Digital Nurture 4.0 – Deep Skilling Program

Java Full Stack Engineer (FSE)

Week 3 – Mandatory Exercises Submission

Name: Adishree Devoor

GitHub Profile: https://github.com/Adishree16

Email: [adishreedevoor18@gmail.com](mailto:adishreedevoor18@gmail.com)

Skills Covered:

* React

**React**

**1.Create a new React Application with the name “myfirstreact”, Run the application to print “welcome to the first session of React” as heading of that page.**

Description

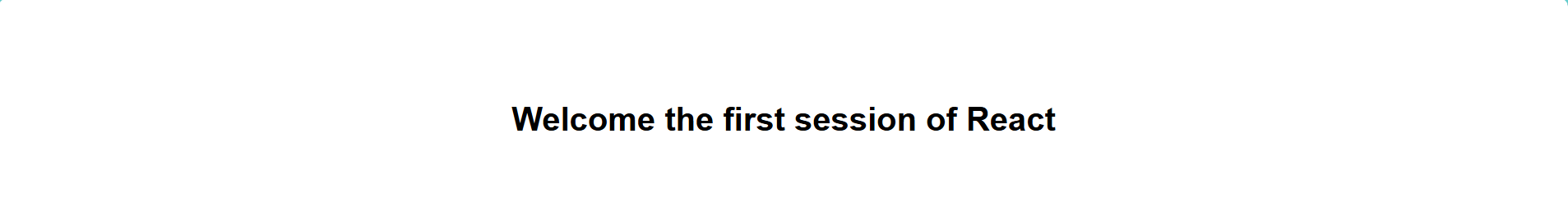
replace App.js contents with:

function App() {  
 return (  
 <h1> Welcome the first session of React </h1>  
 );  
}*export default App;*

Program (App.js)

function App() {  
 return (  
 <h1>Welcome to the first session of React</h1>  
 );  
}

**Output**



**2.Create a react app for Student Management Portal named StudentApp and create a component named Home which will display the Message “Welcome to the Home page of Student Management Portal”. Create another component named About and display the Message “Welcome to the About page of the Student Management Portal”. Create a third component named Contact and display the Message “Welcome to the Contact page of the Student Management Portal”. Call all the three components.**

**Program**

Home.js

import React, { Component } from 'react';  
  
class Home extends Component {  
 render() {  
 return (  
 <div>  
 <h3>Welcome to the Home Page of Student Management Portal</h3>  
 </div>  
 );  
 }  
}  
  
export default Home;

About.js

import React, { Component } from 'react';  
  
class About extends Component {  
 render() {  
 return (  
 <div>  
 <h3>Welcome to the About Page of Student Management Portal</h3>  
 </div>  
 );  
 }  
}  
  
export default About;

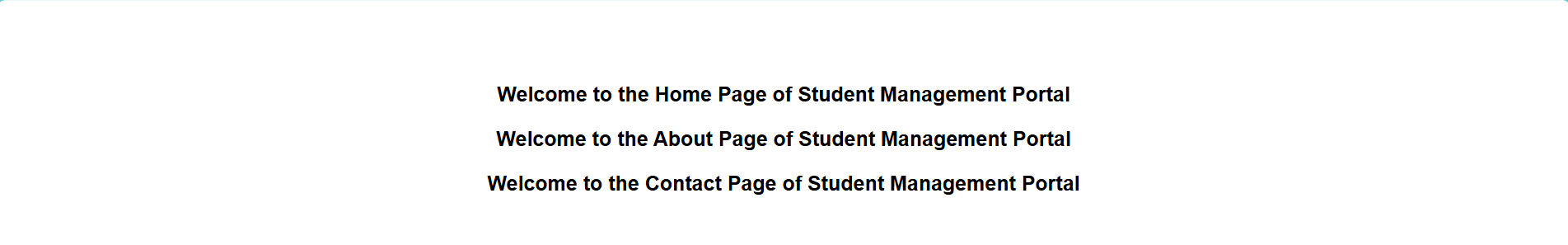
Contact.js

import React, { Component } from 'react';  
  
class Contact extends Component {  
 render() {  
 return (  
 <div>  
 <h3>Welcome to the Contact Page of Student Management Portal</h3>  
 </div>  
 );  
 }  
}  
  
export default Contact;

App.js

import React from 'react';  
import './App.css';  
import Home from './Components/Home';  
import About from './Components/About';  
import Contact from './Components/Contact';  
  
function App() {  
 return (  
 <div className="container">  
 <Home />  
 <About />  
 <Contact />  
 </div>  
 );  
}  
  
export default App;

**Output**



**3.Create a react app for Student Management Portal named scorecalculatorapp and create a function component named “CalculateScore” which will accept Name, School, Total and goal in order to calculate the average score of a student and display the same.**

CalculateScore.js

import '../Stylesheets/mystyle.css';  
  
const percentToDecimal = (decimal) => {  
 return (decimal.toFixed(2) + "%");  
}  
  
const calcScore = (total, goal) => {  
 return percentToDecimal(total / goal);  
}  
  
export const CalculateScore = ({ Name, School, total, goal }) => {  
 return (  
 <div className="formatstyle">  
 <h1><font color="Brown">Student Details:</font></h1>  
 <div className="Name">  
 <b><span> Name: </span> </b>  
 <span>{Name}</span>  
 </div>  
 <div className="School">  
 <b><span> School: </span> </b>  
 <span>{School}</span>  
 </div>  
 <div className="Total">  
 <b><span>Total:</span> </b>  
 <span>{total}</span>  
 <span>Marks</span>  
 </div>  
 <div className="Score">  
 <b>Score:</b>  
 <span>  
 {calcScore(total, goal)}  
 </span>  
 </div>  
 </div>  
 )  
}  
  
export default CalculateScore;

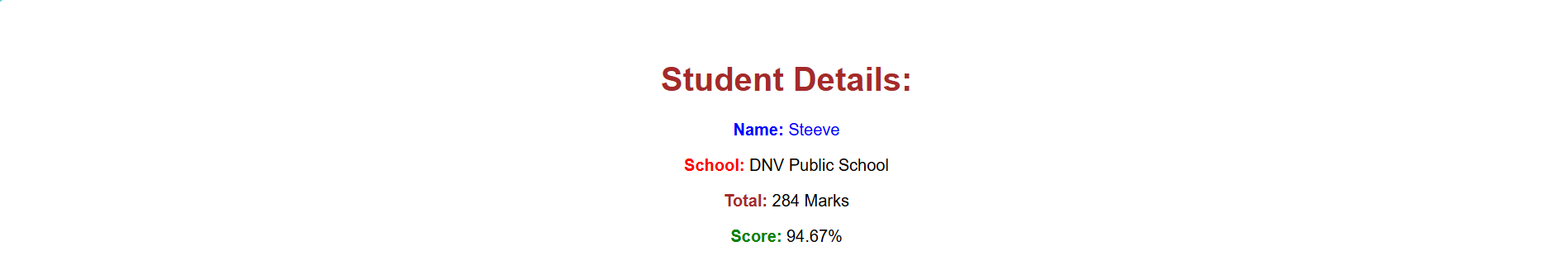
mystyle.css

.Name {  
 font-weight: 300;  
 color: blue;  
}  
  
.School {  
 color: crimson;  
}  
  
.Total {  
 color: darkmagenta;  
}  
  
.formatstyle {  
 text-align: center;  
 font-size: large;  
}  
  
.Score {  
 color: forestgreen;  
}

App.js

import { CalculateScore } from './components/CalculateScore';  
  
function App() {  
 return (  
 <div>  
 <CalculateScore  
 Name={"Steeve"}  
 School={"DNV Public School"}  
 total={284}  
 goal={300}  
 />  
 </div>  
 );  
}  
  
export default App;

**Output**



**React Lab: Blog App Project**

**4.Problem Statement**

**Create a React application named blogapp which uses a class-based component to fetch and display a list of blog posts using a Post class model and the Fetch API.**

Steps to follow:  
1. Create a new React application using create-react-app tool with the name “blogapp”.  
2. Open the application using VS Code.  
3. Create a new file named as Post.js in src folder with the following class definition:

class Post {  
 constructor(id, title, body){  
 this.id = id;  
 this.title = title;  
 this.body = body;  
 }  
}  
export default Post;

4. Create a new class-based component named as Posts inside Posts.js file.  
5. Initialize the component with a list of Post in the state of the component using the constructor.  
6. Create a method loadPosts() to fetch data from:  
 https://jsonplaceholder.typicode.com/posts  
7. Call loadPosts() inside componentDidMount().  
8. Use render() to display posts with heading and paragraph.  
9. Use componentDidCatch() to handle any errors.  
10. Use this Posts component in App.js.  
11. Run the application using npm start.

**Program**

Post.js

class Post {  
 constructor(id, title, body){  
 this.id = id;  
 this.title = title;  
 this.body = body;  
 }  
}  
export default Post;

Posts.js

import React from 'react';  
import Post from './Post';  
  
class Posts extends React.Component {  
 constructor(props){  
 super(props);  
 this.state = {  
 posts: []  
 }  
 }  
  
 loadPosts() {  
 fetch('https://jsonplaceholder.typicode.com/posts')  
 .then(response => response.json())  
 .then(data => {  
 const postList = data.slice(0, 5).map(p => new Post(p.id, p.title, p.body));  
 this.setState({ posts: postList });  
 });  
 }  
  
 componentDidMount() {  
 this.loadPosts();  
 }  
  
 componentDidCatch(error, info) {  
 alert("An error occurred: " + error);  
 }  
  
 render() {  
 return (  
 <div>  
 <h2>Posts</h2>  
 {this.state.posts.map(post => (  
 <div key={post.id}>  
 <h3>{post.title}</h3>  
 <p>{post.body}</p>  
 </div>  
 ))}  
 </div>  
 );  
 }  
}  
  
export default Posts;

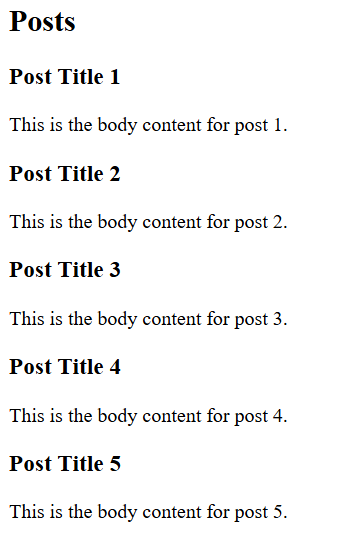
App.js

import React from 'react';  
import Posts from './Posts';  
  
function App() {  
 return (  
 <div className="App">  
 <Posts />  
 </div>  
 );  
}  
  
export default App;

**3. Output Description**

After running the application using the command `npm start`, open your browser at http://localhost:3000.  
  
import React from 'react';  
import Posts from './Posts';  
  
function App() {  
 return (  
 <div className="App">  
 <Posts />  
 </div>  
 );  
}  
  
export default App;

**Output**



**5.My Academy team at Cognizant wants to create a dashboard containing the details of ongoing and completed cohorts. A React application is created which displays the detail of the cohorts using React components. You are assigned the task of styling these React components.**

**Instructions:**

1. **Unzip** the React application in a folder.
2. **Open command prompt** and switch to the React application folder.
3. **Restore the node packages** using the command:

nginx

CopyEdit

npm install

1. **Open** the application using **VS Code**.
2. **Create a CSS Module** in a file named CohortDetails.module.css.
3. **Define a CSS class** box with:
   * width: 300px
   * display: inline-block
   * margin: 10px (overall)
   * padding: 10px top/bottom, 20px left/right
   * border: 1px solid black
   * border-radius: 10px
4. Define a style for HTML <dt> tag using a **tag selector** and set font-weight: 500.
5. Import the **CSS Module** in the CohortDetails component.
6. Apply the **box class** to the outer container <div>.
7. For the <h3> element, apply:
   * **Green color** if status is "Ongoing"
   * **Blue color** in all other cases
8. The final output should visually match the layout shown in the lab image (three boxes for different cohorts).

**Program**

CohortDetails.module.css

.box {  
 width: 300px;  
 display: inline-block;  
 margin: 10px;  
 padding: 10px 20px;  
 border: 1px solid black;  
 border-radius: 10px;  
}  
  
dt {  
 font-weight: 500;  
}  
  
.statusOngoing {  
 color: green;  
}  
  
.statusOther {  
 color: blue;  
}

CohortDetails.js

import React from 'react';  
import styles from './CohortDetails.module.css';  
  
const CohortDetails = () => {  
 const cohorts = [  
 {  
 id: 1,  
 name: "INTADMDF10 - .NET FSD",  
 startDate: "22-Feb-2022",  
 status: "Scheduled",  
 coach: "Jacob Jose",  
 approver: "N/A",  
 trainer: "N/A"  
 },  
 {  
 id: 2,  
 name: "ADM21JF014 - Java FSD",  
 startDate: "10-Sep-2021",  
 status: "Ongoing",  
 coach: "Anoop",  
 approver: "Elisa Smith",  
 trainer: "N/A"  
 },  
 {  
 id: 3,  
 name: "CDBJF21025 - Java FSD",  
 startDate: "24-Dec-2021",  
 status: "Ongoing",  
 coach: "John Doe",  
 approver: "N/A",  
 trainer: "N/A"  
 }  
 ];  
  
 return (  
 <div>  
 <h2>Cohorts Details</h2>  
 {cohorts.map(cohort => (  
 <div key={cohort.id} className={styles.box}>  
 <h3 className={cohort.status === 'Ongoing' ? styles.statusOngoing : styles.statusOther}>  
 {cohort.name}  
 </h3>  
 <dl>  
 <dt>Started On</dt>  
 <dd>{cohort.startDate}</dd>  
 <dt>Current Status</dt>  
 <dd>{cohort.status}</dd>  
 <dt>Coach</dt>  
 <dd>{cohort.coach}</dd>  
 <dt>Approver</dt>  
 <dd>{cohort.approver}</dd>  
 <dt>Trainer</dt>  
 <dd>{cohort.trainer}</dd>  
 </dl>  
 </div>  
 ))}  
 </div>  
 );  
};  
  
export default CohortDetails;

App.js

import React from 'react';  
import CohortDetails from './components/CohortDetails';  
  
function App() {  
 return (  
 <div className="App">  
 <CohortDetails />  
 </div>  
 );  
}  
  
export default App;

**Output**

