

# Instantiating React Components Using JSX

To instantiate a React component using JSX syntax means to create an instance of a component so that it can be rendered to the UI.

JSX provides a clean, HTML-like way to do this within JavaScript.

What Does 'Instantiate' Mean in React?

In React, instantiating a component means:

- Creating a virtual representation of that component.
- Passing any necessary props to it.
- Allowing React to manage its rendering and lifecycle.

JSX Syntax for Instantiation:

You instantiate a component by using JSX tags, just like HTML elements:

```
<MyComponent prop1="value" />
```

This is equivalent to:

```
React.createElement(MyComponent, { prop1: "value" });
```

Example:

```
function Welcome(props) {  
  return <h1>Hello, {props.name}!</h1>;  
}  
  
const element = <Welcome name="Gregory" />;
```

Here:

- Welcome is the component.
- <Welcome name="Gregory" /> is the JSX instantiation.
- element is a virtual DOM node that React will render.

### Why JSX Makes Instantiation Powerful:

- Declarative: You describe what the UI should look like.
- Readable: Looks like HTML, but with JavaScript power.
- Dynamic: You can embed logic, pass props, and compose components easily.

`<Welcome name='Gregory' />`

