

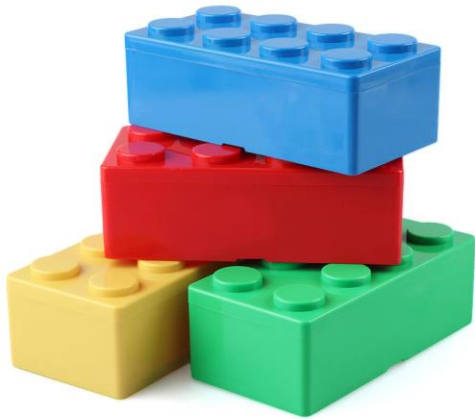
REACT COMPONENTS — LESSON 2

Understanding Components, JSX, and
Rendering Lists

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Course: 2510 React

INTRODUCTION TO REACT COMPONENTS



- React components are the building blocks of a React application.
- Components can be functional or class-based.
- Functional components are simpler and preferred for most use cases.
- Class-based components offer more features but are less common in modern React.

JSX — JAVASCRIPT XML

- JSX is a syntax extension for JavaScript that looks similar to HTML.
- JSX allows you to write HTML-like code within JavaScript.
- JSX is compiled to JavaScript by tools like Babel.
- JSX makes it easier to create React components and manage UI.

RENDERING LISTS IN REACT

- React allows you to render lists of data using the `map()` function.
- Use the `map()` function to iterate over an array and return a list of elements.
- Each element in the list should have a unique `key` prop.

Example:

```
const items = ['Item 1', 'Item 2', 'Item 3'];
```

```
const listItems = items.map((item) => <li  
key={item}>{item}</li>);
```

COMPONENT HIERARCHIES

React applications are built using a hierarchy of components. Parent components can contain child components. Data can be passed from parent to child components via props.

Example:

```
function ParentComponent() {  
  return (  
    <div><ChildComponent propName='value' /></div>  
  );  
}
```

WRAP-UP & EXERCISES

Explore:

[React Documentation](<https://reactjs.org/docs/getting-started.html>)

[JSX Documentation](<https://reactjs.org/docs/introducing-jsx.html>)

Practice:

- Create a simple React component.
- Render a list of items using the `map()` function.
- Build a component hierarchy with parent and child components.