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`.