

Hello React

```
import React from "react";
import ReactDOM from "react-dom";
import App from "./App";

ReactDOM.render(<App />, document.getElementById("root"));
```

```
import React from "react";
import HelloReact from "./components/HelloReact";
```

```
function App() {
  return <HelloReact />;
}
```

```
export default App;
```

```
import React from "react";
function HelloReact() {
  return <p>Hello World!</p>;
}
export default HelloReact;
```

Hello Div

```
import React from "react";
import HelloDiv from "./components/HelloDiv";
```

```
function App() {
  return <HelloDiv />;
}
```

```
export default App;
```

```
import React from "react";
```

```
function HelloDiv() {
  return (
    <div>
      <h1>Hey guys! I'm a header!</h1>
      <h2>Things I like!</h2>
      <ul>
        <li>Peas</li>
        <li>Carrots</li>
        <li>Love</li>
      </ul>
    </div>
  );
}
```

```
export default HelloDiv;
```

Bootstrap

```
import React from "react";
import ReactDOM from "react-dom";
import App from "./App";
```

```
ReactDOM.render(<App />, document.getElementById("root"));
```

```
import React from "react";
import Navbar from "./components/Navbar";
import Jumbotron from "./components/Jumbotron";
import Card from "./components/Card";
```

```
function App() {
  return (
    <div className="container">
      <Navbar />
      <Jumbotron />
      <Card />
    </div>
  );
}
```

```
export default App;
```

```
import React from "react";
```

```
function Navbar() {
  return (
    <nav className="navbar navbar-expand-lg navbar-light bg-light">
      <a className="navbar-brand" href="#">
        Navbar
      </a>
      <button
        className="navbar-toggler"
        data-toggle="collapse"
        data-target="#navbarSupportedContent"
        aria-controls="navbarSupportedContent"
        aria-expanded="false"
        aria-label="Toggle navigation"
      >
        <span className="navbar-toggler-icon" />
      </button>
      <div className="collapse navbar-collapse" id="navbarSupportedContent">
        <ul className="navbar-nav mr-auto">
          <li className="nav-item active">
            <a className="nav-link" href="#">
              Home <span className="sr-only">(current)</span>
            </a>
          </li>
        </ul>
      </div>
    </nav>
  );
}
```

```
import React from "react";
```

```
function Card() {
  return (
    <div className="card">
      <div className="card-body">
        <p className="card-text">
          Aliquip dolore commodo nostnon ullamco. Commodore magna eu ex
          mollit sunt amet fugiat. In irure eu enim id ea sit nostrud
          incididunt ad adipiscing. Aliquip minim. Cillum do enim non
          ullamco. Commodore magna eu ex mollit sunt amet fugiat. In
          irure eu enim id ea sit nostrud incididunt ad adipiscing.
        </p>
      </div>
    </div>
  );
}
```

```
export default Card;
```

```
<li className="nav-item">
  <a className="nav-link" href="#"> Link
</a>
</li>
<li className="nav-item dropdown">
  <a
    className="nav-link dropdown-toggle"
    href="#"
    id="navbarDropdown"
    role="button"
    data-toggle="dropdown"
    aria-haspopup="true"
    aria-expanded="false"
  > Dropdown
  </a>
  <div className="dropdown-menu" aria-labelledby="navbarDropdown">
    <a className="dropdown-item" href="#"> Action
    </a>
    <a className="dropdown-item" href="#"> Another action
    </a>
    <div className="dropdown-divider" />
    <a className="dropdown-item" href="#"> Something else here
    </a>
  </div>
</li>
<li className="nav-item">
  <a className="nav-link disabled" href="#"> Disabled
  </a>
</li>
</ul>
```

```
import React from "react";
```

```
function Jumbotron() {
  return (
    <div className="jumbotron">
      <h1>Your Project</h1>
      <p>
        Enim adipisicing enim reprehenderit ex ullamco exercitation.
        Aliquip reprehenderit magna elit cillum adipisicing dolore
        aliquip velit. Ipsum ullamco nostrud tempor eu deserunt ipsum
        incididunt fugiat esse ipsum. Exercitation nostrud exercitation
        sit ex nostrud aliqua deserunt et esse eu deserunt. Non dolor
        consequat qui ea culpa tempor magna nulla consectetur est
        occaecat.
      </p>
    </div>
  );
}
```

```
export default Jumbotron;
```

```
<form className="form-inline my-2 my-lg-0">
  <input
    className="form-control mr-sm-2"
    type="search"
    placeholder="Search"
    aria-label="Search"
  />
  <button className="btn btn-outline-success my-2 my-sm-0" type="submit"> Search
</button>
</form>
</div>
</nav>
);
}
```

```
export default Navbar;
```

JSX Variables

```
import React from 'react';
import ReactDOM from 'react-dom';
import App from './App';
import 'bootstrap/dist/css/bootstrap.min.css';

ReactDOM.render(<App />, document.getElementById('root'));
```

```
import React from "react";
import JSXVariables from "../components/JSXVariables";
```

```
function App() {
  return <JSXVariables />;
}
```

```
export default App;
```

```
import React from "react";
```

```
const name = "Christian";
const thoughts = "is amazing!!!";
```

```
const stripVowels = str => {
  const vowels = ["a", "e", "i", "o", "u"];
  let result = "";
```

```
  for (let i = 0; i < str.length; i++) {
    if (!vowels.includes(str[i].toLowerCase())) {
      result += str[i];
    }
  }
  return result;
};
```

```
function JSXVariables() {
  return (
    <div className="main-container">
      <div className="container">
        <div className="jumbotron">
          <h1>Hi! My name is ({name})</h1>
          <h2>My name has ({name.length}) letters</h2>
          <h2>My name without any vowels is: ({stripVowels(name)})</h2>
          <h2>I think React ({thoughts})</h2>
        </div>
      </div>
    </div>
  );
}
```

```
export default JSXVariables;
```

Style Prop

```
import React from 'react';
import ReactDOM from 'react-dom';
import App from './App';

ReactDOM.render(<App />, document.getElementById('root'));
```

```
import React from "react";
import Header from "../components/Header";
import Section from "../components/Section";
import Navbar from "../components/Navbar";
```

```
function App() {
  return (
    <div>
      <Navbar />
      <Header />
      <Section />
    </div>
  );
}
```

```
export default App;
```

```
import React from "react";
import "../styles/Header.css";
// By importing the Header.css file, it is added to the DOM whenever this component loads
// We can also style a component inside of its JavaScript file by adding style properties to its rendered elements
// Unlike regular HTML, a JSX style property must be an object instead of a string
// On a style object, we camelCase all property names, and put all of the values in quotes
// Non quoted values default to "pixels", e.g. height, margin, padding
```

```
const styles = {
  headerStyle: {
    background: "red"
  },
  headingStyle: {
    fontSize: 100
  }
};
```

// We use JSX curly braces to evaluate the style object

```
function Header() {
  return (
    <header style={styles.headerStyle} className="header">
      <h1 style={styles.headingStyle}>Welcome</h1>
    </header>
  );
}
```

```
export default Header;
```

```
.header {
  background: #b71775;
  height: 200px;
}
.header h1 {
  margin: 0;
  padding-top: 75px;
  text-align: center;
  color: white;
  font-size: 3rem;
}
```

```
import React from 'react';
import ReactDOM from 'react-dom';
import App from './App';
import 'bootstrap/dist/css/bootstrap.min.css';

ReactDOM.render(<App />, document.getElementById('root'));
```

Props (Calculator)

```
import React from "react";
import Calculator from "../components/Calculator";

function App() {
  return <Calculator />;
}

export default App;
```

```
import React from "react";
```

// The Math function component accepts a props argument

```
function Math(props) {
  let value;

  // Assign value based on the operator
  switch (props.operator) {
    case "+":
      value = props.num1 + props.num2;
      break;
    case "-":
      value = props.num1 - props.num2;
      break;
    case "*":
      value = props.num1 * props.num2;
      break;
    case "/":
      value = props.num1 / props.num2;
      break;
    default:
      value = NaN;
  }
  // Return a span element containing the calculated value
  // Set the fontSize to the value in pixels
  return <span style={{ fontSize: value }}>{value}</span>;
}
```

```
export default Math;
```

```
import React from "react";
import Math from "../Math";
```

// Calculator renders the Math component 4 times with different props

```
function Calculator() {
  return (
    <div>
      {/* Math renders a span tag containing the result */}
      {/* Each span is the font-size of the result in pixels */}
      <p>
        19 + 142 = <Math num1={19} operator="+" num2={142} />
      </p>
      <p>
        42 - 17 = <Math num1={42} operator="-" num2={17} />
      </p>
      <p>
        100 * 3 = <Math num1={100} operator="*" num2={3} />
      </p>
      <p>
        96 / 4 = <Math num1={96} operator="/" num2={4} />
      </p>
    </div>
  );
}
```

```
export default Calculator;
```

Props Review pt1

```
import React from "react";
import ReactDOM from "react-dom";
import App from "./App";
import "./index.css";
```

```
ReactDOM.render(<App />, document.getElementById("root"));
```

```
* {
  box-sizing: border-box;
  font-family: sans-serif;
}
html, body, #root {
  padding: 0;
  margin: 0;
  height: 100%;
}
```

```
[
  {
    "id": 1,
    "name": "SpongeBob",
    "image":
      "https://vignette.wikia.nocookie.net/spongebobgalaxy/images/0/07/
      SpongeBob_SquarePants.png/revision/latest?cb=20171228024014",
    "occupation": "Fry Cook",
    "location": "A Pineapple Under the Sea"
  },
  {
    "id": 2,
    "name": "Mr. Krabs",
    "image":
      "https://vignette3.wikia.nocookie.net/vsbattles/images/8/80/
      Mr._Krabs.png/revision/latest?cb=20150919162131",
    "occupation": "Restaurant Owner",
    "location": "A Giant Anchor"
  },
  {
    "id": 3,
    "name": "Squidward",
    "image":
      "https://vignette2.wikia.nocookie.net/fictionalcharacters/images/a/ac/
      Squidward.png/revision/latest?cb=20131121012626",
    "occupation": "Cashier",
    "location": "An Easter Island Head"
  }
]
```

```
import React from "react";
import Wrapper from "./components/Wrapper";
import Title from "./components/Title";
import FriendCard from "./components/FriendCard";
```

```
import friends from "./friends.json";
```

```
function App() {
  return (
    <Wrapper>
      <Title>Friends List</Title>
      <FriendCard
        name={friends[0].name}
        image={friends[0].image}
        occupation={friends[0].occupation}
        location={friends[0].location}
      />
      <FriendCard
        name={friends[1].name}
        image={friends[1].image}
        occupation={friends[1].occupation}
        location={friends[1].location}
      />
      <FriendCard
        name={friends[2].name}
        image={friends[2].image}
        occupation={friends[2].occupation}
        location={friends[2].location}
      />
    </Wrapper>
  );
}
```

```
export default App;
```

```
import React from "react";
import "../style.css";

function FriendCard(props) {
  return (
    <div className="card">
      <div className="img-container">
        <img alt={props.name} src={props.img} />
      </div>
      <div className="content">
        <ul>
          <li>
            <strong>Name:</strong> {props.name}
          </li>
          <li>
            <strong>Occupation:</strong> {props.occupation}
          </li>
          <li>
            <strong>Location:</strong> {props.location}
          </li>
        </ul>
      </div></div>);
}

export default FriendCard;
```

```
.card {
  background: #fff;
  border-radius: 2px;
  height: 325px;
  margin: 1rem;
  position: relative;
  width: 325px;
  box-shadow: 0 3px 6px #999, 0 3px 6px #999;
  text-align: left;
}
.card > .img-container {
  height: 60%;
  overflow: hidden;
  text-align: center;
  background: #6CADD8;
}
.card > .img-container > img {
  width: 60%
}
.card > .content {
  padding-left: 1rem;
  padding-right: 1rem;
  font-size: 15px;
}
.card > .content > ul {
  list-style-type: none;
}
.card > .content > ul > li {
  margin-top: 18px;
}
```

Props Review pt2

```
import React from "react";
import "../style.css";

function Title(props) {
  return <h1 className="title">{props.children}</h1>;
}

export default Title;

.title {
  width: 100%;
  text-align: center;
  font-size: 3rem;
  text-decoration: underline;
  color: #2A77AE;
  margin-bottom: 50px;
}
```

```
import React from "react";
import "../style.css";

function Wrapper(props) {
  return <div className="wrapper">{props.children}</div>;
}

export default Wrapper;

.wrapper {
  padding-top: 50px;
  background: #ECEEFF1;
  height: 100%;
  display: flex;
  flex-flow: row wrap;
  padding: 20px;
  justify-content: space-around;
  align-content: flex-start;
  overflow: auto;
}
```

Component Map (w/ Filter)

```
import React from 'react';
import ReactDOM from 'react-dom';
import App from './App';
import 'bootstrap/dist/css/bootstrap.min.css';
```

```
ReactDOM.render(<App />, document.getElementById('root'));
```

```
import React from "react";
```

```
// Whenever we try to render an array containing JSX, React knows to render each JSX element separately
```

```
function List(props) {
```

```
  // Using the filter method, we can create a new array containing only groceries which haven't been purchased
```

```
  const notPurchased = props.groceries.filter(grocery => !grocery.purchased);
```

```
  return (
    <ul className="list-group">
      {notPurchased.map(item => (
        <li className="list-group-item" key={item.id}>
          {item.name}
        </li>
      ))}
    </ul>
  );
}
```

```
export default List;
```

```
import React from "react";
import List from "../components/List";
```

```
const groceries = [
  {
    id: 1,
    name: "Milk",
    purchased: true
  },
  {
    id: 2,
    name: "Eggs",
    purchased: true
  },
  {
    id: 3,
    name: "Cheese",
    purchased: false
  },
  {
    id: 4,
    name: "Cake Mix",
    purchased: false
  },
  {
    id: 5,
    name: "Carrots",
    purchased: false
  },
  {
    id: 6,
    name: "Juice",
    purchased: true
  }
];
```

```
function App() {
  return <List groceries={groceries} />;
}
```

```
export default App;
```



```
import React from 'react';
import ReactDOM from 'react-dom';
import App from './App';
import 'bootstrap/dist/css/bootstrap.min.css';

ReactDOM.render(<App />, document.getElementById('root'));
```

```
import React from "react";
import Counter from "../components/Counter";
```

```
function App() {
  return <Counter />;
}
```

```
export default App;
```

```
import React from "react";
```

```
// If we want a child component to update or pass data to its parent,
// we can create a method inside the parent for the update
// Then bind the method to the parent, and pass it to the child as a prop
```

```
function CardBody(props) {
  return (
    <div className="card-body">
      <p className="card-text">Click Count: {props.count}</p>
      <button className="btn btn-primary" onClick={props.handleIncrement}>
        Increment
      </button>{" "}
      <button className="btn btn-danger" onClick={props.handleDecrement}>
        Decrement
      </button>
    </div>
  );
}
```

```
export default CardBody;
```

Basic State

```
import React from "react";
import CardBody from "../CardBody";
```

```
// By extending the React.Component class,
// Counter inherits functionality from it
class Counter extends React.Component {
  // Setting the initial state of the Counter component
  state = {
    count: 0
  };
}
```

```
// handleIncrement increases this.state.count by 1
handleIncrement = () => {
  // We always use the setState method to update a component's state
  this.setState({ count: this.state.count + 1 });
};
```

```
// handleDecrement decreases this.state.count by 1
handleDecrement = () => {
  // We always use the setState method to update a component's state
  this.setState({ count: this.state.count - 1 });
};
```

```
// The render method returns the JSX that should be rendered
```

```
render() {
  return (
    <div className="card text-center">
      <div className="card-header bg-primary text-white">
        Click Counter!
      </div>
      <CardBody
        count={this.state.count}
        handleIncrement={this.handleIncrement}
        handleDecrement={this.handleDecrement}
      />
    </div>
  );
}
```

```
export default Counter;
```

Refactor pt1

```
import React from "react";
import ReactDOM from "react-dom";
import App from "./App";
import "./index.css";
```

```
ReactDOM.render(<App />, document.getElementById("root"));
```

```
* {
  box-sizing: border-box;
  font-family: sans-serif;
}
html, body, #root {
  padding: 0;
  margin: 0;
  height: 100%;
}
```

```
[
  {
    "id": 1,
    "name": "SpongeBob",
    "image": "https://vignette.wikia.nocookie.net/spongebobgalaxy/
      images/0/07/SpongeBob_SquarePants.png/revision/
      latest?cb=20171228024014",
    "occupation": "Fry Cook",
    "location": "A Pineapple Under the Sea"
  },
  {
    "id": 2,
    "name": "Mr. Krabs",
    "image": "https://vignette3.wikia.nocookie.net/vsbattles/
      images/8/80/Mr._Krabs.png/revision/
      latest?cb=20150919162131",
    "occupation": "Restaurant Owner",
    "location": "A Giant Anchor"
  },
  {
    "id": 3,
    "name": "Squidward",
    "image": "https://vignette2.wikia.nocookie.net/fictionalcharacters/
      images/a/ac/Squidward.png/revision/
      latest?cb=20131121012626",
    "occupation": "Cashier",
    "location": "An Easter Island Head"
  },
  {
    "id": 4,
    "name": "Dexter",
    "image": "https://s-media-cache-ak0.pinimg.com/originals/
      fe/32/49/fe32495d45283cd6860ae122f0aeaad9.png",
    "occupation": "Boy Genius",
    "location": "A Secret Laboratory"
  },
  {
    "id": 5,
    "name": "Courage",
    "image": "https://vignette4.wikia.nocookie.net/vsbattles/
      images/3/39/Courage-0.png/revision/
      latest?cb=20160719055423",
    "occupation": "A Cowardly Dog",
    "location": "Nowhere, Kansas"
  },
  {
    "id": 6,
    "name": "Doug Funnie",
    "image": "https://vignette1.wikia.nocookie.net/doug/
      images/3/3b/Doug001.gif/revision/
      latest?cb=20110807170511",
    "occupation": "Student",
    "location": "Bluffington"
  },
]
```

```
{
  "id": 7,
  "name": "Bugs Bunny",
  "image": "https://vignette2.wikia.nocookie.net/deathbattlefanon/
    images/2/2b/Bugs_Bunny.png/revision/
    latest?cb=20151206010607",
  "occupation": "Looney Toon",
  "location": "A Rabbit Burrow"
},
{
  "id": 8,
  "name": "Johnny Bravo",
  "image": "http://vignette3.wikia.nocookie.net/p_/
    images/9/9a/Johnny_Bravo.png/revision/
    latest?cb=20131031233339&path-prefix=protagonist",
  "occupation": "Ladies Man",
  "location": "Aron City"
},
{
  "id": 9,
  "name": "Tommy Pickles",
  "image": "https://vignette4.wikia.nocookie.net/uncyclopedia/
    images/e/e4/Tommy_Pickles.png/revision/
    latest?cb=20110530102641",
  "occupation": "Adventurer",
  "location": "California"
},
{
  "id": 10,
  "name": "Rocko",
  "image": "http://vignette3.wikia.nocookie.net/rockosmodernlife/
    images/9/9e/Rockos-modern-life-4e582a8f06a41.png/
    revision/latest?cb=20130522173416",
  "occupation": "Cashier",
  "location": "O-Town, California"
},
{
  "id": 11,
  "name": "Captain Planet",
  "image": "http://vignette2.wikia.nocookie.net/dragon-rap-battles/
    images/b/b6/Captain_Planet.png/revision/
    latest?cb=20160911200836",
  "occupation": "Superhero",
  "location": "Earth"
},
{
  "id": 12,
  "name": "Ickis",
  "image": "http://static.tvtropes.org/pmwiki/pub/images/ickis.png",
  "occupation": "Ahhhh! A Real Monster!",
  "location": "Under a City Dump"
}
}
```

```
import React, { Component } from "react";
import FriendCard from "./components/FriendCard";
import Wrapper from "./components/Wrapper";
import Title from "./components/Title";
import friends from "./friends.json";
```

```
class App extends Component {
  // Setting this.state.friends to the friends json array
  state = {
    friends
  };
  removeFriend = id => {
    // Filter this.state.friends for friends with an id
    // not equal to the id being removed
    const friends = this.state.friends.filter(friend => friend.id !== id);
    // Set this.state.friends equal to the new friends array
    this.setState({ friends });
  };
}
```

// Map over this.state.friends and
render a FriendCard component for each friend object

```
render() {
  return (
    <Wrapper>
      <Title>Friends List</Title>
      {this.state.friends.map(friend => (
        <FriendCard
          removeFriend={this.removeFriend}
          id={friend.id}
          key={friend.id}
          name={friend.name}
          image={friend.image}
          occupation={friend.occupation}
          location={friend.location}
        />
      ))}
    </Wrapper>
  );
}
```

```
export default App;
```

Refactor pt2

```
import React from "react";
import "./style.css";

function FriendCard(props) {
  return (
    <div className="card">
      <div className="img-container">
        <img alt={props.name}
          src={props.image} />
      </div>
      <div className="content">
        <ul>
          <li>
            <strong>Name:</strong> {props.name}
          </li>
          <li>
            <strong>Occupation:
            </strong> {props.occupation}
          </li>
          <li>
            <strong>Location:
            </strong> {props.location}
          </li>
        </ul>
      </div>
      <span onClick={() =>
        props.removeFriend(props.id)}
        className="remove">
        □
      </span>
    </div>
  );
}

export default FriendCard;
```

```
.card {
  background: #fff;
  border-radius: 2px;
  height: 325px;
  margin: 1rem;
  position: relative;
  width: 325px;
  box-shadow: 0 3px 6px #999, 0 3px 6px #999;
  text-align: left;
}

.card > .img-container {
  height: 60%;
  overflow: hidden;
  text-align: center;
  background: #6CADD8;
}

.card > .img-container > img {
  width: 60%
}

.card > .content {
  padding-left: 1rem;
  padding-right: 1rem;
  font-size: 15px;
}

.card > .content > ul {
  list-style-type: none;
}

.card > .content > ul > li {
  margin-top: 18px;
}

.card > .remove {
  color: #ff1744;
  font-size: 48px;
  position: absolute;
  top: -20px;
  right: 5px;
  cursor: pointer;
}

.card > .remove:hover {
  color: #d50000;
}
```

```
import React from "react";
import "./style.css";
function Title(props) {
  return <h1 className="title">{props.children}</h1>;
}
export default Title;
```

```
.title {
  width: 100%;
  text-align: center;
  font-size: 3rem;
  text-decoration: underline;
  color: #2A77AE;
  margin-bottom: 50px;
}
```

```
import React from "react";
import "./style.css";
function Wrapper(props) {
  return <div className="wrapper">{props.children}</div>;
}
export default Wrapper;
```

```
.wrapper {
  padding-top: 50px;
  background: #ECEFF1;
  height: 100%;
  display: flex;
  flex-flow: row wrap;
  padding: 20px;
  justify-content: space-around;
  align-content: flex-start;
  overflow: auto;
}
```

```
import React from "react";
import ReactDOM from "react-dom";
import App from "./App";
```

```
ReactDOM.render(<App />, document.getElementById("root"));
```

Forms

```
import React from "react";
import Form from "./components/Form";
```

```
function App() {
  return <Form />;
}
```

```
export default App;
```

```
.form {
  margin: 20px;
}

.form input {
  display: block;
  margin-top: 5px;
  margin-bottom: 5px;
  width: 100%;
}
```

```
import React, { Component } from "react";
import "./style.css";
```

```
class Form extends Component {
  // Setting the component's initial state
  state = {
    firstName: "",
    lastName: "",
    password: "",
  };

  handleInputChange = (event) => {
    // Getting the value and name of the input which triggered the change
    let value = event.target.value;
    const name = event.target.name;
    if (name === "password") {
      value = value.substring(0, 15);
    }
    // Updating the input's state
    this.setState({
      [name]: value,
    });
  };

  handleFormSubmit = (event) => {
    // Preventing the default behavior of the form submit (which is to refresh the page)
    event.preventDefault();
    if (!this.state.firstName || !this.state.lastName) {
      alert("Fill out your first and last name please!");
    } else if (this.state.password.length < 6) {
      alert(
        `Choose a more secure password ${this.state.firstName} ${this.state.lastName}`
      );
    } else {
      alert(`Hello ${this.state.firstName} ${this.state.lastName}`);
    }

    this.setState({
      firstName: "",
      lastName: "",
      password: "",
    });
  };
}
```

```
render() {
  // Notice how each input has a `value`, `name`, and `onChange` prop
  return (
    <div>
      <p>
        Hello {this.state.firstName} {this.state.lastName}
      </p>
      <form className="form">
        <input
          value={this.state.firstName}
          name="firstName"
          onChange={this.handleInputChange}
          type="text"
          placeholder="First Name"
        />
        <input
          value={this.state.lastName}
          name="lastName"
          onChange={this.handleInputChange}
          type="text"
          placeholder="Last Name"
        />
        <input
          value={this.state.password}
          name="password"
          onChange={this.handleInputChange}
          type="password"
          placeholder="Password"
        />
        <button onClick={this.handleFormSubmit}>Submit</button>
      </form>
    </div>
  );
}

export default Form;
```

AJAX

```
import React from "react";
import OmdbContainer from "../components/OmdbContainer";
```

```
function App() {
  return <OmdbContainer />;
}
```

```
export default App;
```

```
import React, { Component } from "react";
import Container from "../Container";
import Row from "../Row";
import Col from "../Col";
import Card from "../Card";
import SearchForm from "../SearchForm";
import MovieDetail from "../MovieDetail";
import API from "../utils/API";
```

```
class OmdbContainer extends Component {
  state = {
    result: {},
    search: ""
  };
}
```

// When this component mounts, search for the movie "The Matrix"

```
componentDidMount() {
  this.searchMovies("The Matrix");
}
```

```
searchMovies = query => {
  API.search(query)
    .then(res => this.setState({ result: res.data }))
    .catch(err => console.log(err));
};
```

```
handleInputChange = event => {
  const value = event.target.value;
  const name = event.target.name;
  this.setState({
    [name]: value
  });
};
```

```
// When the form is submitted,
  search the OMDb API for the value of `this.state.search`
handleSubmit = event => {
  event.preventDefault();
  this.searchMovies(this.state.search);
};
```

```
import React from "react";
```

```
function Card(props) {
  return (
    <div className="card text-center">
      <div className="card-header">
        <h2>{props.heading}</h2>
      </div>
      <div className="card-body">{props.children}</div>
    </div>
  );
}
export default Card;
```

```
import React from "react";
```

```
function Row(props) {
  return <div className={`row${props.fluid ? "-fluid" : ""}`>
    {props.children}</div>;
}
export default Row;
```

```
render() {
  return (
    <Container>
      <Row>
        <Col size="md-8">
          <Card
            heading={this.state.result.Title || "Search for a Movie to Begin"}
          >
            {this.state.result.Title ? (
              <MovieDetail
                title={this.state.result.Title}
                src={this.state.result.Poster}
                director={this.state.result.Director}
                genre={this.state.result.Genre}
                released={this.state.result.Released}
              />
            ) : (
              <h3>No Results to Display</h3>
            )}
          </Card>
        </Col>
        <Col size="md-4">
          <Card heading="Search">
            <SearchForm
              value={this.state.search}
              handleInputChange={this.handleInputChange}
              handleSubmit={this.handleSubmit}
            />
          </Card>
        </Col>
      </Row>
    </Container>
  );
}
```

```
export default OmdbContainer;
```

```
import React from "react";
```

```
function MovieDetail(props) {
  return (
    <div className="text-center">
      <img alt={props.title} className="img-fluid"
        src={props.src} style={{ margin: "0 auto" }} />
      <h3>Director(s): {props.director}</h3>
      <h3>Genre: {props.genre}</h3>
      <h3>Released: {props.released}</h3>
    </div>
  );
}
export default MovieDetail;
```

```
import axios from "axios";
const BASEURL = "https://www.omdbapi.com/?t=";
const APIKEY = "&apikey=trilogy";
```

```
export default {
  search: function(query) {
    return axios.get(BASEURL + query + APIKEY);
  }
};
```

```
import React from "react";
```

// This Col component offers us the convenience of being able
to set a column's "size" prop instead of its className
// We can also omit the col- at the start of each Bootstrap
column class, e.g. size="md-12" instead of className="col-
md-12"

```
function Col(props) {
  const size = props.size.split(" ").map(size => "col-" +
    size).join(" ");
  return (
    <div className={size}>
      {props.children}
    </div>
  );
}
export default Col;
```

```
import React from "react";
```

```
function SearchForm(props) {
  return (
    <form>
      <div className="form-group">
        <label htmlFor="search">Search:</label>
        <input
          onChange={props.handleInputChange}
          value={props.value}
          name="search"
          type="text"
          className="form-control"
          placeholder="Search For a Movie"
          id="search"
        />
        <br />
        <button onClick={props.handleSubmit} className="btn btn-primary">
          Search
        </button>
      </div>
    </form>
  );
}
export default SearchForm;
```

```
import React from "react";
```

```
function Container(props) {
  return <div className={`container${props.fluid ?
    "-fluid" : ""}`>{props.children}</div>;
}
export default Container;
```

```
import React from "react";
import PortfolioContainer from "../components/PortfolioContainer";
```

```
const App = () => <PortfolioContainer />;
```

```
export default App;
```

```
import React, { Component } from "react";
import NavTabs from "../NavTabs";
import Home from "../pages/Home";
import About from "../pages/About";
import Blog from "../pages/Blog";
import Contact from "../pages/Contact";
```

```
class Portfolio extends Component {
  state = {
    currentPage: "Home"
  };

```

```
  handlePageChange = page => {
    this.setState({ currentPage: page });
  };

```

```
  renderPage = () => {
    if (this.state.currentPage === "Home") {
      return <Home />;
    } else if (this.state.currentPage === "About") {
      return <About />;
    } else if (this.state.currentPage === "Blog") {
      return <Blog />;
    } else {
      return <Contact />;
    }
  };

```

```
  render() {
    return (
      <div>
        <NavTabs
          currentPage={this.state.currentPage}
          handlePageChange={this.handlePageChange}
        />
        {this.renderPage()}
      </div>
    );
  }
}
export default Portfolio;
```

Conditional Render

```
import React from "react";
```

```
function NavTabs(props) {
  return (
    <ul className="nav nav-tabs">
      <li className="nav-item">
        <a
          href="#home"
          onClick={() => props.handlePageChange("Home")}
          className={props.currentPage === "Home" ? "nav-link active" : "nav-link"}
        >
          Home
        </a>
      </li>
      <li className="nav-item">
        <a
          href="#about"
          onClick={() => props.handlePageChange("About")}
          className={props.currentPage === "About" ? "nav-link active" : "nav-link"}
        >
          About
        </a>
      </li>
      <li className="nav-item">
        <a
          href="#blog"
          onClick={() => props.handlePageChange("Blog")}
          className={props.currentPage === "Blog" ? "nav-link active" : "nav-link"}
        >
          Blog
        </a>
      </li>
      <li className="nav-item">
        <a
          href="#contact"
          onClick={() => props.handlePageChange("Contact")}
          className={props.currentPage === "Contact" ? "nav-link active" : "nav-link"}
        >
          Contact
        </a>
      </li>
    </ul>
  );
}
export default NavTabs;
```

```
import React from "react";
```

```
const Home = () => (
  <div>
    <h1>Home Page</h1>
    <p>
      Lorem ipsum dolor sit amet, consectetur adipiscing elit.
      Sed neque velit, lobortis ut magnavarius, Etiam
    </p>
  </div>
);
export default Home;
```

```
import React from "react";
import { BrowserRouter as Router, Route } from "react-router-dom";
import NavTabs from "../components/NavTabs";
import Home from "../components/pages/Home";
import About from "../components/pages/About";
import Blog from "../components/pages/Blog";
import Contact from "../components/pages/Contact";
```

```
function App() {
  return (
    <Router>
      <div>
        <NavTabs />
        <Route exact path="/" component={Home} />
        <Route exact path="/about" component={About} />
        <Route exact path="/blog" component={Blog} />
        <Route path="/contact" component={Contact} />
      </div>
    </Router>
  );
}
export default App;
```

```
import React from "react";
import { Link, Route } from "react-router-dom";
import Learn from "../Learn";
```

```
function Contact(props) {
  return (
    <div>
      <h1>Contact Page</h1>
      <p>
        Integer cursus bibendum sem non pretium. Vestibulum in aliquet sem,
        quis molestie urna. Aliquam semper ultrices varius. Aliquam faucibus
        sit amet magna a ultrices. Aenean pellentesque placerat lacus imperdiet
        efficitur. In felis nisl, luctus non ante euismod,
      </p>
      <Link to={`/${props.match.url}/learn`} role="button" className="btn btn-link">
        Learn More
      </Link>{" "}
      <Link to="/contact" role="button" className="btn btn-link">
        Learn Less
      </Link>
      <Route exact path={`/${props.match.url}/learn`} component={Learn} />
    </div>
  );
}
export default Contact;
```

React Router

```
import React from "react";
import { Link, useLocation } from "react-router-dom";
```

```
function NavTabs() {
  // We'll go into the Hooks API later, for now, we are just using some code
  // from the react-router docs (https://reacttraining.com/react-router/web/api/Hooks/useLocation)
  // This allows the component to check the route any time the user uses a link to navigate.
  const location = useLocation();
```

```
  return (
    <ul className="nav nav-tabs">
      <li className="nav-item">
        <Link to="/" className={location.pathname === "/" ? "nav-link active" : "nav-link"}>
          Home
        </Link>
      </li>
      <li className="nav-item">
        <Link
          to="/about"
          className={location.pathname === "/about" ? "nav-link active" : "nav-link"}
        >
          About
        </Link>
      </li>
      <li className="nav-item">
        <Link
          to="/blog"
          className={location.pathname === "/blog" ? "nav-link active" : "nav-link"}
        >
          Blog
        </Link>
      </li>
      <li className="nav-item">
        <Link
          to="/contact"
          className={location.pathname === "/contact" ? "nav-link active" : "nav-link"}
        >
          Contact
        </Link>
      </li>
      <li className="nav-item">
        <Link
          to="/contact/learn"
          className={location.pathname === "/contact/learn" ? "nav-link active" : "nav-link"}
        >
          Learn
        </Link>
      </li>
    </ul>
  );
}
export default NavTabs;
```

Pupster (Partial) pt1

```
import React from "react";
import { BrowserRouter as Router, Route } from "react-router-dom";
import Discover from "../pages/Discover";
import About from "../pages/About";
import Search from "../pages/Search";
import Navbar from "../components/Navbar";
import Footer from "../components/Footer";
import Wrapper from "../components/Wrapper";
```

```
function App() {
  return (
    <Router>
      <div>
        <Navbar />
        <Wrapper>
          <Route exact path="/" component={About} />
          <Route exact path="/about" component={About} />
          <Route exact path="/discover" component={Discover} />
          <Route exact path="/search" component={Search} />
        </Wrapper>
        <Footer />
      </div>
    </Router>
  );
}
export default App;
```

```
import React, { Component } from "react";
import API from "../utils/API";
import Card from "../components/Card";
import Alert from "../components/Alert";
```

```
class Discover extends Component {
  state = {
    image: "",
    match: false,
    matchCount: 0
  };
}
```

```
// When the component mounts, load the next dog to be displayed
componentDidMount() {
  this.loadNextDog();
}
```

```
handleBtnClick = event => {
  // Get the data-value of the clicked button
  const btnType = event.target.attributes.getNamedItem("data-value").value;
```

```
// Clone this.state to the newState object
// We'll modify this object and use it to set our component's state
const newState = { ...this.state };
```

```
if (btnType === "pick") {
  // Set newState.match to either true or false depending
  // on whether or not the dog likes us (1/5 chance)
  newState.match = 1 === Math.floor(Math.random() * 5) + 1;

  // Set newState.matchCount equal to its current value or
  // its current value + 1 depending on whether the dog likes us
  newState.matchCount = newState.match
    ? newState.matchCount + 1
    : newState.matchCount;
} else {
  // If we thumbs down'ed the dog, we haven't matched with it
  newState.match = false;
}
// Replace our component's state with newState,
// load the next dog image
this.setState(newState);
this.loadNextDog();
};

loadNextDog = () => {
  API.getRandomDog()
    .then(res =>
      this.setState({
        image: res.data.message
      })
    )
    .catch(err => console.log(err));
};
```

```
import axios from "axios";
```

```
// Export an object containing methods we'll use for accessing the Dog.Ceo API
export default {
  getRandomDog: function() {
    return axios.get("https://dog.ceo/api/breeds/image/random");
  },
  getDogsOfBreed: function(breed) {
    return axios.get("https://dog.ceo/api/breed/" + breed + "/images");
  },
  getBaseBreedsList: function() {
    return axios.get("https://dog.ceo/api/breeds/list");
  }
};
```

```
render() {
  return (
    <div>
      <h1 className="text-center">Make New Friends</h1>
      <h3 className="text-center">
        Thumbs up on any pups you'd like to meet!
      </h3>
      <Card image={this.state.image} handleBtnClick={
        this.handleBtnClick} />
      <h1 className="text-center">
        Made friends with {this.state.matchCount} pups so far!
      </h1>
      <Alert style={{ opacity: this.state.match ? 1 : 0 }}
        type="success">
        Yay! That Pup Liked You Too!!!
      </Alert>
    </div>
  );
}
export default Discover;
```


Pupster (Partial) pt2

```
import React from "react";
import { Link } from "react-router-dom";
import "../style.css";
```

// Depending on the current path, this component
sets the "active" class on the appropriate navigation link item

```
function NavBar() {
  return (
    <nav className="navbar navbar-expand-lg navbar-light bg-light">
      <Link className="navbar-brand" to="/">
        Pupster
      </Link>
      <div>
        <ul className="navbar-nav">
          <li className="nav-item">
            <Link
              to="/"
              className={
                window.location.pathname ===
                  "/" || window.location.pathname === "/about"
                  ? "nav-link active"
                  : "nav-link"
              }
            >
              About
            </Link>
          </li>
          <li className="nav-item">
            <Link
              to="/discover"
              className={window.location.pathname ===
                "/discover" ? "nav-link active" : "nav-link"}
            >
              Discover
            </Link>
          </li>
          <li className="nav-item">
            <Link
              to="/search"
              className={window.location.pathname ===
                "/search" ? "nav-link active" : "nav-link"}
            >
              Search
            </Link>
          </li>
        </ul>
      </div>
    </nav>
  );
}
export default NavBar;
```

```
import React from "react";
import CardBtn from "../CardBtn";
import "../style.css";
```

```
function Card(props) {
  return (
    <div
      className="card"
      style={{
        backgroundImage: props.image ? `url(${props.image})` : "none"
      }}
    >
      {!props.image && <i className="fa fa-spinner fa-spin"
        aria-hidden="true" />}
      <CardBtn
        onClick={props.handleClick}
        data-value="pass"
      />
      <CardBtn
        onClick={props.handleClick}
        data-value="pick"
      />
    </div>
  );
}
export default Card;
```

```
import React from "react";
```

```
function Alert(props) {
  return (
    <div
      role="alert"
      className={`alert alert-${props.type} fade in`}
      style={{ width: "80%", margin: "0 auto",
        marginTop: 18, ...props.style }}
    >
      {props.children}
    </div>
  );
}
export default Alert;
```

```
import React from "react";
import "../style.css";
```

```
function SearchResults(props) {
  return (
    <ul className="list-group search-results">
      {props.results.map(result => (
        <li key={result} className="list-group-item">
          <img alt="Dog" src={result} className="img-fluid" />
        </li>
      ))}
    </ul>
  );
}
export default SearchResults;
```

```
import React from "react";
import "../style.css";
```

// Using the datalist element we can create autofill suggestions
based on the props.breeds array

```
function SearchForm(props) {
  return (
    <form className="search">
      <div className="form-group">
        <label htmlFor="breed">Breed Name:</label>
        <input
          value={props.search}
          onChange={props.handleChange}
          name="breed"
          list="breeds"
          type="text"
          className="form-control"
          placeholder="Type in a dog breed to begin"
          id="breed"
        />
        <datalist id="breeds">
          {props.breeds.map(breed => (
            <option value={breed} key={breed} />
          ))}
        </datalist>
        <button type="submit" onClick={props.handleFormSubmit}
          className="btn btn-success">
          Search
        </button>
      </div>
    </form>
  );
}
export default SearchForm;
```