React Props

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React Props

In React, components communicate by passing data through props (short for "properties"). Props allow parent components to send data to child component

- Props are read-only and cannot be modified inside the child component.
- They are passed as **attributes** in JSX.
- They help make components reusable and dynamic.

```
function Greeting(props) {
  return <h1>Hello, {props.name}!</h1>;
}

function App() {
  return <Greeting name="Alice" />;
}
```

Props Destructuring

 Instead of using props.name, you can destructure props directly in function parameters.

```
function Greeting({ name }) {
  return <h1>Hello, {name}!</h1>;
}
```

Default Props

• You can set **default values** for props in case they are not provided.

```
function Greeting({ name = "Guest" }) {
  return <h1>Hello, {name}!</h1>;
}
```

Passing an Object as a Prop

• You can pass an entire object as a prop instead of individual properties

```
function UserInfo({ user }) {
  return <h1>{user.name} is {user.age} years old.</h1>;
}

const user = { name: "Alice", age: 25 };
function App() {
  return <UserInfo user={user} />;
}
```

Spread Operator in Props

• The **spread operator (...)** allows passing all object properties as props

```
function UserInfo({ name, age }) {
  return <h1>{name} is {age} years old.</h1>;
}

const user = { name: "Alice", age: 25 };
function App() {
  return <UserInfo {...user} />;
}
```

This avoids manually passing each property (name={user.name}, age={user.age}).

The children prop

When you nest content inside a JSX tag, the parent component will receive that content in a prop called children

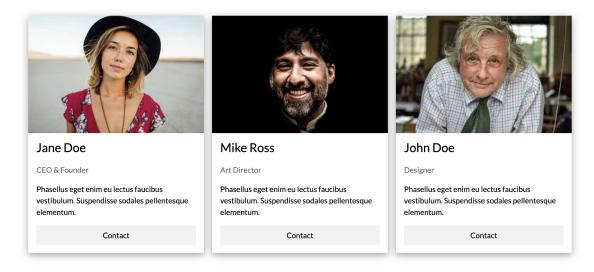
```
import Avatar from './Avatar.js';
function Card({ children }) {
  return (
    <div className="card">
      {children}
    </div>
 );
}
export default function Profile() {
  return (
    <Card>
      <Avatar
        size={100}
        person={{
          name: 'Katsuko Saruhashi',
          imageId: 'YfeOqp2'
        }}
      />
    </Card>
  );
}
```

You use the children prop to create HOC (Higher-Order Components) e.g. Modal, Tooltip, etc.

Assignments

Use Props to pass User Display Data:

1. Profiles Display



2. What do we offer



3. Build this section with red boxes as separate components.

