

Exp3

Code:

```
#index.js
import React from 'react';
import ReactDOM from 'react-dom/client';
import App from './App';
const root = ReactDOM.createRoot(document.getElementById('root'));
root.render(<App />);
```

#App.js

```
import React from 'react';
import { BrowserRouter, Routes, Route, Link } from 'react-router-dom';
import Home from './pages/Home';
import About from './pages/About';
function App() {
  return (
    <BrowserRouter>
      <nav>
        <Link to="/">Home</Link> | <Link to="/about">About</Link>
      </nav>
      <Routes>
        <Route path="/" element={<Home />} />
        <Route path="/about" element={<About />} />
      </Routes>
    </BrowserRouter>
  );
}
export default App;
```

#Home.js

```
import React from 'react';
import Counter from '../components/Counter';
import Form from '../components/Form';
import RefExample from '../components/RefExample';
import ItemList from '../components/ItemList';
function Home() {
  return (
    <div>
      <h1>Welcome to React Concepts Demo</h1>
      <Counter />
      <Form />
      <RefExample />
      <ItemList items={['Apple', 'Banana', 'Orange']} />
    </div>
  );
}
export default Home;
```

#About.js

```
import React from 'react';
function About() {
  return <h2>This is the About Page (React Router demo)</h2>;
}
export default About;
```

#src/counter.js

```
import React, { useState } from 'react';
function Counter() {
  const [count, setCount] = useState(0);
  return (
    <div>
      <h2>Counter (State + Events)</h2>
      <p>Count: {count}</p>
      <button onClick={() => setCount(count + 1)}>+1</button>
    </div>
  );
}
export default Counter;
```

#src/Form.js

```
import React, { useState } from 'react';
function Form() {
  const [name, setName] = useState("");
  const handleSubmit = e => {
    e.preventDefault();
    alert(`Submitted name: ${name}`);
  };
  return (
    <div>
      <h2>Form Example</h2>
      <form onSubmit={handleSubmit}>
        <input
          type="text"
          value={name}
          onChange={e => setName(e.target.value)}
          placeholder="Enter name"
        />
        <button type="submit">Submit</button>
      </form>
    </div>
  );
}
export default Form;
```

RefExample.js

```
import React, { useRef } from 'react';
function RefExample() {
  const inputRef = useRef();
  const focusInput = () => {
    inputRef.current.focus();
  };
}
```

```

    };
    return (
      <div>
        <h2>Ref Example</h2>
        <input ref={inputRef} type="text" placeholder="Click button to focus" />
        <button onClick={focusInput}>Focus Input</button>
      </div>
    );
  }
  export default RefExample;

```

#src/ItemList.js

```

import React from 'react';
function ItemList({ items }) {
  return (
    <div>
      <h2>Item List (Keys + Props)</h2>
      <ul>
        {items.map((item, index) => (
          <li key={index}>{item}</li> /* Ideally use unique IDs instead of index */
        ))}
      </ul>
    </div>
  );
}
export default ItemList;

```

Output:

[Home](#) | [About](#)

Welcome to React Concepts Demo

Counter (State + Events)

Count: 4

+1

Form Example

Enter name

Ref Example

Click button to focus

Item List (Keys + Props)

- Apple
- Banana
- Orange

[Home](#) | [About](#)

This is the About Page (React Router demo)