

Task 1: Display a List of Names

src/NameList.js

```
import React from "react";

function NameList({ names }) {
  return (
    <ul>
      {names.map((name, index) => (
        <li key={index}>{name}</li>
      ))}
    </ul>
  );
}

export default NameList;
```

Task 2: TodoList (Mark Completed Tasks)

src/TodoList.js

```
import React from "react";

function TodoList({ tasks }) {
  return (
    <ul>
      {tasks.map((task, index) => (
        <li key={index} style={{ textDecoration: task.completed ? "line-through" : "none" }}>
          {task.text} {task.completed && "☐"}
        </li>
      ))}
    </ul>
  );
}

export default TodoList;
```

Task 3: ProductList (Filter Products Under \$10)

```
import React from "react";

function ProductList({ products }) {
  const affordableProducts = products.filter(product => product.price < 10);

  return (
    <ul>
      {affordableProducts.map((product) => (
        <li key={product.id}>{product.name} - ${product.price}</li>
      ))}
    </ul>
  );
}
```

```
export default ProductList;
```

Task 4: UserList (Display Name & Email)

src/UserList.js

```
import React from "react";

function UserList({ users }) {
  return (
    <ul>
      {users.map((user) => (
        <li key={user.id}>
          <strong>{user.name}</strong> - {user.email}
        </li>
      ))}
    </ul>
  );
}

export default UserList;
```

Task 5: ShoppingCart (Display Items & Prices)

src/ShoppingCart.js

```
import React from "react";

function ShoppingCart({ items }) {
  return (
    <ul>
      {items.map((item) => (
        <li key={item.id}>
          {item.name}: ${item.price}
        </li>
      ))}
    </ul>
  );
}

export default ShoppingCart;
```

Step 6: Combine Everything in App.js

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src/App.js

```
import React from "react";
import NameList from "../NameList";
import TodoList from "../TodoList";
```

```

import ProductList from "../ProductList";
import UserList from "../UserList";
import ShoppingCart from "../ShoppingCart";

function App() {
  const names = ["Alice", "Bob", "Charlie", "David"];

  const tasks = [
    { text: "Buy groceries", completed: true },
    { text: "Study React", completed: false },
    { text: "Go for a walk", completed: true }
  ];

  const products = [
    { id: 1, name: "Pencil", price: 2 },
    { id: 2, name: "Notebook", price: 5 },
    { id: 3, name: "Backpack", price: 20 }
  ];

  const users = [
    { id: 1, name: "John Doe", email: "john@example.com" },
    { id: 2, name: "Jane Smith", email: "jane@example.com" }
  ];

  const cartItems = [
    { id: 1, name: "Apple", price: 1 },
    { id: 2, name: "Banana", price: 2 },
    { id: 3, name: "Laptop", price: 999 }
  ];

  return (
    <div>
      <h2>Rendering Lists Example</h2>

      <h3>Name List</h3>
      <NameList names={names} />

      <h3>Todo List</h3>
      <TodoList tasks={tasks} />

      <h3>Product List (Under $10)</h3>
      <ProductList products={products} />

      <h3>User List</h3>
      <UserList users={users} />

      <h3>Shopping Cart</h3>
      <ShoppingCart items={cartItems} />
    </div>
  );
}

export default App;

```

Step 7: Render Everything in `index.js`

src/index.js

```
import React from "react";
import ReactDOM from "react-dom";
import App from "../App";

ReactDOM.render(
  <React.StrictMode>
    <App />
  </React.StrictMode>,
  document.getElementById("root")
);
```