COMPONENT **CATEGORIES**
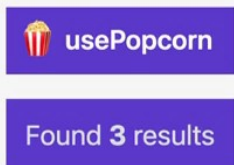
👉 **Most of your components will naturally fall into one of three categories:**

Stateless / presentational components	Stateful components	Structural components

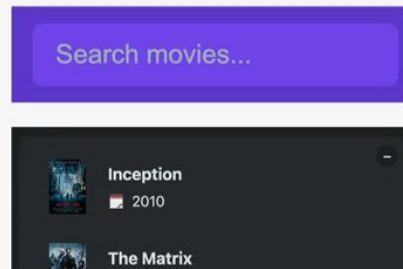**Stateless / presentational components**

👉 **No state**

👉 Can receive props and simply *present* received data or other content
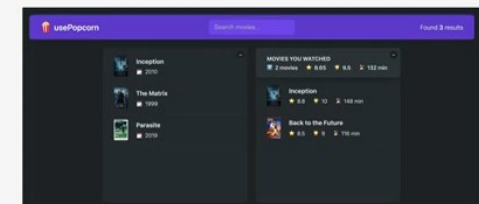
👉 Usually **small and reusable**

Stateful components

👉 **Have state**

👉 Can still be **reusable**

Structural components

👉 "Pages", "layouts", or "screens" of the app

👉 Result of **composition**

👉 Can be **huge and non-reusable** (but don't have to)

WHAT IS COMPONENT **COMPOSITION?**

"USING" A COMPONENT

Modal

Want to reuse →

```
function Modal() {
  return (
    <div className="modal">
      <Success />
    </div>
```

```
function Success() {
  return <p>Well done!</p>;
```

Success

COMPONENT COMPOSITION

WHAT IS COMPONENT **COMPOSITION?**

"USING" A COMPONENT

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COMPONENT COMPOSITION

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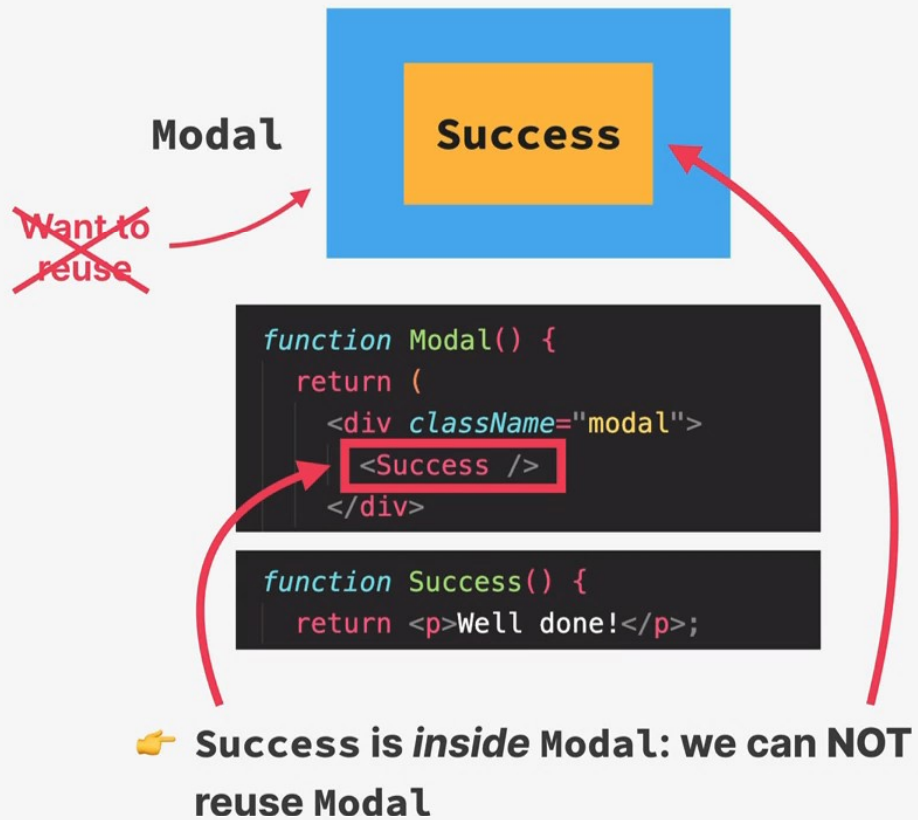
👉 **Success is** *inside* **Modal: we can NOT reuse Modal**

WHAT IS COMPONENT **COMPOSITION?**

"USING" A COMPONENT

COMPONENT COMPOSITION

Modal

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WHAT IS COMPONENT **COMPOSITION?**

"USING" A COMPONENT

Modal

Success

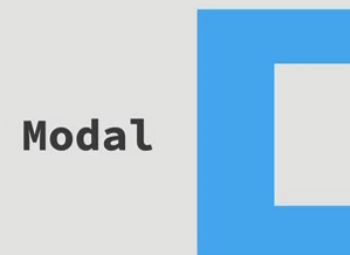~~Want to reuse~~

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👉 **Success is** *inside* **Modal: we can NOT reuse Modal**

COMPONENT COMPOSITION

Modal

```
function Modal({ children }) {
  return (
    <div className="modal">
      {children}
    </div>
```

WHAT IS COMPONENT **COMPOSITION?**

"USING" A COMPONENT

Modal

Success

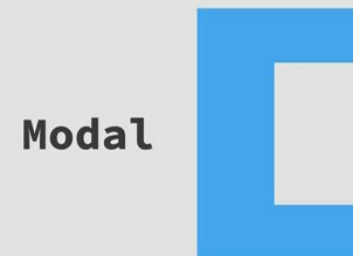~~Want to reuse~~

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Success

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"USING" A COMPONENT

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WHAT IS COMPONENT **COMPOSITION?**

"USING" A COMPONENT

Modal

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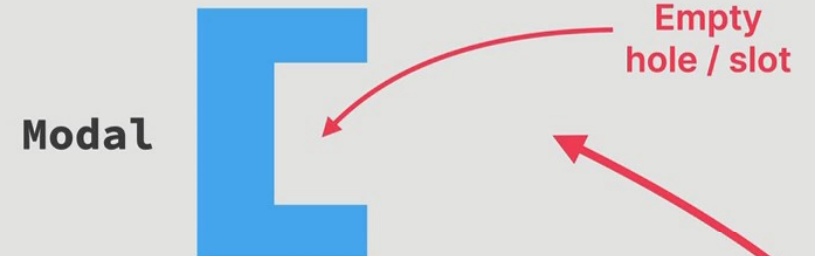~~Want to reuse~~

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👉 **Success is** *inside* **Modal: we can NOT reuse Modal**

COMPONENT COMPOSITION

Modal

Empty hole / slot

```
function Modal({ children }) {
  return (
    <div className="modal">
      {children}
    </div>
```

```
<Modal>
  <Success />
</Modal>
```

```
function Success() {
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```

👉 **Success is** *passed into* **Modal: we can REUSE Modal**

Udemy

WHAT IS COMPONENT **COMPOSITION?**

"USING" A COMPONENT

Modal

Success

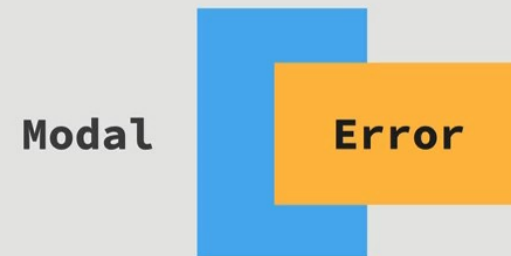~~Want to reuse~~

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function Modal() {
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    <div className="modal">
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function Success() {
  return <p>Well done!</p>;
```

👉 Success is *inside* Modal: we can **NOT** reuse Modal

COMPONENT COMPOSITION

Modal

Error

```
function Modal({ children }) {
  return (
    <div className="modal">
      {children}
    </div>

function Error() {
  return <p>This went wrong!</p>;
```

```
<Modal>
  <Success />
</Modal>
```

```
<Modal>
  <Error />
</Modal>
```

👉 Success is *passed into* Modal: we can **REUSE** Modal

Udemy

WHAT IS COMPONENT **COMPOSITION?**

COMPONENT COMPOSITION


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👉 **Success is** *passed into* Modal: we can **REUSE** Modal

👉 **Component composition**: combining different components using the `children` prop (or explicitly defined props)

WE COMPONENT COMPOSITION, WE CAN:

1 Create highly reusable and flexible components

2 Fix prop drilling (great for layouts)

WHAT IS COMPONENT **COMPOSITION?**

COMPONENT COMPOSITION

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👉 **Success is *passed into* Modal: we can REUSE Modal**

👉 **Component composition**: combining different components using the `children` prop (or explicitly defined props)

WE COMPONENT COMPOSITION, WE CAN:

1 Create highly reusable and flexible components

2 Fix prop drilling (great for layouts)

Possible because components don't need to know their children in advance