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React Js Basics

- Single Line

```
import React from 'react';
const SingleLineComponent = () => Hello, world!;
export default SingleLineComponent;
```

- Multiple Line

```
import React from 'react';
import MultiLineComponent from './MultiLineComponent';
const App = () => {
  return (
    <div>
      <h1>My App</h1>
      <MultiLineComponent />
    </div>
  );
};
export default App;
```

Functional Component

```
import React from 'react';

const FunctionalComponent = () => {
  return (
    <div>
      <h1>Hello, world!</h1>
      <p>This is a functional component.</p>
    </div>
  );
};
```

```
export default FunctionalComponent;
```

```
import React from 'react';
import FunctionalComponent from './FunctionalComponent';

const App = () => {
  return (
    <div>
      <h1>My React App</h1>
      <FunctionalComponent />
    </div>
  );
};
```

```
    </div>
  );
};

export default App;
```

Class Component

```
import React, { Component } from 'react';

class ClassComponent extends Component {
  render() {
    return (
      <div>
        <h1>Hello, world!</h1>
        <p>This is a class component.</p>
      </div>
    );
  }
}

export default ClassComponent;

import React from 'react';
import ClassComponent from './ClassComponent';

const App = () => {
  return (
    <div>
      <h1>My React App</h1>
      <ClassComponent />
    </div>
  );
};

export default App;
```

Props

```
import React from 'react';

const Greeting = (props) => {
  return (
    <div>
      <h1>Hello, {props.name}!</h1>
      <p>{props.message}</p>
    </div>
  );
};
```

```
export default Greeting;

import React from 'react';
import Greeting from './Greeting';

const App = () => {
  return (
    <div>
      <h1>My React App</h1>
      <Greeting name="John" message="Welcome to my app!" />
    </div>
  );
};

export default App;
```

State

```
import React, { useState } from 'react';

const Counter = () => {
  const [count, setCount] = useState(0);

  const increment = () => {
    setCount(count + 1);
  };

  const decrement = () => {
    setCount(count - 1);
  };

  return (
    <div>
      <h1>Counter</h1>
      <p>Count: {count}</p>
      <button onClick={increment}>Increment</button>
      <button onClick={decrement}>Decrement</button>
    </div>
  );
};

export default Counter;

import React from 'react';
import Counter from './Counter';
```

```
const App = () => {
  return (
    <div>
      <h1>My React App</h1>
```

```
    <Counter />
  </div>
);
};

export default App;
```

Prop Validation

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

const Person = (props) => {
  return (
    <div>
      <h2>Name: {props.name}</h2>
      <p>Age: {props.age}</p>
    </div>
  );
};

Person.propTypes = {
  name: PropTypes.string.isRequired,
  age: PropTypes.number.isRequired
};

export default Person;

import React from 'react';
import Person from './Person';

const App = () => {
  return (
    <div>
      <h1>My React App</h1>
      <Person name="John" age={25} />
    </div>
  );
};

export default App;
```