**Exercise 4: 4. ReactJS-HOL**

**//App.js**

import React from 'react';

import Posts from './Posts';

function App() {

return (

<div className="min-h-screen bg-gray-100 flex flex-col items-center justify-center p-4 font-sans">

<Posts />

</div>

);

}

export default App;

**//Posts.js**

import React from 'react';

class Posts extends React.Component {

constructor(props) {

super(props);

this.state = {

posts: [],

loading: true,

error: null,

hasError: false,

errorInfo: null,

};

}

componentDidMount() {

this.setState({ loading: true, error: null, hasError: false }); // Reset error state on mount

fetch("https://jsonplaceholder.typicode.com/posts")

.then(response => {

if (!response.ok) {

throw new Error(`HTTP error! status: ${response.status}`);

}

return response.json();

})

.then(data => {

this.setState({

posts: data,

loading: false,

});

})

.catch(error => {

console.error("Error fetching posts:", error);

this.setState({

error: error,

loading: false,

hasError: true,

errorInfo: error,

});

});

}

componentDidCatch(error, errorInfo) {

console.error("Caught an error in a child component:", error, errorInfo);

this.setState({

hasError: true,

errorInfo: errorInfo,

error: error,

});

}

render() {

const { posts, loading, error, hasError } = this.state;

if (hasError) {

return (

<div className="text-center text-xl font-semibold text-red-600 mt-10 p-4 border border-red-300 rounded-lg bg-red-50">

<p>Something went wrong.</p>

<p className="text-sm mt-2">{error ? error.message : 'An unknown error occurred.'}</p>

</div>

);

}

if (loading) {

return (

<div className="text-center text-xl font-semibold text-gray-600 mt-10">

Loading posts...

</div>

);

}

return (

<div className="container mx-auto p-4">

<h1 className="text-4xl font-bold text-gray-900 mb-8 text-center">Blog Posts</h1>

{posts.map(post => (

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

))}

{posts.length === 0 && !loading && !error && (

<p className="text-center text-gray-500 mt-10">No posts found.</p>

)}

</div>

);

}

}

export default Posts;