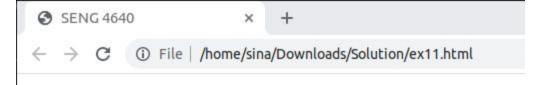
Function and Component

Use React to create a webpage that displays
"Welcome {Name}!"



Hello Mike!

```
class Welcome extends React.Component {
    constructor(props) {
        super(props);
    }
    render() {
        return (<h1>Hello {this.props.name}!</h1>);
    };
}
ReactDOM.createRoot(document.getElementById("root")).render(<Welcome name="Mike" />);
```

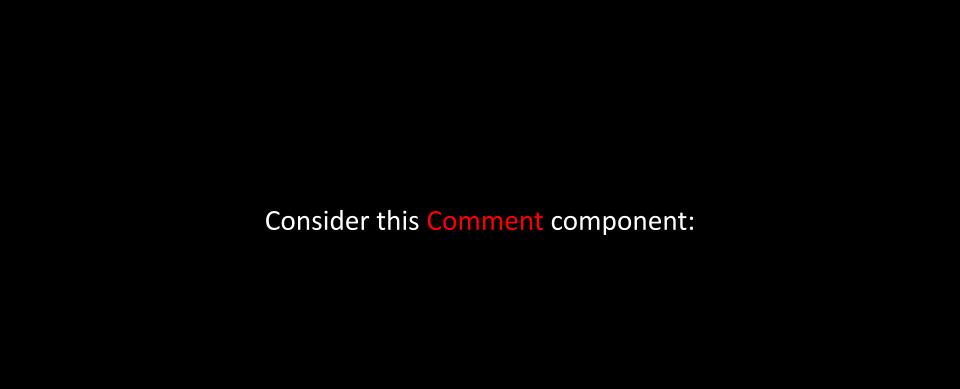
can we use function! isn't function an object!

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

ReactDOM.createRoot(document.getElementById("root")).render(<Welcome name="Robert" />);

A sample solution using React class





```
function Comment(props) {
   return (
       <div className="Comment">
           <div className="UserInfo">
               <img className="Avatar"</pre>
                   src={props.author.avatarUrl}
                   alt={props.author.name}
               />
               <div className="UserInfo-name">
                   {props.author.name}
               </div>
           </div>
           <div className="Comment-text">
               {props.text}
           </div>
           <div className="Comment-date">
               {props.date.toLocaleDateString()}
           </div>
       </div>
   );
```

```
const comment = {
  date: new Date(),
  text: 'I hope you enjoy learning React!',
  author: {
       name: 'Hello Kitty',
       avatarUrl: 'http://placekitten.com/g/64/64'
};
ReactDOM.createRoot(document.getElementById("root")).re
nder(<Comment date={comment.date}</pre>
  text={comment.text}
  author={comment.author} />);
```

```
function formatDate(date) {
    return date.toLocaleDateString();
}
```

it is also hard to reuse individual parts of it.

This component can be tricky to change

because of all the nesting, and

Don't be afraid to split components into smaller components.

extract Avatar from the component

We can now simplify **Comment** a tiny bit

```
function Comment(props) {
function Comment(props) {
                                                        return (
   return (
                                                            <div className="Comment">
       <div className="Comment">
                                                                <div className="UserInfo">
                                                                    <img className="Avatar"</pre>
           <div className="UserInfo">
                                                                        src={props.author.avatarUrl}
                <Avatar user={props.author} />
                                                                        alt={props.author.name}
                <div className="UserInfo-name">
                    {props.author.name}
                                                                    <div className="UserInfo-name">
                </div>
                                                                        {props.author.name}
           </div>
                                                                    </div>
           <div className="Comment-text">
                                                                </div>
                {props.text}
                                                                <div className="Comment-text">
           </div>
                                                                    {props.text}
           <div className="Comment-date">
                                                                </div>
                                                                <div className="Comment-date">
                {formatDate(props.date)}
                                                                    {props.date.toLocaleDateString()}
           </div>
                                                                </div>
       </div>
                                                            </div>
                                                        );
```

renders an Avatar next to the user's name

extract a UserInfo component that

This lets us simplify Comment even further

```
function Comment(props) {
                                                         return (
                                                             <div className="Comment">
                                                                 <div className="UserInfo">
function Comment(props) {
                                                                     <img className="Avatar"</pre>
   return (
                                                                         src={props.author.avatarUrl}
       <div className="Comment">
                                                                         alt={props.author.name}
            <UserInfo user={props.author} />
                                                                     />
            <div className="Comment-text">
                                                                     <div className="UserInfo-name">
                                                                         {props.author.name}
                {props.text}
                                                                     </div>
            </div>
                                                                 </div>
           <div className="Comment-date">
                                                                 <div className="Comment-text">
                {formatDate(props.date)}
                                                                     {props.text}
            </div>
                                                                 </div>
       </div>
                                                                 <div className="Comment-date">
   );
                                                                     {props.date.toLocaleDateString()}
                                                                 </div>
                                                             </div>
                                                         );
```





Hello Kitty
I hope you enjoy learning React!
2/10/2023