

5. Components Reusability and Composition

In React, component reusability and composition are fundamental concepts. Let's create a simple set of reusable components and demonstrate their integration within different parts of an application.

1. ****Create Reusable Components:****

```
```jsx
```

```
// Button.js
```

```
Import React from 'react';
```

```
Const Button = ({ onClick, label }) => {
```

```
 Return (
```

```
 <button onClick={onClick}>
```

```
 {label}
```

```
 </button>
```

```
);
```

```
};
```

```
Export default Button;
```

```
```
```

```
```jsx
```

```
// Card.js
```

```
Import React from 'react';
```

```
Const Card = ({ title, content }) => {
```

```
 Return (
```

```
 <div style={{ border: '1px solid #ccc', padding: '10px', margin: '10px' }}>
```

```
 <h3>{title}</h3>
```

```
 <p>{content}</p>
 </div>
);
};
```

```
Export default Card;
```
```

2. ****Compose Components in the Main App:****

```
```jsx
// App.js
Import React from 'react';
Import Button from './Button';
Import Card from './Card';

Const App = () => {
 Const handleClick = () => {
 Alert('Button Clicked!');
 };

 Return (
 <div>
 <h1>Main App</h1>

 {/* Reusable Button Component */}
 <Button onClick={handleButtonClick} label="Click me" />

 {/* Reusable Card Component */}

```

```
<Card title="Card Title 1" content="Card Content 1" />
<Card title="Card Title 2" content="Card Content 2" />
</div>

);
};
```

Export default App;

...

In this example, the `Button` and `Card` components are reusable. They can be easily integrated into different parts of your application. The `App` component demonstrates the composition of these reusable components.

### 3. **\*\*Run your React app:\*\***

```
```bash
```

Npm start

```
```
```

Visit `http://localhost:3000` in your browser to see the integration of reusable components within different parts of the application. The button can be clicked, and the cards display distinct content, showcasing component reusability and composition in React.