ICP – 7

ICP GROUP: 38
ICP7
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Partner Repository : https://github.com/UMKC-APL-WebMobileProgramming/ICP7-YAbhinay
Source Code Link : https://github.com/UMKC-APL-WebMobileProgramming/ICP7-YAbhinay/tree/main/Source/LibraryManagementSystem

My report, video and source code links:
ICP7 video: https://drive.google.com/file/d/1Ex-Xrs00usvNJw9MATB7hclO9iEhxeE-/view?usp=sharing
ICP7 Repository : https://github.com/UMKC-APL-WebMobileProgramming/ICP7-AnilkumarreddyNandikonda

ICP7 source codelink: https://github.com/UMKC-APL-WebMobileProgramming/ICP7-AnilkumarreddyNandikonda/tree/main/Source/LibraryManagementSystem

Lesson Overview:
In this lesson, we are going to discuss MongoDB, Express.js, NodeJS, and MEAN stack.

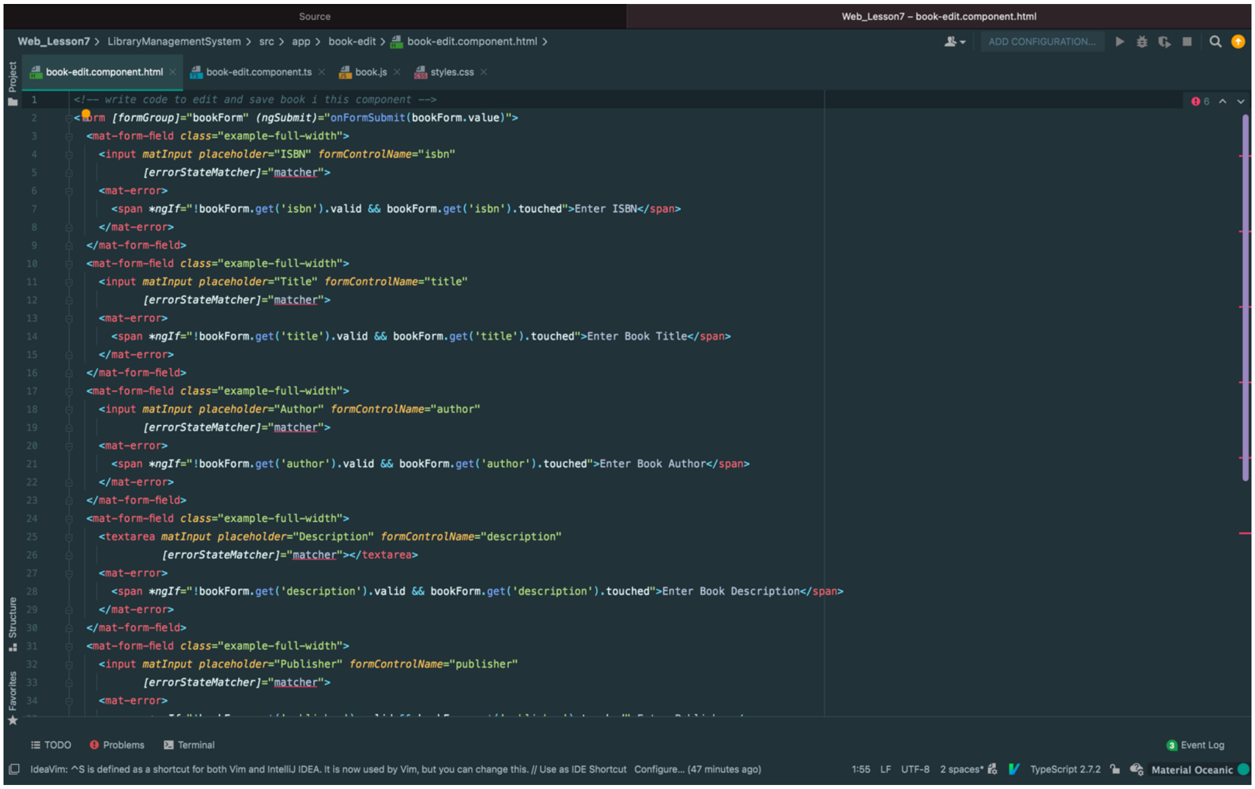
Programming elements:
MongoDB, Express.js, Node.js, and MEAN stack

In Class Programming (ICP):

In the above use case, implement update and delete functionality (user should be able to update the book details and delete the book from the database).

Initially, Update functions as follows:

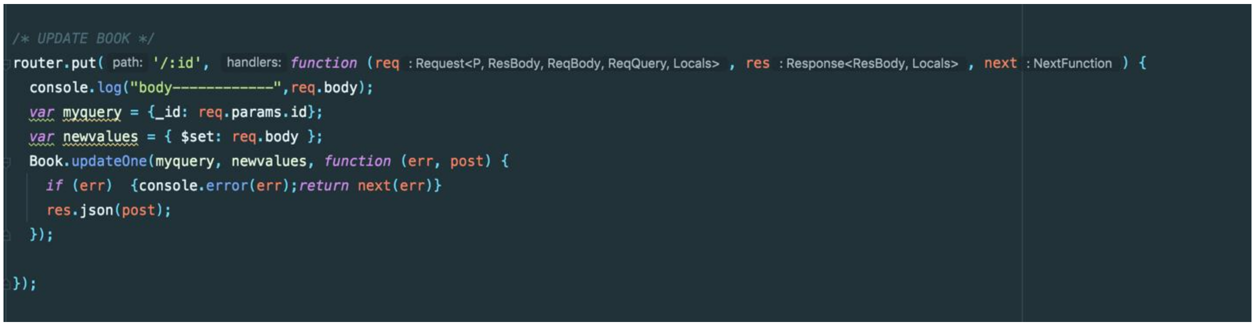
Adjust HTML page where it gets the data from the database


Source
Web_Lesson7 – book-edit.component.html
Web_Lesson7 > LibraryManagementSystem > src > app > book-edit > book-edit.component.html >
ADD CONFIGURATION...
Project
book-edit.component.html
book-edit.component.ts
book.js
styles.css
6
Structure
Favorites
TODO
Problems
Terminal
3 Event Log
1:55 LF UTF-8 2 spaces* TypeScript 2.7.2 Material Oceanic

```html
<!-- write code to edit and save book i this component -->
<form [formGroup]="bookForm" (ngSubmit)="onFormSubmit(bookForm.value)">
  <mat-form-field class="example-full-width">
    <input matInput placeholder="ISBN" formControlName="isbn"
           [errorStateMatcher]="matcher">
    <mat-error>
      <span *ngIf="!bookForm.get('isbn').valid && bookForm.get('isbn').touched">Enter ISBN</span>
    </mat-error>
  </mat-form-field>
  <mat-form-field class="example-full-width">
    <input matInput placeholder="Title" formControlName="title"
           [errorStateMatcher]="matcher">
    <mat-error>
      <span *ngIf="!bookForm.get('title').valid && bookForm.get('title').touched">Enter Book Title</span>
    </mat-error>
  </mat-form-field>
  <mat-form-field class="example-full-width">
    <input matInput placeholder="Author" formControlName="author"
           [errorStateMatcher]="matcher">
    <mat-error>
      <span *ngIf="!bookForm.get('author').valid && bookForm.get('author').touched">Enter Book Author</span>
    </mat-error>
  </mat-form-field>
  <mat-form-field class="example-full-width">
    <textarea matInput placeholder="Description" formControlName="description"
              [errorStateMatcher]="matcher"></textarea>
    <mat-error>
      <span *ngIf="!bookForm.get('description').valid && bookForm.get('description').touched">Enter Book Description</span>
    </mat-error>
  </mat-form-field>
  <mat-form-field class="example-full-width">
    <input matInput placeholder="Publisher" formControlName="publisher"
           [errorStateMatcher]="matcher">
    <mat-error>
```

IdeaVim: ^S is defined as a shortcut for both Vim and IntelliJ IDEA. It is now used by Vim, but you can change this. // Use as IDE Shortcut Configure... (47 minutes ago)

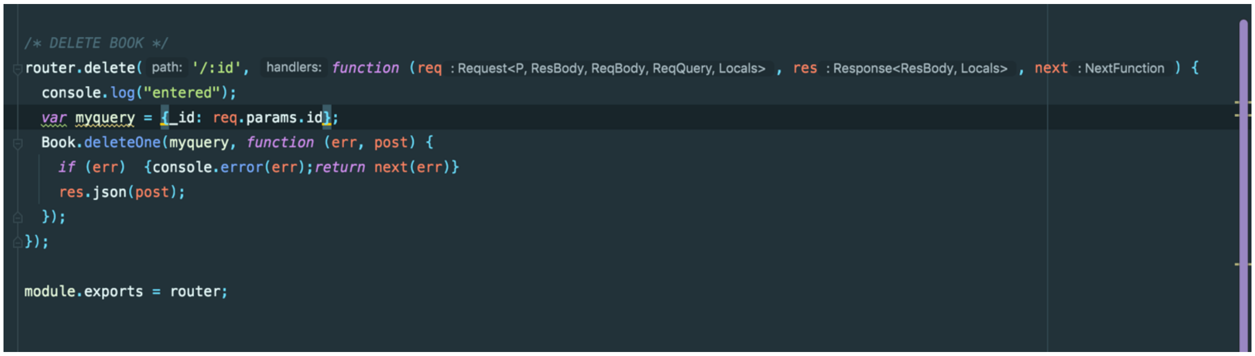
The update values should be setup in the database



```javascript
/* UPDATE BOOK */
router.put( path: '/:id',  handlers: function (req :Request<P, ResBody, ReqBody, ReqQuery, Locals> , res :Response<ResBody, Locals> , next :NextFunction ) {
  console.log("body------------",req.body);
  var myquery = {_id: req.params.id};
  var newvalues = { $set: req.body };
  Book.updateOne(myquery, newvalues, function (err, post) {
    if (err)  {console.error(err);return next(err)}
    res.json(post);
  });

});
```

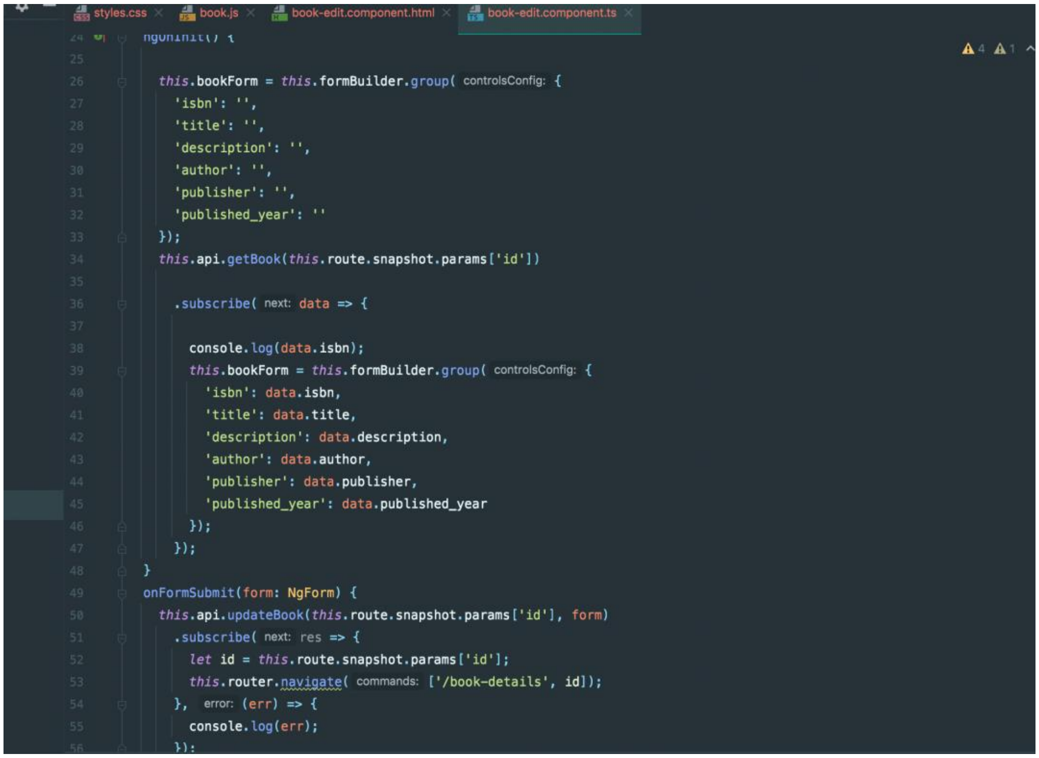
The delete function steps should be as followed :



```
/* DELETE BOOK */
router.delete( path: '/:id',  handlers: function (req : Request<P, ResBody, ReqBody, ReqQuery, Locals> , res : Response<ResBody, Locals> , next : NextFunction ) {
  console.log("entered");
  var myquery = {_id: req.params.id};
  Book.deleteOne(myquery, function (err, post) {
    if (err)  {console.error(err);return next(err)}
    res.json(post);
  });
});

module.exports = router;
```

Typescript file for book edit:



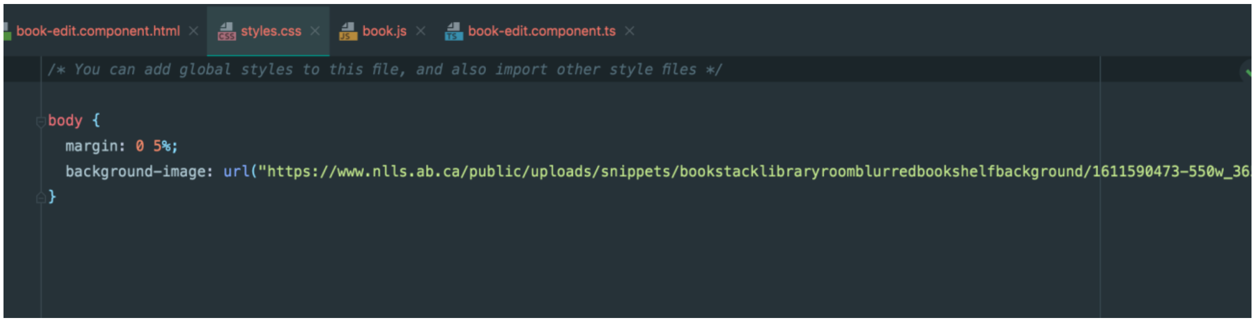
```
  ngOnInit() {

    this.bookForm = this.formBuilder.group( controlsConfig: {
      'isbn': '',
      'title': '',
      'description': '',
      'author': '',
      'publisher': '',
      'published_year': ''
    });
    this.api.getBook(this.route.snapshot.params['id'])

      .subscribe( next: data => {

        console.log(data.isbn);
        this.bookForm = this.formBuilder.group( controlsConfig: {
          'isbn': data.isbn,
          'title': data.title,
          'description': data.description,
          'author': data.author,
          'publisher': data.publisher,
          'published_year': data.published_year
        });
      });
  }
  onFormSubmit(form: NgForm) {
    this.api.updateBook(this.route.snapshot.params['id'], form)
      .subscribe( next: res => {
        let id = this.route.snapshot.params['id'];
        this.router.navigate( commands: ['/book-details', id]);
      }, error: (err) => {
        console.log(err);
      });
```

Included the background image for the webpage:

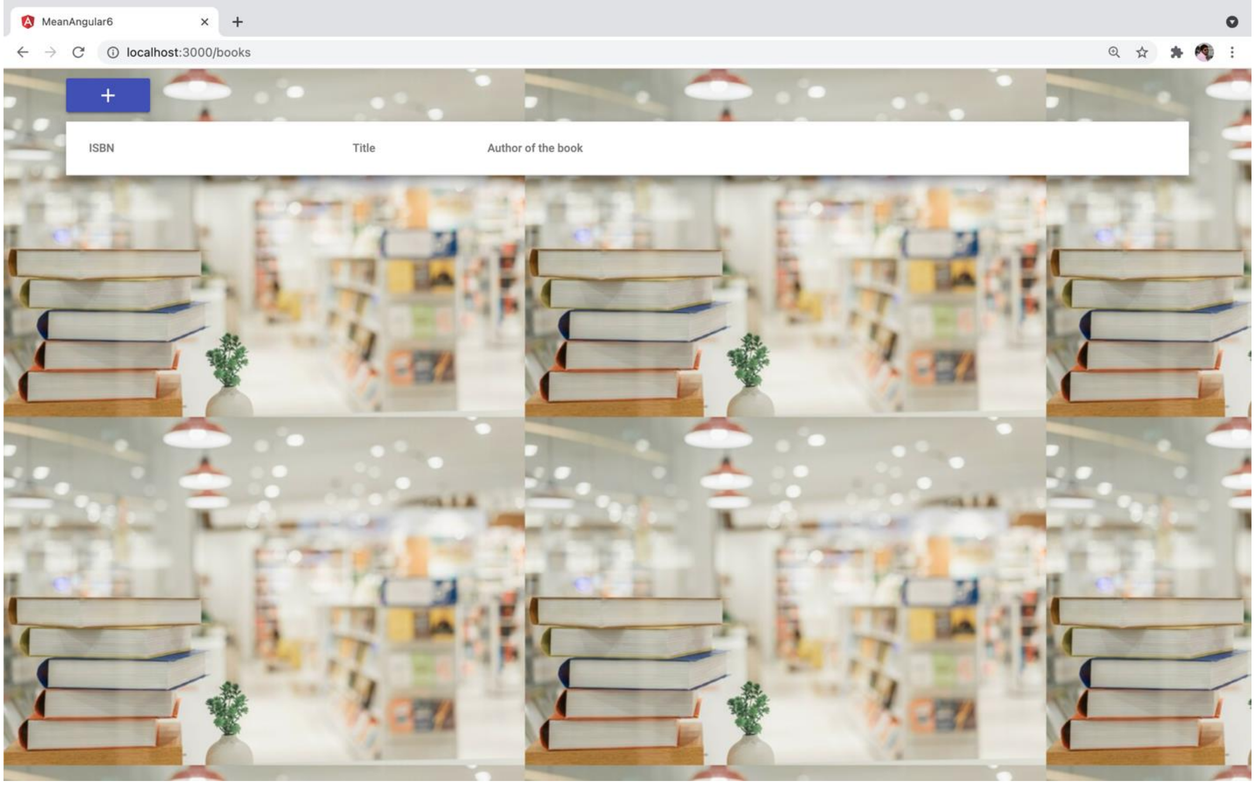


```
/* You can add global styles to this file, and also import other style files */

body {
  margin: 0 5%;
  background-image: url("https://www.nlls.ab.ca/public/uploads/snippets/bookstacklibraryroomblurredbookshelfbackground/1611590473-550w_36
}
```

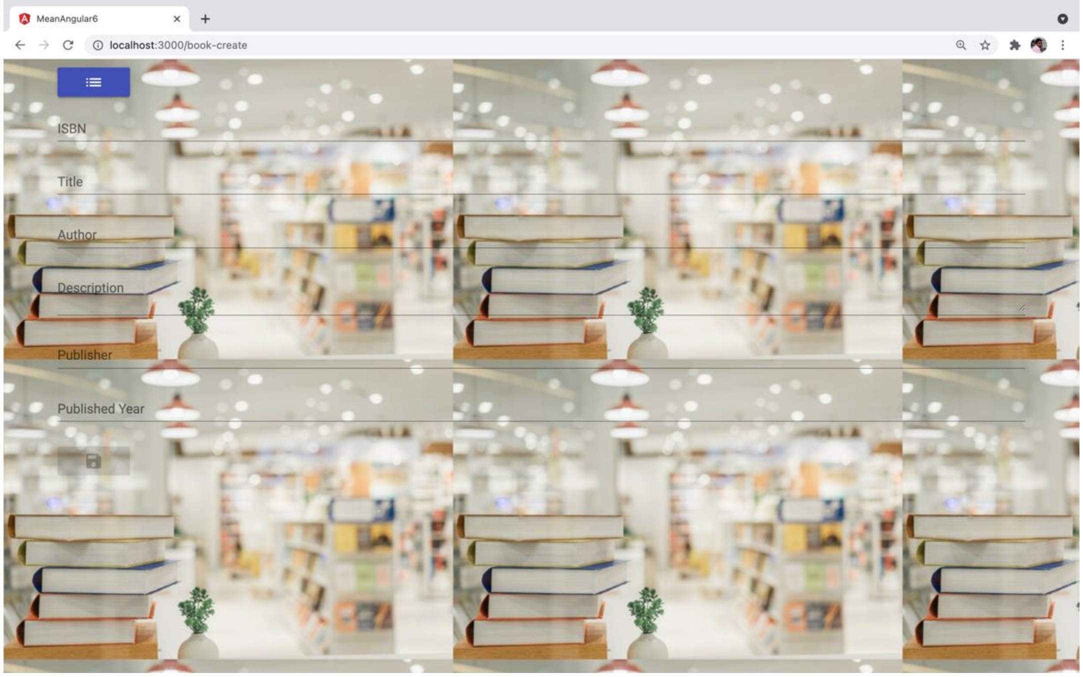
OUTPUT:

Welcome page of the website



ISBN Title Author of the book

Insert book details:



ISBN

Title

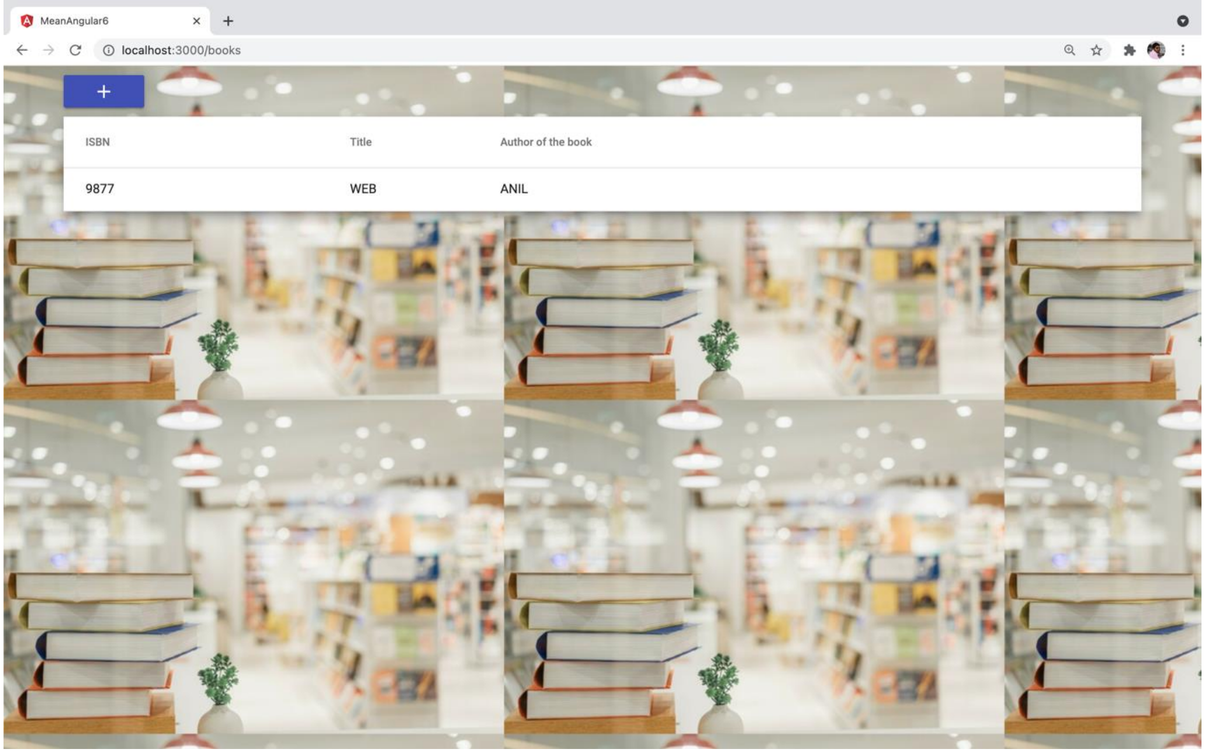
Author

Description

Publisher

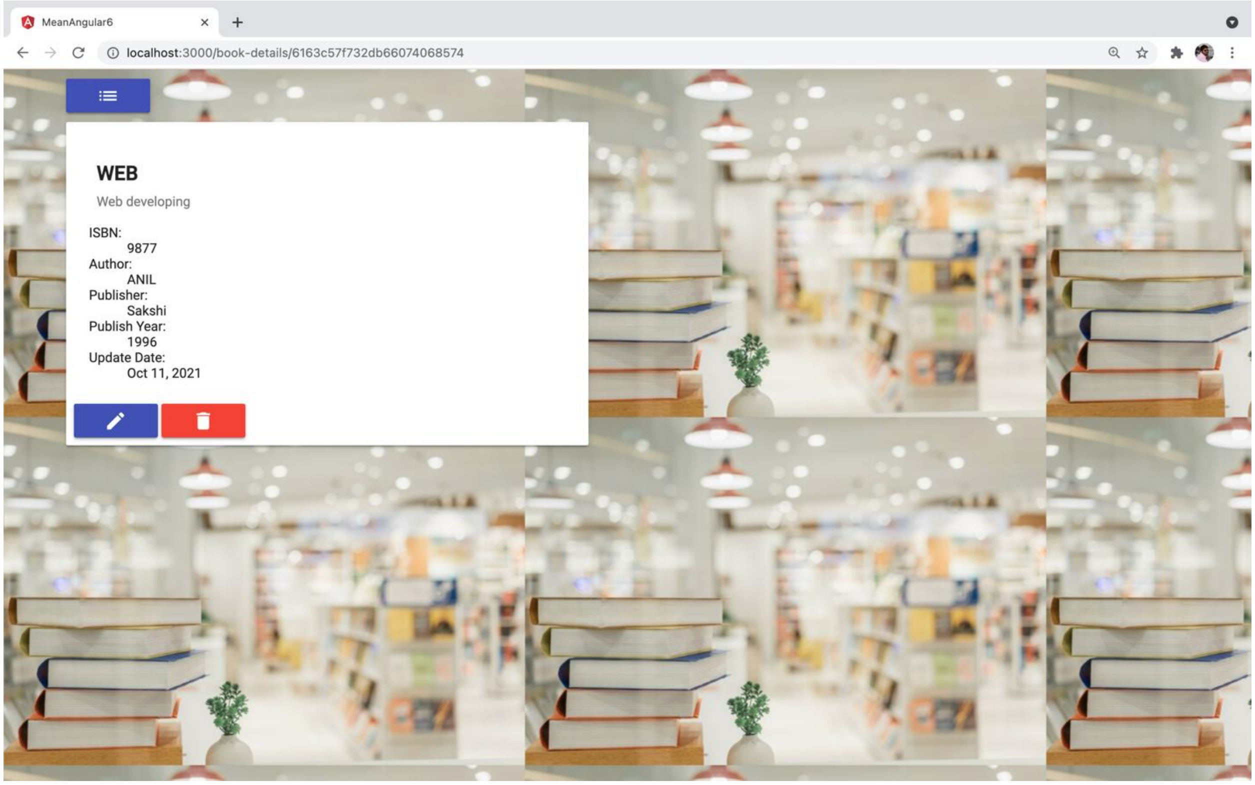
Published Year

List of the books:



ISBN	Title	Author of the book
9877	WEB	ANIL

Update and delete function:

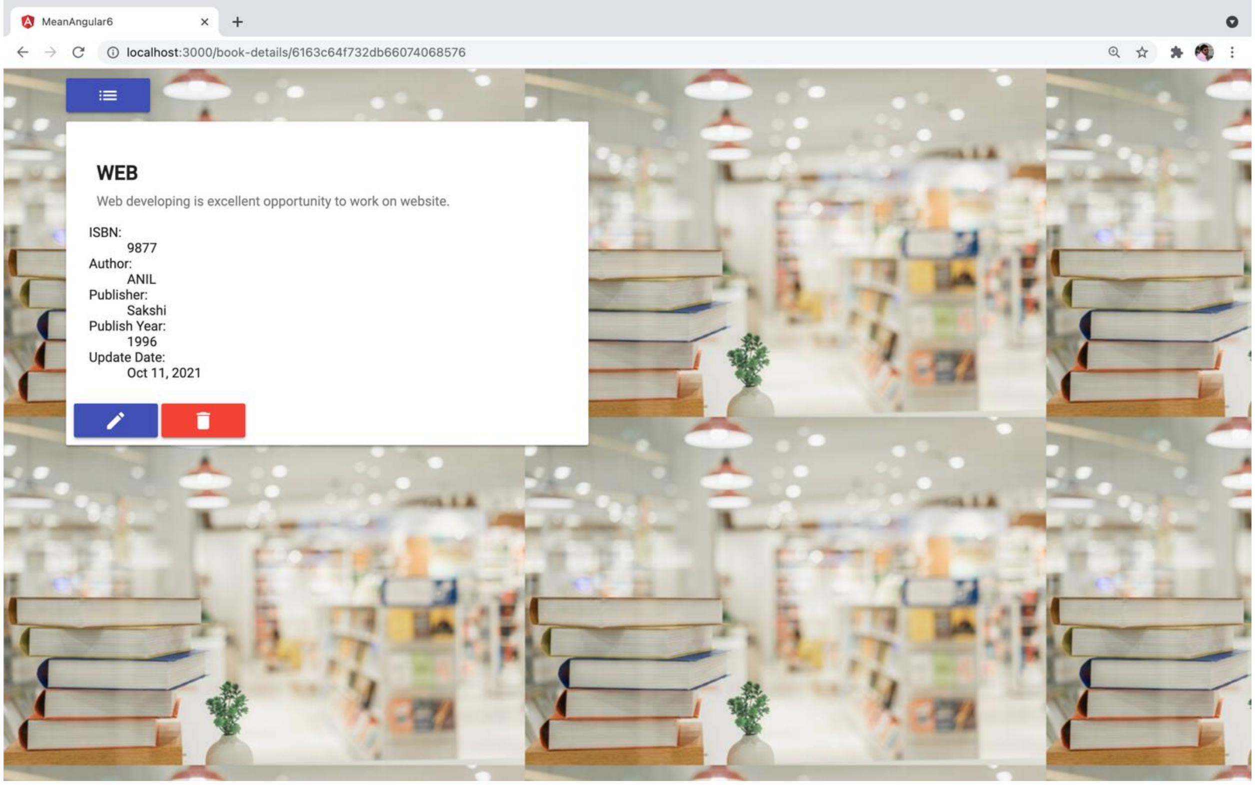


WEB

Web developing

ISBN:
9877
Author:
ANIL
Publisher:
Sakshi
Publish Year:
1996
Update Date:
Oct 11, 2021

After updating details:

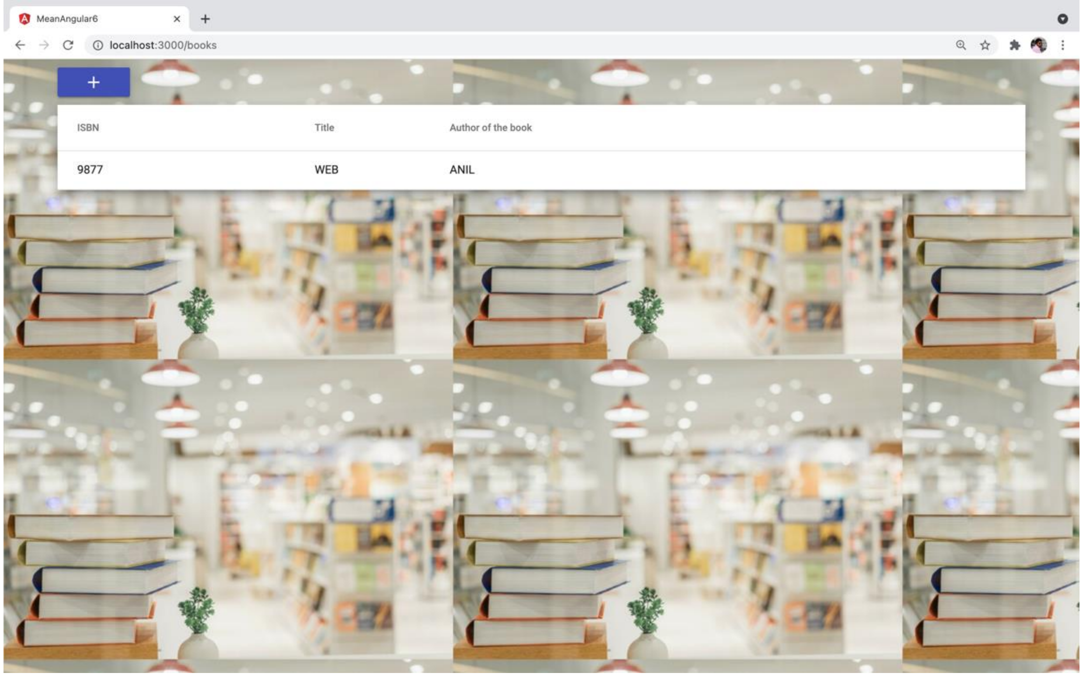


WEB

Web developing is excellent opportunity to work on website.

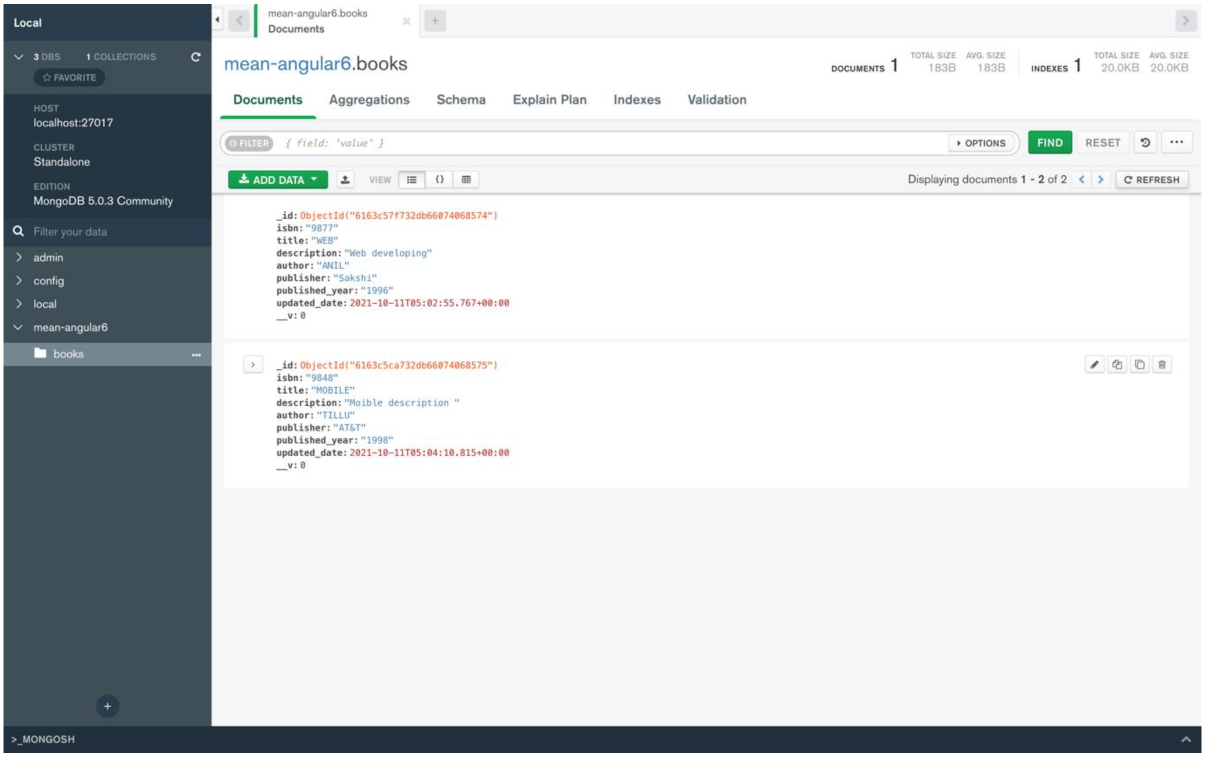
ISBN:
9877
Author:
ANIL
Publisher:
Sakshi
Publish Year:
1996
Update Date:
Oct 11, 2021

After deletion one of the books from list:



ISBN	Title	Author of the book
9877	WEB	ANIL

Records in MongoDB:



HOST
localhost:27017

CLUSTER
Standalone

EDITION
MongoDB 5.0.3 Community

mean-angular6.books

DOCUMENTS 1 TOTAL SIZE 183B AVG. SIZE 183B

INDEXES 1 TOTAL SIZE 20.0KB AVG. SIZE 20.0KB

Displaying documents 1 - 2 of 2

```
_id: ObjectId("6163c57f732db66074068574")
isbn: "9877"
title: "WEB"
description: "Web developing"
author: "ANIL"
publisher: "Sakshi"
published_year: "1996"
updated_date: 2021-10-11T05:02:55.767+00:00
__v: 0
```

```
_id: ObjectId("6163c5ca732db66074068575")
isbn: "9848"
title: "MOBILE"
description: "Moible description "
author: "TILLU"
publisher: "AT&T"
published_year: "1998"
updated_date: 2021-10-11T05:04:10.815+00:00
__v: 0
```