



# Student Management Portal

Welcome to the Home page of Student Management Portal

Welcome to the About page of the Student Management Portal

Welcome to the Contact page of the Student Management Portal

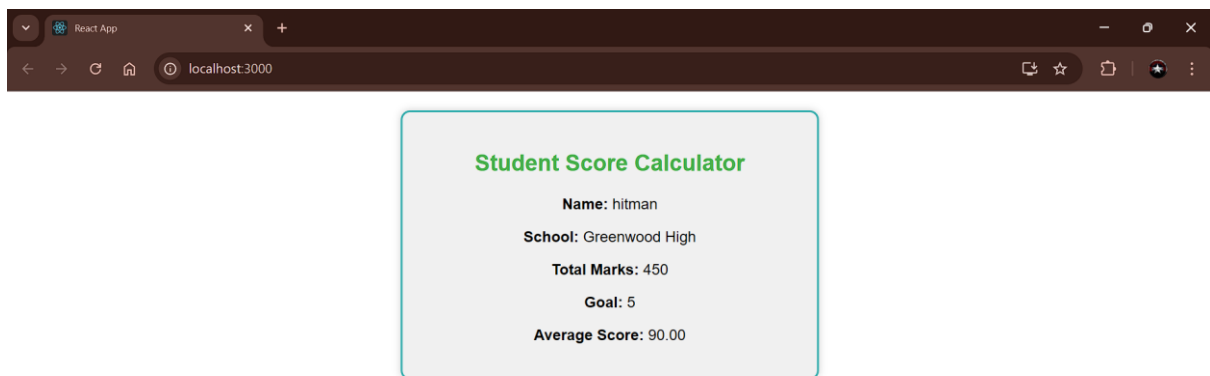
### 3) ReactJS-HOL

```
JS CalculateScore.js JS App.js X # mystyle.css
scorecalculatorapp > src > JS App.js > App
1 import React from 'react';
2 import './App.css';
3 import CalculateScore from './Components/CalculateScore';
4
5 function App() {
6   return (
7     <div className="App">
8       <CalculateScore name="hitman" school="Greenwood High" total={450} goal={5} />
9     </div>
10   );
11 }
12
13 export default App;
14
```

```
JS CalculateScore.js X JS App.js # mystyle.css
scorecalculatorapp > src > Components > JS CalculateScore.js > CalculateScore
1 import React from 'react';
2 import '../StyleSheets/mystyle.css';
3
4 function CalculateScore(props) {
5   const average = props.total / props.goal;
6
7   return (
8     <div className="score-card">
9       <h2>Student Score Calculator</h2>
10       <p><strong>Name:</strong> {props.name}</p>
11       <p><strong>School:</strong> {props.school}</p>
12       <p><strong>Total Marks:</strong> {props.total}</p>
13       <p><strong>Goal:</strong> {props.goal}</p>
14       <p><strong>Average Score:</strong> {average.toFixed(2)}</p>
15     </div>
16   );
17 }
18
19 export default CalculateScore;
20
```

```
JS CalculateScore.js JS App.js # mystyle.css X
scorecalculatorapp > src > StyleSheets > # mystyle.css > .score-card
1  .score-card {
2    background-color: #f0f0f0;
3    border: 2px solid #4cafaf;
4    padding: 20px;
5    margin: 20px auto;
6    width: 400px;
7    border-radius: 10px;
8    font-family: Arial, sans-serif;
9    box-shadow: 0px 0px 8px #ccc;
10 }
11
12 .score-card h2 {
13   color: #4CAF50;
14 }
15
```

## Output



#### 4) ReactJS-HOL

```
JS App.js  X
blogapp > src > JS App.js > ...
1  import React from 'react';
2  import './App.css';
3  import Posts from './Components/Posts';
4
5  function App() {
6    return (
7      <div className="App">
8        <Posts />
9      </div>
10   );
11 }
12
13 export default App;
14
```

```
JS Post.js  X
blogapp > src > Components > JS Post.js > Post
1  class Post {
2    constructor(userId, id, title, body) {
3      this.userId = userId;
4      this.id = id;
5      this.title = title;
6      this.body = body;
7    }
8  }
9
10 export default Post;
11
```

```
JS Posts.js x
blogapp > src > Components > JS Posts.js > ...
1 import React, { Component } from 'react';
2 import Post from '../Post';
3
4 class Posts extends Component {
5   constructor(props) {
6     super(props);
7     this.state = {
8       posts: [],
9       hasError: false
10    };
11  }
12
13  componentDidMount() {
14    this.loadPosts();
15  }
16
17  loadPosts() {
18    const data = [
19      {
20        userId: 1,
21        id: 1,
22        title: 'How to Build a React App',
23        body: 'This post explains the basic steps to build a React application using Create React App.'
24      },
25      {
26        userId: 2,
27        id: 2,
28        title: 'Understanding Component Lifecycle',
29        body: 'In this post, we explore how lifecycle methods work in React class components.'
30      },

```

```
JS Posts.js x
blogapp > src > Components > JS Posts.js > ...
4 class Posts extends Component {
17   loadPosts() {
18     const data = [
30     ],
31     {
32       userId: 3,
33       id: 3,
34       title: 'Why Use React?',
35       body: 'React is a powerful JavaScript library for building user interfaces efficiently.'
36     }
37   ];
38
39   const postList = data.map(post => new Post(post.userId, post.id, post.title, post.body));
40   this.setState({ posts: postList });
41 }
42
43
44 componentDidCatch(error, info) {
45   alert('Something went wrong while rendering posts.');
```

```
46   console.error('Error caught by componentDidCatch:', error, info);
47 }
48
49 render() {
50   if (this.state.hasError) {
51     return <h2>Error loading posts</h2>;
52   }
53
54   return (
55     <div>
56       <h1>Blog Posts</h1>
57       {this.state.posts.map(post => (
58         <div key={post.id} style={{ marginBottom: '20px' }}>
```

Ln 1, Col 1 Spaces: 2 UTF-8 CRLF {} JavaScript

```
JS Posts.js x
blogapp > src > Components > JS Posts.js > ...
4  class Posts extends Component {
42
43
44  componentDidCatch(error, info) {
45    alert('Something went wrong while rendering posts.');
```

```
46    console.error('Error caught by componentDidCatch:', error, info);
47  }
48
49  render() {
50    if (this.state.hasError) {
51      return <h2>Error loading posts</h2>;
52    }
53
54    return (
55      <div>
56        <h1>Blog Posts</h1>
57        {this.state.posts.map(post => (
58          <div key={post.id} style={{ marginBottom: '20px' }}>
59            <h3>{post.title}</h3>
60            <p>{post.body}</p>
61          </div>
62        ))}
63      </div>
64    );
65  }
66 }
67
68 export default Posts;
69
```

## Output



# Blog Posts

## How to Build a React App

This post explains the basic steps to build a React application using Create React App.

## Understanding Component Lifecycle

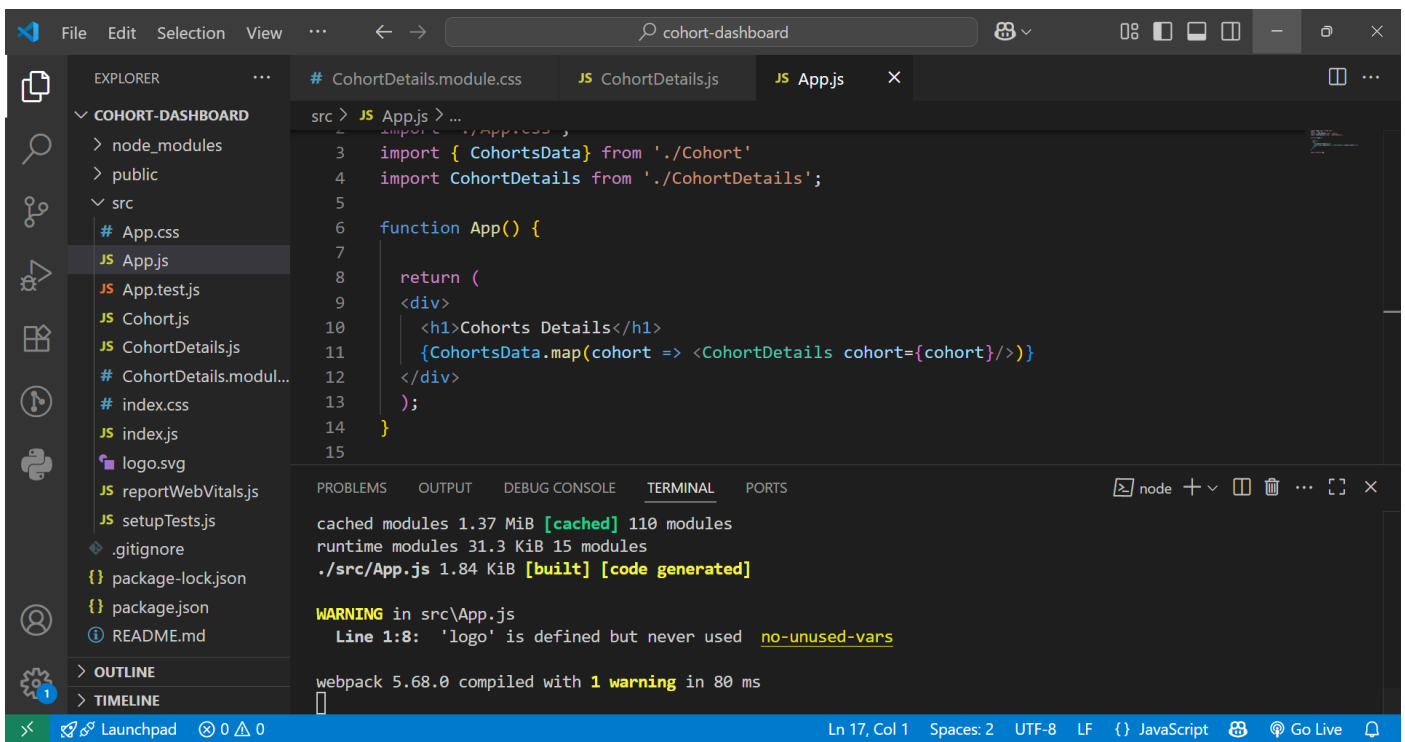
In this post, we explore how lifecycle methods work in React class components.

## Why Use React?

React is a powerful JavaScript library for building user interfaces efficiently.



## 5) ReactJS-HOL



The screenshot shows the VS Code editor with the 'CohortDetails.js' file open. The file contains the following code:

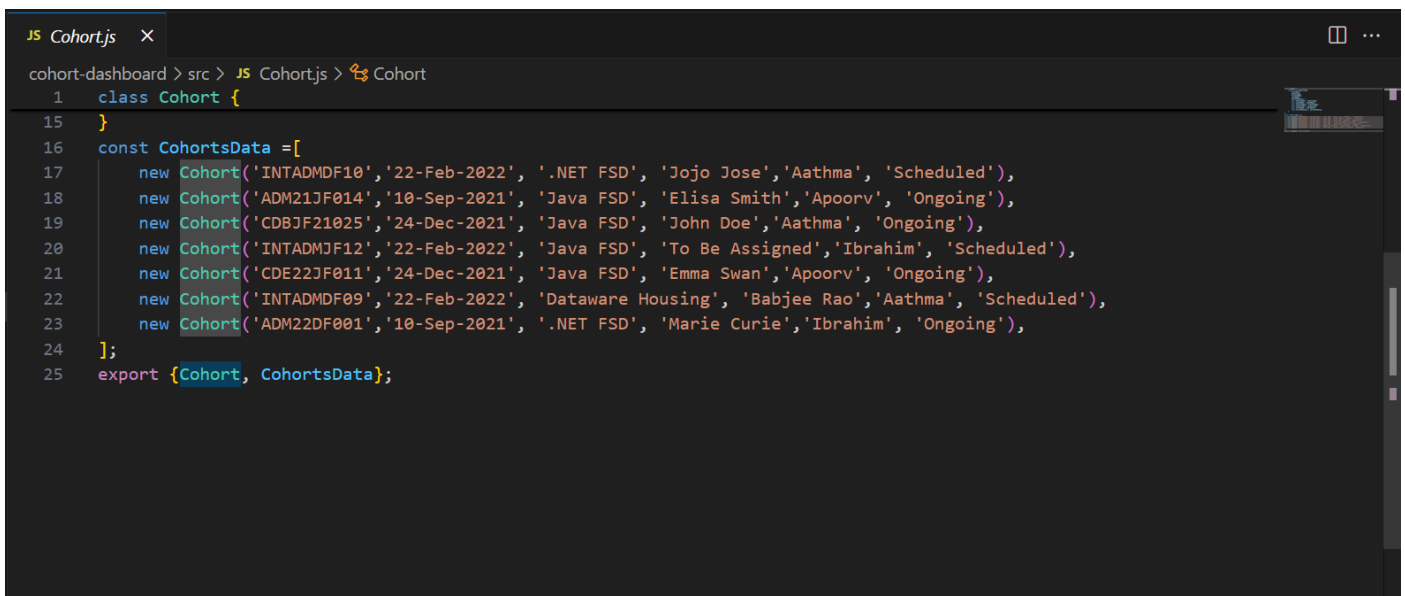
```
src > JS App.js > ...
1 import './App.css';
2
3 import { CohortsData } from './Cohort';
4 import CohortDetails from './CohortDetails';
5
6 function App() {
7
8   return (
9     <div>
10       <h1>Cohorts Details</h1>
11       {CohortsData.map(cohort => <CohortDetails cohort={cohort}/>)}
12     </div>
13   );
14 }
15
```

The terminal output shows the following information:

```
cached modules 1.37 MiB [cached] 110 modules
runtime modules 31.3 KiB 15 modules
./src/App.js 1.84 KiB [built] [code generated]

WARNING in src\App.js
  Line 1:8: 'logo' is defined but never used  no-unused-vars

webpack 5.68.0 compiled with 1 warning in 80 ms
```



The screenshot shows the VS Code editor with the 'Cohort.js' file open. The file contains the following code:

```
JS Cohort.js >
cohort-dashboard > src > JS Cohort.js > Cohort
1 class Cohort {
15 }
16 const CohortsData =[
17   new Cohort('INTADMDF10','22-Feb-2022', '.NET FSD', 'Jojo Jose','Aathma', 'Scheduled'),
18   new Cohort('ADM21JF014','10-Sep-2021', 'Java FSD', 'Elisa Smith','Apoorv', 'Ongoing'),
19   new Cohort('CDBJF21025','24-Dec-2021', 'Java FSD', 'John Doe','Aathma', 'Ongoing'),
20   new Cohort('INTADMJF12','22-Feb-2022', 'Java FSD', 'To Be Assigned','Ibrahim', 'Scheduled'),
21   new Cohort('CDE22JF011','24-Dec-2021', 'Java FSD', 'Emma Swan','Apoorv', 'Ongoing'),
22   new Cohort('INTADMDF09','22-Feb-2022', 'Dataware Housing', 'Babjee Rao','Aathma', 'Scheduled'),
23   new Cohort('ADM22DF001','10-Sep-2021', '.NET FSD', 'Marie Curie','Ibrahim', 'Ongoing'),
24 ];
25 export {Cohort, CohortsData};
```

```
JS CohortDetails.js X
cohort-dashboard > src > JS CohortDetails.js > ...
1 import React from 'react';
2 import styles from './CohortDetails.module.css'; // Assuming this file is in same folder
3
4 function CohortDetails(props) {
5   const { cohort } = props;
6
7   // Inline style for h3 based on currentStatus
8   const statusStyle = {
9     color: cohort.currentStatus.toLowerCase() === 'ongoing' ? 'green' : 'blue'
10  };
11
12  return (
13    <div className={styles.box}>
14      <h3 style={statusStyle}>
15        {cohort.cohortCode} - <span>{cohort.technology}</span>
16      </h3>
17      <dl>
18        <dt>Started On</dt>
19        <dd>{cohort.startDate}</dd>
20        <dt>Current Status</dt>
21        <dd>{cohort.currentStatus}</dd>
22        <dt>Coach</dt>
23        <dd>{cohort.coachName}</dd>
24        <dt>Trainer</dt>
25        <dd>{cohort.trainerName}</dd>
26      </dl>
27    </div>
28  );
29 }
30
31 export default CohortDetails;
32
```

## Output

### Cohorts Details

<b>INTADMDF10 - .NET FSD</b>  Started On 22-Feb-2022 Current Status Scheduled Coach Aathma Trainer Jojo Jose	<b>ADM21JF014 - Java FSD</b>  Started On 10-Sep-2021 Current Status Ongoing Coach Apoorv Trainer Elisa Smith	<b>CDBJF21025 - Java FSD</b>  Started On 24-Dec-2021 Current Status Ongoing Coach Aathma Trainer John Doe
<b>INTADMJF12 - Java FSD</b>  Started On 22-Feb-2022 Current Status Scheduled Coach Ibrahim	<b>CDE22JF011 - Java FSD</b>  Started On 24-Dec-2021 Current Status Ongoing Coach Apoorv	<b>INTADMDF09 - Dataware Housing</b>  Started On 22-Feb-2022 Current Status Scheduled Coach Aathma