**Project note**

Q: How to use ‘for Each’?

A: mySimpleArray = ['a', 1, 'etc'];

mySimpleArray.forEach(function(val) {

console.log(val);

});

* Used over arrays

Q: for-in:

A: Used over objects

his can be error prone because for-in does not loop from 0 to length - 1 but over all the present keys in the object and its prototype chain.

* So:

myObj = {'firstName':'Ada','lastName':'Lovelace'};

for (var key in myObj) {

if (myObj.hasOwnProperty(key)) {

console.log(myObj[key]);

}

}

\_For new repo on github, use git remote add origin

Q: Sometimes you create a remote repo and a local repo. Then when you try to merge the 2 together (pull), you receive this message “fatal: refusing to merge unrelated histories

“. What do you do?

A: git pull origin branchname --allow-unrelated-histories

Q: componentDidMount(){

BooksAPI.getAll().then((books) =>{

this.state({books})

})

}

A: getAll goes into the BooksAPI where it’s defined, and then it goes through all the promises and saves into this.state. books: books is simplified to just “books”

Q: So when do we use =() =>{} on the method and when do we just use method()?

A: They’re basically the same thing if we consider what’s written on the render() method:

1. Properly initialized syntax:
2. class LoggingButton extends React.Component {
3. // This syntax ensures `this` is bound within handleClick.
4. // Warning: this is \*experimental\* syntax.
5. handleClick = () => {
6. console.log('this is:', this);
7. }
8. render() {
9. return (
10. <button onClick={this.handleClick}>
11. Click me
12. </button>
13. );
14. }
15. }

2) Non-properly initialized syntax:

class LoggingButton extends React.Component {

handleClick() {

console.log('this is:', this);

}

render() {

// This syntax ensures `this` is bound within handleClick

return (

<button onClick={(e) => this.handleClick(e)}>

Click me

</button>

);

}

}

* They are the same, but preferably use ()=>{}. Just different syntaxes

\_If you write it like this bookAPI.update(book, shelf).then((book, shelf)=>{

It’s like you’re redefining book and shelf.

So instead, do this: bookAPI.update(book, shelf).then(()=>{

\_Always pass an object into setState

\_componentDidMount(){

BooksAPI.getAll().then((books) =>{

this.setState({books})

console.log(books)

})

}

* Notice no comma between this.setState() and console.log

Q: What does this do?

UpdateBooks = (book, shelf) =>{

BooksAPI.update(book, shelf).then(()=>{

book.shelf = shelf;

this.setState({

books: this.state.filter(b => b.id !== book.id).concat([ book ])

})

})

}

A: First I make the API call.

Then API call returns a promise, which is resolved using .then(…)

Inside .then we have () =>{…}

Now the method inside is executed.

book is a new variable, and the same with ‘shelf’. Book.shelf is set to ‘shelf’.

Now in the books array, there already exist an old variable book which contains the same id of the book the user is selecting, but this one has no shelf

Then when you run the .filter array, it returns a new array WITHOUT the old variable.

Then now you concat it (as opposed to ‘push’, to create a new array) that item to the new book array.

We return the new array cuz we need to treat state as immutable

Another way is:

updateBook = (book, shelf) => {

const books = [...this.state.books];

books.forEach(b => {

if(b.id === book.id) {

b.shelf = shelf;

}

});

\_When I use React Router, I’ve got to wrap it in the index.js file, wrapping it around <App> like this:

<BrowserRouter><App /></BrowserRouter>

\_Also, when import file with 1 component/ function in, use “import filename from direction”

ex: import BookShelves from './BookShelves'

\_But with files with multiple components/ functions, use “import \* as name from direction”

ex: import \* as BooksAPI from './BooksAPI'

Your function has ato return a view

For example, this doesn’t work:

{Shelves.map((shelf) =>{

<h2 className="bookshelf-title">{shelf.title}</h2>

})}

* Need to return 1 view, like below:

{Shelves.map((shelf) =>{

return(

<h2 className="bookshelf-title">{shelf.title}</h2>

)

})}

\_If I wanna pass something in so that it’ll show up, pass it like this:

<div className="book-list-item”> {book1.title</div>

\_Don’t pass things into a plain div element like this (it might givde you an error

<div props props>

\_ Whenever you see this error: “Objects are not valid as a React child (found: object with keys {title, subtitle, authors, publisher, publishedDate, description, industryIdentifiers, readingModes, pageCount, printType, categories, averageRating, ratingsCount, maturityRating, allowAnonLogging, contentVersion, panelizationSummary, imageLinks, language, previewLink, infoLink, canonicalVolumeLink, id, shelf}). If you meant to render a collection of children, use an array instead or wrap the object using createFragment(object) from the React add-ons. Check the render method of BookShelf.

lVolumeLink, id, shelf}). If you meant to render a collection of children, use an array instead or wrap the object using createFragment(object) from the React add-ons. Check the render method of BookShelf.”

* It could be that one of your prop is an object

\_If I want to display something down the prop, I have to call {this.props.children} on the child component

Ex: Passing {shelf.title} from BookShelves to BookShelf

BookShelves:

<div>

{Shelves.map((shelf) =>{

return(

<BookShelf

className="bookshelf-content"

shelf={shelf}

title={shelf.title}

key={shelf.id}

isRightBook={shelf.bookOnShelf}

books={books}

updateBookShelf={updateBookShelf}

>{shelf.title}

</BookShelf>

)

})}

</div>

And then BookShelf:

eturn(

<div className="bookshelf-books">

<div className="bookshelf-title">{this.props.children}</div>

<ol className="books-grid">

<li>