

# How to Reuse logic across components?

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- Sometimes we have some code or design that repeats in different components
- Can there be a way to repeat a piece of logic across various components?

## What are possible scenarios?

### 1. We need some particular design element in various components

#### Example

- All My 'Screen' components will need to display a title
- Now in every screen we need to add something like  
`<h2>Page Title</h2>`
- What if tomorrow I want to change the placement of title or design on all the pages?
  - What if I need vertical title aligned at the top left?
  - We will need to update the logic on every page.

### 2. React components don't have visibility property out of box.

- What if I want to write a logic to toggle visibility on all my components using

```
<MyComponent visible={some-condition} />
```

- We don't want to wrap the component each time with
  - `{ condition && <MyComponent/> }` or
  - `<If condition={condition}> <MyComponent /> </If>`

- What if we want to write
  - Show BookDetails only if book is not null

```
• <BookDetails visible={book} book={book} />
```

- Show Start Button only if move is null

```
• <StartButton visible={move===null} />
```

- Here each component needs same code

```
const BookDetails = (props) =>{  
  if(!props.condition)  
    return null;  
  
  //rest of book details code  
}
```

← common logic →

```
const ResetButton = (props) =>{  
  if(!props.condition)  
    return null;  
  
  //rest of reset button code  
}
```

### 3. We may need some information added as props to all my component

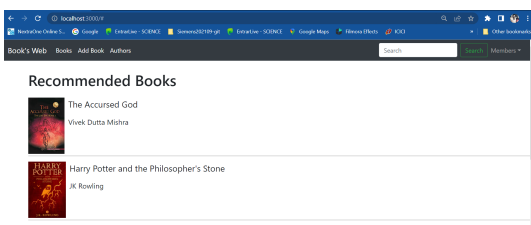
- All my screens should have "setScreen" function to navigate between pages
- Currently this information is being passed by App explicitly

Can there be a way to auto inject this info?

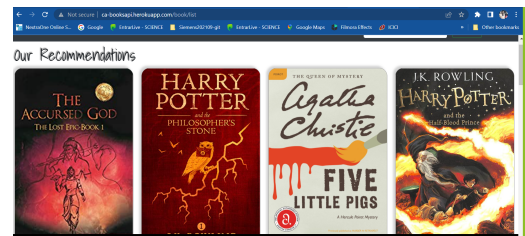
```
return (  
  <div>  
    <AppHeader title="Book's Web" setScreen={setScreen} />  
    <div className='screen'>  
      {screen==='book-list' && <BookListScreen onBookSelect={handleBookSelect}/> }  
      {screen==='book-details' && <BookDetailsScreen selectedBook={selectedBook} onBack={()=>setScreen('book-list')}  
      {screen==='book-add' && <BookAddScreen/>}  
    </div>  
    <AppFooter/>  
  </div>  

```

### 4. We may fetch the data from server (common logic) and then display it using different (component ui)



Display logic may be different  
Data fetching logic is same across page



List View

Grid View

### 5. Adding common features like

- A wait animation while we wait for the data

