**REACTJS ASSIGNMENT**

## **1. First React Application (myfirstreact)**

### **Installation Commands**

npm install -g create-react-app

npx create-react-app myfirstreact

cd myfirstreact

npm start

### **App.js**

import React from 'react';

function App() {

return (

<div>

<h1>Welcome to the first session of React</h1>

</div>

);

}

export default App;

## **2. Student Management Portal (StudentApp)**

### **Installation Commands**

npx create-react-app StudentApp

cd StudentApp

npm start

### **src/Components/Home.js**

import React from 'react';

function Home() {

return (

<div>

<h1>Welcome to the Home page of Student Management Portal</h1>

</div>

);

}

export default Home;

### **src/Components/About.js**

import React from 'react';

function About() {

return (

<div>

<h1>Welcome to the About page of the Student Management Portal</h1>

</div>

);

}

export default About;

### **src/Components/Contact.js**

import React from 'react';

function Contact() {

return (

<div>

<h1>Welcome to the Contact page of the Student Management Portal</h1>

</div>

);

}

export default Contact;

### **src/App.js**

import React from 'react';

import Home from './Components/Home';

import About from './Components/About';

import Contact from './Components/Contact';

function App() {

return (

<div>

<Home />

<About />

<Contact />

</div>

);

}

export default App;

## **3. Score Calculator (scorecalculatorapp)**

### **Installation Commands**

npx create-react-app scorecalculatorapp

cd scorecalculatorapp

npm start

### **src/Components/CalculateScore.js**

import React from 'react';

import '../Stylesheets/mystyle.css';

function CalculateScore({ name, school, total, goal }) {

const average = total / goal;

return (

<div className="score-container">

<h2>Student Score Calculator</h2>

<p>Name: {name}</p>

<p>School: {school}</p>

<p>Total Score: {total}</p>

<p>Goal: {goal}</p>

<p>Average Score: {average.toFixed(2)}</p>

</div>

);

}

export default CalculateScore;

### **src/Stylesheets/mystyle.css**

.score-container {

border: 1px solid #ccc;

padding: 20px;

margin: 20px;

border-radius: 5px;

}

### **src/App.js**

import React from 'react';

import CalculateScore from './Components/CalculateScore';

function App() {

return (

<div>

<CalculateScore name="John Doe" school="XYZ High" total={450} goal={5} />

</div>

);

}

export default App;

## **4. Blog App (blogapp)**

### **Installation Commands**

npx create-react-app blogapp

cd blogapp

npm start

### **src/Post.js**

import React from 'react';

class Post extends React.Component {

render() {

return (

<div>

<h3>{this.props.title}</h3>

<p>{this.props.body}</p>

</div>

);

}

}

export default Post;

### **src/Posts.js**

import React from 'react';

import Post from './Post';

class Posts extends React.Component {

constructor(props) {

super(props);

this.state = {

posts: [],

error: null

};

}

loadPosts = async () => {

try {

const response = await fetch('https://jsonplaceholder.typicode.com/posts');

const data = await response.json();

this.setState({ posts: data });

} catch (error) {

this.setState({ error: error.message });

}

};

componentDidMount() {

this.loadPosts();

}

componentDidCatch(error, info) {

alert(`Error: ${error.message}`);

}

render() {

const { posts, error } = this.state;

if (error) return <div>Error: {error}</div>;

return (

<div>

{posts.map(post => (

<Post key={post.id} title={post.title} body={post.body} />

))}

</div>

);

}

}

export default Posts;

### **src/App.js**

import React from 'react';

import Posts from './Posts';

function App() {

return (

<div>

<Posts />

</div>

);

}

export default App;

## **5. Cohort Dashboard**

### **Installation Commands**

npm install

npm start

### **src/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;

}

### **src/CohortDetails.js**

import React from 'react';

import styles from './CohortDetails.module.css';

function CohortDetails({ cohort }) {

const headingStyle = {

color: cohort.status === 'ongoing' ? 'green' : 'blue'

};

return (

<div className={styles.box}>

<h3 style={headingStyle}>{cohort.name}</h3>

<dl>

<dt>Status:</dt>

<dd>{cohort.status}</dd>

<dt>Start Date:</dt>

<dd>{cohort.startDate}</dd>

<dt>End Date:</dt>

<dd>{cohort.endDate}</dd>

</dl>

</div>

);

}

export default CohortDetails;

## **6. Trainers App (TrainersApp)**

### **Installation Commands**

npx create-react-app TrainersApp

cd TrainersApp

npm install react-router-dom

npm start

### **src/Trainer.js**

import React from 'react';

class Trainer extends React.Component {

render() {

return (

<div>

<p>Trainer ID: {this.props.trainerId}</p>

<p>Name: {this.props.name}</p>

<p>Email: {this.props.email}</p>

<p>Phone: {this.props.phone}</p>

<p>Technology: {this.props.technology}</p>

<p>Skills: {this.props.skills.join(', ')}</p>

</div>

);

}

}

export default Trainer;

### **src/TrainersMock.js**

const trainers = [

{

trainerId: 1,

name: 'John Doe',

email: 'john@example.com',

phone: '123-456-7890',

technology: 'React',

skills: ['JavaScript', 'React', 'Node.js']

},

{

trainerId: 2,

name: 'Jane Smith',

email: 'jane@example.com',

phone: '098-765-4321',

technology: 'Angular',

skills: ['TypeScript', 'Angular', 'CSS']

}

];

export default trainers;

### **src/TrainersList.js**

import React from 'react';

import { Link } from 'react-router-dom';

import trainers from './TrainersMock';

function TrainersList() {

return (

<div>

<h2>Trainers List</h2>

<ul>

{trainers.map(trainer => (

<li key={trainer.trainerId}>

<Link to={`/trainers/${trainer.trainerId}`}>{trainer.name}</Link>

</li>

))}

</ul>

</div>

);

}

export default TrainersList;

### **src/Home.js**

import React from 'react';

function Home() {

return (

<div>

<h1>Welcome to Cognizant Academy Trainers Portal</h1>

</div>

);

}

export default Home;

### **src/TrainerDetails.js**

import React from 'react';

import { useParams } from 'react-router-dom';

import trainers from './TrainersMock';

function TrainerDetails() {

const { id } = useParams();

const trainer = trainers.find(t => t.trainerId === parseInt(id));

return (

<div>

<h2>Trainer Details</h2>

{trainer ? (

<div>

<p>Name: {trainer.name}</p>

<p>Email: {trainer.email}</p>

<p>Phone: {trainer.phone}</p>

<p>Technology: {trainer.technology}</p>

<p>Skills: {trainer.skills.join(', ')}</p>

</div>

) : (

<p>Trainer not found</p>

)}

</div>

);

}

export default TrainerDetails;

### **src/App.js**

import React from 'react';

import { BrowserRouter, Routes, Route, Link } from 'react-router-dom';

import Home from './Home';

import TrainersList from './TrainersList';

import TrainerDetails from './TrainerDetails';

function App() {

return (

<BrowserRouter>

<div>

<nav>

<Link to="/">Home</Link> | <Link to="/trainers">Trainers</Link>

</nav>

<Routes>

<Route path="/" element={<Home />} />

<Route path="/trainers" element={<TrainersList />} />

<Route path="/trainers/:id" element={<TrainerDetails />} />

</Routes>

</div>

</BrowserRouter>

);

}

export default App;

## **7. Shopping App (shoppingapp)**

### **Installation Commands**

npx create-react-app shoppingapp

cd shoppingapp

npm start

### **src/Cart.js**

import React from 'react';

class Cart extends React.Component {

render() {

return (

<div>

<p>Item: {this.props.itemname}</p>

<p>Price: ${this.props.price}</p>

</div>

);

}

}

export default Cart;

### **src/OnlineShopping.js**

import React from 'react';

import Cart from './Cart';

class OnlineShopping extends React.Component {

state = {

cartItems: [

{ itemname: 'Laptop', price: 999 },

{ itemname: 'Phone', price: 699 },

{ itemname: 'Headphones', price: 99 },

{ itemname: 'Tablet', price: 499 },

{ itemname: 'Smartwatch', price: 199 }

]

};

render() {

return (

<div>

<h2>Online Shopping</h2>

{this.state.cartItems.map((item, index) => (

<Cart key={index} itemname={item.itemname} price={item.price} />

))}

</div>

);

}

}

export default OnlineShopping;

### **src/App.js**

import React from 'react';

import OnlineShopping from './OnlineShopping';

function App() {

return (

<div>

<OnlineShopping />

</div>

);

}

export default App;

## **8. Counter App (counterapp)**

### **Installation Commands**

npx create-react-app counterapp

cd counterapp

npm start

### **src/CountPeople.js**

import React from 'react';

class CountPeople extends React.Component {

constructor(props) {

super(props);

this.state = {

entrycount: 0,

exitcount: 0

};

}

UpdateEntry = () => {

this.setState(prevState => ({

entrycount: prevState.entrycount + 1

}));

};

UpdateExit = () => {

this.setState(prevState => ({

exitcount: prevState.exitcount + 1

}));

};

render() {

return (

<div>

<h2>Mall Counter</h2>

<p>People Entered: {this.state.entrycount}</p>

<p>People Exited: {this.state.exitcount}</p>

<button onClick={this.UpdateEntry}>Login</button>

<button onClick={this.UpdateExit}>Exit</button>

</div>

);

}

}

export default CountPeople;

### **src/App.js**

import React from 'react';

import CountPeople from './CountPeople';

function App() {

return (

<div>

<CountPeople />

</div>

);

}

export default App;

## **9. Cricket App (cricketapp)**

### **Installation Commands**

npx create-react-app cricketapp

cd cricketapp

npm start

### **src/ListofPlayers.js**

import React from 'react';

function ListofPlayers() {

const players = [

{ name: 'Player 1', score: 85 },

{ name: 'Player 2', score: 65 },

{ name: 'Player 3', score: 90 },

{ name: 'Player 4', score: 45 },

{ name: 'Player 5', score: 75 },

{ name: 'Player 6', score: 55 },

{ name: 'Player 7', score: 80 },

{ name: 'Player 8', score: 60 },

{ name: 'Player 9', score: 95 },

{ name: 'Player 10', score: 70 },

{ name: 'Player 11', score: 50 }

];

const lowScorers = players.filter(player => player.score < 70);

return (

<div>

<h2>All Players</h2>

<ul>

{players.map((player, index) => (

<li key={index}>{player.name}: {player.score}</li>

))}

</ul>

<h2>Players with Score < 70</h2>

<ul>

{lowScorers.map((player, index) => (

<li key={index}>{player.name}: {player.score}</li>

))}

</ul>

</div>

);

}

export default ListofPlayers;

### **src/IndianPlayers.js**

import React from 'react';

function IndianPlayers() {

const T20players = ['T20 Player 1', 'T20 Player 2', 'T20 Player 3'];

const RanjiTrophy = ['Ranji Player 1', 'Ranji Player 2', 'Ranji Player 3'];

const mergedPlayers = [...T20players, ...RanjiTrophy];

const [oddPlayer, evenPlayer] = mergedPlayers;

return (

<div>

<h2>Indian Players</h2>

<p>Odd Team Player: {oddPlayer}</p>

<p>Even Team Player: {evenPlayer}</p>

<h3>Merged Players</h3>

<ul>

{mergedPlayers.map((player, index) => (

<li key={index}>{player}</li>

))}

</ul>

</div>

);

}

export default IndianPlayers;

### **src/App.js**

import React from 'react';

import ListofPlayers from './ListofPlayers';

import IndianPlayers from './IndianPlayers';

function App() {

const flag = true;

return (

<div>

{flag ? <ListofPlayers /> : <IndianPlayers />}

</div>

);

}

export default App;

## **10. Office Space Rental App (officespacerentalapp)**

### **Installation Commands**

npx create-react-app officespacerentalapp

cd officespacerentalapp

npm start

### **src/App.js**

import React from 'react';

function App() {

const offices = [

{ name: 'Office 1', rent: 55000, address: '123 Main St' },

{ name: 'Office 2', rent: 65000, address: '456 Oak Ave' },

{ name: 'Office 3', rent: 50000, address: '789 Pine Rd' }

];

return (

<div>

<h1>Office Space Rental</h1>

<img src="office.jpg" alt="Office Space" style={{ width: '300px' }} />

{offices.map((office, index) => (

<div key={index}>

<h3>{office.name}</h3>

<p style={{ color: office.rent < 60000 ? 'red' : 'green' }}>

Rent: {office.rent}

</p>

<p>Address: {office.address}</p>

</div>

))}

</div>

);

}

export default App;

## **11. Event Examples App (eventexamplesapp)**

### **Installation Commands**

npx create-react-app eventexamplesapp

cd eventexamplesapp

npm start

### **src/CurrencyConverter.js**

import React, { Component } from 'react';

class CurrencyConverter extends Component {

constructor(props) {

super(props);

this.state = {

rupees: 0,

euros: 0

};

}

handleChange = (event) => {

const rupees = event.target.value;

const euros = rupees / 88.5; // Assuming 1 EUR = 88.5 INR

this.setState({ rupees, euros });

};

handleSubmit = (event) => {

event.preventDefault();

alert(`Converted ${this.state.rupees} INR to ${this.state.euros.toFixed(2)} EUR`);

};

render() {

return (

<div>

<h2>Currency Converter</h2>

<form>

<input

type="number"

value={this.state.rupees}

onChange={this.handleChange}

placeholder="Enter amount in INR"

/>

<button onClick={this.handleSubmit}>Convert</button>

<p>{this.state.rupees} INR = {this.state.euros.toFixed(2)} EUR</p>

</form>

</div>

);

}

}

export default CurrencyConverter;

### **src/App.js**

import React, { Component } from 'react';

import CurrencyConverter from './CurrencyConverter';

class App extends Component {

constructor(props) {

super(props);

this.state = { count: 0 };

}

increment = () => {

this.setState(prevState => ({ count: prevState.count + 1 }));

this.sayHello();

};

decrement = () => {

this.setState(prevState => ({ count: prevState.count - 1 }));

};

sayHello = () => {

alert('Hello! This is a static message.');

};

sayWelcome = (message) => {

alert(message);

};

handlePress = (event) => {

alert('I was clicked');

};

render() {

return (

<div>

<h2>Event Examples</h2>

<p>Counter: {this.state.count}</p>

<button onClick={this.increment}>Increment</button>

<button onClick={this.decrement}>Decrement</button>

<button onClick={() => this.sayWelcome('welcome')}>Say Welcome</button>

<button onClick={this.handlePress}>OnPress</button>

<CurrencyConverter />

</div>

);

}

}

export default App;

## **12. Ticket Booking App (ticketbookingapp)**

### **Installation Commands**

npx create-react-app ticketbookingapp

cd ticketbookingapp

npm start

### **src/App.js**

import React, { Component } from 'react';

class App extends Component {

constructor(props) {

super(props);

this.state = { isLoggedIn: false };

}

handleLogin = () => {

this.setState({ isLoggedIn: true });

};

handleLogout = () => {

this.setState({ isLoggedIn: false });

};

render() {

const { isLoggedIn } = this.state;

const flights = [

{ id: 1, name: 'Flight A', destination: 'New York' },

{ id: 2, name: 'Flight B', destination: 'London' }

];

return (

<div>

{isLoggedIn ? (

<div>

<h2>User Page</h2>

<p>Welcome, User!</p>

<ul>

{flights.map(flight => (

<li key={flight.id}>

{flight.name} to {flight.destination} <button>Book</button>

</li>

))}

</ul>

<button onClick={this.handleLogout}>Logout</button>

</div>

) : (

<div>

<h2>Guest Page</h2>

<p>Please login to book tickets</p>

<ul>

{flights.map(flight => (

<li key={flight.id}>{flight.name} to {flight.destination}</li>

))}

</ul>

<button onClick={this.handleLogin}>Login</button>

</div>

)}

</div>

);

}

}

export default App;

## **13. Blogger App (bloggerapp)**

### **Installation Commands**

npx create-react-app bloggerapp

cd bloggerapp

npm start

### **src/BookDetails.js**

import React from 'react';

function BookDetails({ books }) {

return (

<div>

<h2>Book Details</h2>

<ul>

{books.map(book => (

<li key={book.id}>{book.title} by {book.author}</li>

))}

</ul>

</div>

);

}

export default BookDetails;

### **src/BlogDetails.js**

import React from 'react';

function BlogDetails({ blogs }) {

return (

<div>

<h2>Blog Details</h2>

<ul>

{blogs.map(blog => (

<li key={blog.id}>{blog.title} - {blog.content}</li>

))}

</ul>

</div>

);

}

export default BlogDetails;

### **src/CourseDetails.js**

import React from 'react';

function CourseDetails({ courses }) {

return (

<div>

<h2>Course Details</h2>

<ul>

{courses.map(course => (

<li key={course.id}>{course.name} ({course.duration})</li>

))}

</ul>

</div>

);

}

export default CourseDetails;

### **src/App.js**

import React, { Component } from 'react';

import BookDetails from './BookDetails';

import BlogDetails from './BlogDetails';

import CourseDetails from './CourseDetails';

class App extends Component {

render() {

const books = [

{ id: 1, title: 'Book A', author: 'Author A' },

{ id: 2, title: 'Book B', author: 'Author B' }

];

const blogs = [

{ id: 1, title: 'Blog 1', content: 'Content 1' },

{ id: 2, title: 'Blog 2', content: 'Content 2' }

];

const courses = [

{ id: 1, name: 'Course 1', duration: '3 months' },

{ id: 2, name: 'Course 2', duration: '6 months' }

];

const displayType = 'all'; // Can be 'books', 'blogs', 'courses', or 'all'

return (

<div>

<h2>Blogger App</h2>

{/\* Method 1: If-Else \*/}

{displayType === 'books' ? (

<BookDetails books={books} />

) : displayType === 'blogs' ? (

<BlogDetails blogs={blogs} />

) : displayType === 'courses' ? (

<CourseDetails courses={courses} />

) : (

<>

<BookDetails books={books} />

<BlogDetails blogs={blogs} />

<CourseDetails courses={courses} />

</>

)}

{/\* Method 2: Ternary Operator \*/}

{displayType === 'all' ? (

<>

<BookDetails books={books} />

<BlogDetails blogs={blogs} />

<CourseDetails courses={courses} />

</>

) : null}

{/\* Method 3: Logical && Operator \*/}

{displayType === 'all' && (

<>

<BookDetails books={books} />

<BlogDetails blogs={blogs} />

<CourseDetails courses={courses} />

</>

)}

</div>

);

}

}

export default App;

## **14. Employee Management App (employeeapp)**

### **Installation Commands**

npm install

npm start

### **src/ThemeContext.js**

import React from 'react';

const ThemeContext = React.createContext('light');

export default ThemeContext;

### **src/App.js**

import React, { Component } from 'react';

import ThemeContext from './ThemeContext';

import EmployeesList from './EmployeesList';

class App extends Component {

state = { theme: 'light' };

toggleTheme = () => {

this.setState(prevState => ({

theme: prevState.theme === 'light' ? 'dark' : 'light'

}));

};

render() {

return (

<ThemeContext.Provider value={this.state.theme}>

<div>

<button onClick={this.toggleTheme}>Toggle Theme</button>

<EmployeesList />

</div>

</ThemeContext.Provider>

);

}

}

export default App;

### **src/EmployeesList.js**

import React from 'react';

import EmployeeCard from './EmployeeCard';

function EmployeesList() {

const employees = [

{ id: 1, name: 'John Doe', role: 'Developer' },

{ id: 2, name: 'Jane Smith', role: 'Designer' }

];

return (

<div>

<h2>Employees List</h2>

{employees.map(employee => (

<EmployeeCard key={employee.id} employee={employee} />

))}

</div>

);

}

export default EmployeesList;

### **src/EmployeeCard.js**

import React, { useContext } from 'react';

import ThemeContext from './ThemeContext';

function EmployeeCard({ employee }) {

const theme = useContext(ThemeContext);

return (

<div>

<h3>{employee.name}</h3>

<p>Role: {employee.role}</p>

<button className={theme}>Action</button>

</div>

);

}

export default EmployeeCard;

## **15. Ticket Raising App (ticketraisingapp)**

### **Installation Commands**

npx create-react-app ticketraisingapp

cd ticketraisingapp

npm start

### **src/ComplaintRegister.js**

import React, { Component } from 'react';

class ComplaintRegister extends Component {

constructor(props) {

super(props);

this.state = {

employeeName: '',

complaint: '',

reference: ''

};

}

handleChange = (event) => {

this.setState({ [event.target.name]: event.target.value });

};

handleSubmit = (event) => {

event.preventDefault();

const reference = `REF${Math.floor(Math.random() \* 10000)}`;

this.setState({ reference });

alert(`Complaint submitted with Reference: ${reference}`);

};

render() {

return (

<div>

<h2>Raise a Complaint</h2>

<form onSubmit={this.handleSubmit}>

<div>

<label>Employee Name:</label>

<input

type="text"

name="employeeName"

value={this.state.employeeName}

onChange={this.handleChange}

/>

</div>

<div>

<label>Complaint:</label>

<textarea

name="complaint"

value={this.state.complaint}

onChange={this.handleChange}

/>

</div>

<button type="submit">Submit</button>

</form>

{this.state.reference && <p>Reference Number: {this.state.reference}</p>}

</div>

);

}

}

export default ComplaintRegister;

### **src/App.js**

import React from 'react';

import ComplaintRegister from './ComplaintRegister';

function App() {

return (

<div>

<ComplaintRegister />

</div>

);

}

export default App;

## **16. Mail Register App (mailregisterapp)**

### **Installation Commands**

npx create-react-app mailregisterapp

cd mailregisterapp

npm start

### **src/Register.js**

import React, { Component } from 'react';

class Register extends Component {

constructor(props) {

super(props);

this.state = {

name: '',

email: '',

password: '',

errors: {}

};

}

handleChange = (event) => {

this.setState({ [event.target.name]: event.target.value });

};

validateForm = () => {

const { name, email, password } = this.state;

const errors = {};

if (name.length < 5) errors.name = 'Name must be at least 5 characters';

if (!email.includes('@') || !email.includes('.')) errors.email = 'Invalid email';

if (password.length < 8) errors.password = 'Password must be at least 8 characters';

return errors;

};

handleSubmit = (event) => {

event.preventDefault();

const errors = this.validateForm();

if (Object.keys(errors).length === 0) {

alert('Registration successful!');

this.setState({ errors: {} });

} else {

this.setState({ errors });

}

};

render() {

const { name, email, password, errors } = this.state;

return (

<div>

<h2>Register</h2>

<form onSubmit={this.handleSubmit}>

<div>

<label>Name:</label>

<input

type="text"

name="name"

value={name}

onChange={this.handleChange}

/>

{errors.name && <p style={{ color: 'red' }}>{errors.name}</p>}

</div>

<div>

<label>Email:</label>

<input

type="email"

name="email"

value={email}

onChange={this.handleChange}

/>

{errors.email && <p style={{ color: 'red' }}>{errors.email}</p>}

</div>

<div>

<label>Password:</label>

<input

type="password"

name="password"

value={password}

onChange={this.handleChange}

/>

{errors.password && <p style={{ color: 'red' }}>{errors.password}</p>}

</div>

<button type="submit">Register</button>

</form>

</div>

);

}

}

export default Register;

### **src/App.js**

import React from 'react';

import Register from './Register';

function App() {

return (

<div>

<Register />

</div>

);

}

export default App;

## **17. Fetch User App (fetchuserapp)**

### **Installation Commands**

npx create-react-app fetchuserapp

cd fetchuserapp

npm start

### **src/Getuser.js**

import React, { Component } from 'react';

class Getuser extends Component {

constructor(props) {

super(props);

this.state = {

user: null,

error: null

};

}

async componentDidMount() {

try {

const response = await fetch('https://api.randomuser.me/');

const data = await response.json();

this.setState({ user: data.results[0] });

} catch (error) {

this.setState({ error: error.message });

}

}

render() {

const { user, error } = this.state;

if (error) return <div>Error: {error}</div>;

if (!user) return <div>Loading...</div>;

return (

<div>

<h2>User Details</h2>

<p>Title: {user.name.title}</p>

<p>First Name: {user.name.first}</p>

<img src={user.picture.large} alt="User" />

</div>

);

}

}

export default Getuser;

### **src/App.js**

import React from 'react';

import Getuser from './Getuser';

function App() {

return (

<div>

<Getuser />

</div>

);

}

export default App;

## **18. Cohort Dashboard Testing**

### **Installation Commands**

npm install

npm install --save-dev enzyme enzyme-adapter-react-16

npm test

### **src/setupTests.js**

import { configure } from 'enzyme';

import Adapter from 'enzyme-adapter-react-16';

configure({ adapter: new Adapter() });

### **src/CohortDetails.test.js**

import React from 'react';

import { mount } from 'enzyme';

import CohortDetails from './CohortDetails';

import { CohortData } from './Cohort';

describe('Cohort Details Component', () => {

test('should create the component', () => {

const wrapper = mount(<CohortDetails />);

expect(wrapper.exists()).toBe(true);

});

test('should initialize the props', () => {

const cohort = CohortData[0];

const wrapper = mount(<CohortDetails cohort={cohort} />);

expect(wrapper.props().cohort).toEqual(cohort);

});

test('should display cohort code in h3', () => {

const cohort = CohortData[0];

const wrapper = mount(<CohortDetails cohort={cohort} />);

expect(wrapper.find('h3').text()).toBe(cohort.name);

});

test('should always render same html', () => {

const cohort = CohortData[0];

const wrapper = mount(<CohortDetails cohort={cohort} />);

expect(wrapper).toMatchSnapshot();

});

});

## **19. Git Client App (gitclientapp)**

### **Installation Commands**

npx create-react-app gitclientapp

cd gitclientapp

npm install axios

npm start

### **src/GitClient.js**

import React, { Component } from 'react';

import axios from 'axios';

class GitClient extends Component {

getRepositories = async (username) => {

try {

const response = await axios.get(`https://api.github.com/users/${username}/repos`);

return response.data.map(repo => repo.name);

} catch (error) {

console.error(error);

return [];

}

};

render() {

return null;

}

}

export default GitClient;

### **src/App.js**

import React, { Component } from 'react';

import GitClient from './GitClient';

class App extends Component {

state = { repos: [] };

async componentDidMount() {

const gitClient = new GitClient();

const repos = await gitClient.getRepositories('techiesyed');

this.setState({ repos });

}

render() {

return (

<div>

<h2>GitHub Repositories</h2>

<ul>

{this.state.repos.map((repo, index) => (

<li key={index}>{repo}</li>

))}

</ul>

</div>

);

}

}

export default App;

### **src/GitClient.test.js**

import React from 'react';

import axios from 'axios';

import GitClient from './GitClient';

jest.mock('axios');

describe('Git Client Tests', () => {

test('should return repository names for techiesyed', async () => {

const mockData = [

{ name: 'repo1' },

{ name: 'repo2' }

];

axios.get.mockResolvedValue({ data: mockData });

const gitClient = new GitClient();

const repos = await gitClient.getRepositories('techiesyed');

expect(repos).toEqual(['repo1', 'repo2']);

expect(axios.get).toHaveBeenCalledWith('https://api.github.com/users/techiesyed/repos');

});

});