

Available PropTypes

Sección 7, Clase 100

Source: <https://reactjs.org/docs/typechecking-with-proptypes.html>

```
import PropTypes from 'prop-types';
```

```
MyComponent.propTypes = {  
  // You can declare that a prop is a specific JS primitive. By default, these  
  // are all optional.  
  optionalArray: PropTypes.array,  
  optionalBool: PropTypes.bool,  
  optionalFunc: PropTypes.func,  
  optionalNumber: PropTypes.number,  
  optionalObject: PropTypes.object,  
  optionalString: PropTypes.string,  
  optionalSymbol: PropTypes.symbol,  
  
  // Anything that can be rendered: numbers, strings, elements or an array  
  // (or fragment) containing these types.  
  optionalNode: PropTypes.node,  
  
  // A React element.  
  optionalElement: PropTypes.element,  
  
  // You can also declare that a prop is an instance of a class. This uses  
  // JS's instanceof operator.  
  optionalMessage: PropTypes.instanceOf(Message),  
  
  // You can ensure that your prop is limited to specific values by treating  
  // it as an enum.  
  optionalEnum: PropTypes.oneOf(['News', 'Photos']),  
  
  // An object that could be one of many types  
  optionalUnion: PropTypes.oneOfType([  
    PropTypes.string,  
    PropTypes.number,  
    PropTypes.instanceOf(Message)  
  ]),  
  
  // An array of a certain type  
  optionalArrayOf: PropTypes.arrayOf(PropTypes.number),  
  
  // An object with property values of a certain type  
  optionalObjectOf: PropTypes.objectOf(PropTypes.number),
```

```
// An object taking on a particular shape
optionalObjectWithShape: PropTypes.shape({
  color: PropTypes.string,
  fontSize: PropTypes.number
}),
```

```
// You can chain any of the above with `isRequired` to make sure a warning
// is shown if the prop isn't provided.
requiredFunc: PropTypes.func.isRequired,
```

```
// A value of any data type
requiredAny: PropTypes.any.isRequired,
```

```
// You can also specify a custom validator. It should return an Error
// object if the validation fails. Don't `console.warn` or throw, as this
// won't work inside `oneOfType`.
```

```
customProp: function(props, propName, componentName) {
  if (!/matchme/.test(props[propName])) {
    return new Error(
      'Invalid prop `' + propName + '` supplied to' +
      ' `' + componentName + `'. Validation failed.'
    );
  }
},
```

```
// You can also supply a custom validator to `arrayOf` and `objectOf`.
// It should return an Error object if the validation fails. The validator
// will be called for each key in the array or object. The first two
// arguments of the validator are the array or object itself, and the
// current item's key.
```

```
customArrayProp: PropTypes.arrayOf(function(propValue, key,
componentName, location, propFullName) {
  if (!/matchme/.test(propValue[key])) {
    return new Error(
      'Invalid prop `' + propFullName + '` supplied to' +
      ' `' + componentName + `'. Validation failed.'
    );
  }
})
};
```

Requiring Single Child

With `PropTypes.element` you can specify that only a single child can be passed to a component as children.

```
import PropTypes from 'prop-types';
```

```

class MyComponent extends React.Component {
  render() {
    // This must be exactly one element or it will warn.
    const children = this.props.children;
    return (
      <div>
        {children}
      </div>
    );
  }
}

```

```

MyComponent.propTypes = {
  children: PropTypes.element.isRequired
};

```

Default Prop Values

You can define default values for your props by assigning to the special `defaultProps` property:

```

class Greeting extends React.Component {
  render() {
    return (
      <h1>Hello, {this.props.name}</h1>
    );
  }
}

```

```

// Specifies the default values for props:
Greeting.defaultProps = {
  name: 'Stranger'
};

```

```

// Renders "Hello, Stranger":
ReactDOM.render(
  <Greeting />,
  document.getElementById('example')
);

```

The `defaultProps` will be used to ensure that `this.props.name` will have a value if it was not specified by the parent component. The `propTypes` typechecking happens after `defaultProps` are resolved, so typechecking will also apply to the `defaultProps`.