FICTION PASSION BOARD

PROJECT REPORT

OF MINI PROJECT

BACHELOR OF TECHNOLOGY

Computer Science and Engineering Branch

SUBMITTED BY:

AYUSHI BATHAM (191500204)
VANI JAIN (191500893)
VASUNDHARA TIWARI (191500902)

SUPERVISED BY:

Mr. AMIR KHAN
(Technical Trainer)

GLA University, Mathura

(2021-2022)

Declaration

Department of computer Engineering and Applications
GLA University, Mathura
17 km. Stone NH#2, Mathura-Delhi Road, P.O. – Chaumuha,
Mathura – 281406

I hereby declare that the work which is being presented in the Mini project - I "FICTION PASSION BOARD**",** in partial fulfilment of the requirements for Mini Project-I viva voce, is an authentic record of my own work carried under the supervision of Mr. AMIR KHAN, Technical Trainer, GLAU.

Name of Candidate:

Course: B Tech

Year: III

Semester: V

CERTIFICATE

This is to certify that the mini project report entitled "FICTION PASSION BOARD" submitted by Ayushi Batham, Vani Jain and Vasundhara Tiwari has been carried out under the guidance of Mr. AMIR KHAN, Technical Trainer, Department of Computer Engineering & Applications, GLA University, Mathura.

Signature:

Date:

ACKNOWLEDGEMENT

The project work in this report is an outcome of continuous work over a period and drew intellectual support from various sources. We would like to articulate our profound gratitude to all those people who extended their wholehearted co-operation and have helped me in completing this project successfully.

We are thankful to **Mr. Amir Khan** for teaching and assisting me in making the project successful. We would also like to thank other fellow mates for guiding and encouraging me throughout the duration of the project.

Ayushi Batham (191500204)

Vani Jain (191500893)

Vasundhara Tiwari (191500902)

ABSTRACT

The main objective of the project is to create an online book store that allows users to search book online based on title, and can also add to the wish list. Using this users can explore books from their busy schedule without wasting their time. The user can login using their account details or new users can set up their account. They should give their name .The books are dividing in many categories. A user can create, sign in to his account, place their items in wish list. This website is using MERN Stack to develop this book store.

Training Certificates

udemy

Certificate no: UC-92d19a53-0287-4079-8c40-347bd7450820
Certificate url: ude.my/UC-92d19a53-0287-4079-8c40-347bd7450820
Reference Number: 0004

CERTIFICATE OF COMPLETION

React, NodeJS, Express & MongoDB - The MERN Fullstack Guide

Instructors **Academind by Maximilian Schwarzmüller, Maximilian Schwarzmüller, Manuel Lorenz**

Vasundhara Tiwari

Date **Nov. 29, 2021**
Length **19 total hours**


CERTIFICATE
sololearn
Issued 29 May, 2020
This is to certify that
Ayushi Batham
has successfully completed the
HTML course
COURSE COMPLETED
HTML
Yeva Hyusyan
Chief Executive Officer
Certificate #1014-18664917

GitHub Repository

https://github.com/Academic-Projects-GLAU-2021-2022/FictionPassionBoard

Content

1. **Introduction**
    a. General Introduction to the Project
    b. Area of Computer Science
2. **Problem Definition**
3. **Objective**
4. **Technology being used**
5. **Software Development tool**
6. **Methodology**
7. **Implementation**
8. **Screenshots**

Chapter 01

1.1 General Introduction to the Project

Currently in our society, the people used to search for the books in the library as per their interest which becomes very frustrating to find. There is no central system within our reach which allow user to search for the books which they will find interested in reading. We are totally dependent on the views of our friends, colleagues, family, etc. to know some good books to read which results in confusing reviews of some books.

We are going to design a system for a library which will keep track of the user rating's and their reviews for the books they are reading. This will help user to know more about the content of the book before reading. As well as we will provide a system where user's can rate the books after reading which will be a source of information for other users. We will be designing a website which will facilitate the readers of the books as well as the library administrator.

1.2 Area of Computer Science

The computer has brought revolution in every sphere of human life, whether it is business, education field, governance, medical science etc. The computer has reduced the human work load, businesses are going global and everything is available at the click of mouse. Most of the users have to look for the reviews of others to find some good books, which is very time-consuming task. By this application they can access reviews easily.

Chapter 02

Problem Definition

Most of the people nowadays prefer online shopping, this become more convenient for them as most of the things they want are available online and can be purchased with a single click. There are some areas of online shopping which needs to be covered like most of the time one has to visit shop to buy goods related to construction. So, we are trying to make an online platform which provide these types of construction material goods.

Chapter 03

Objectives of the Project

Fiction Passion Board is a platform where readers can provide and access the reviews and ratings of the books. The objective of this project is to collect reviews and ratings of different readers on a book as well as giving them a facility to provide ratings and reviews for the books and its content they have read.

Chapter 04

Technology being used

Hardware Requirements:

- Computer System with minimum 8GB of RAM

Software Requirements:

- Windows/Linux OS
- Visual Code Studio
- Robo 3T
- Postman

Programming language:

- JavaScript
- MERN Stack

Chapter 05

Software Development Tools

Visual Studio Code

Visual Studio Code is a lightweight but powerful source code editor which runs on your desktop and is available for Windows, macOS and Linux. It comes with built-in support for JavaScript, TypeScript and Node.js and has a rich ecosystem of extensions for other languages (such as C++, C#, Java, Python, PHP, Go) and runtimes (such as .NET and Unity).

Getting up and running with Visual Studio Code is quick and easy. It is a small download so you can install in a matter of minutes and give VS Code a try.

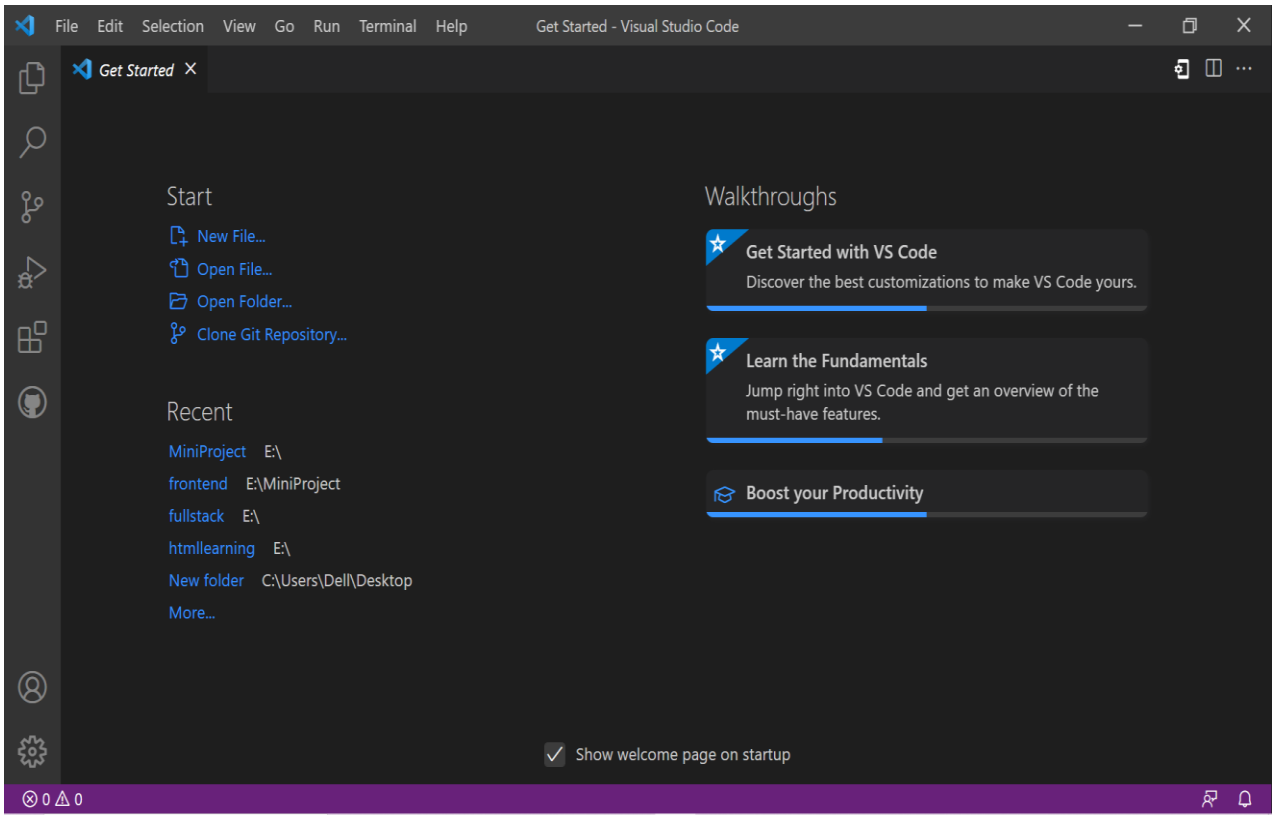
Cross platform

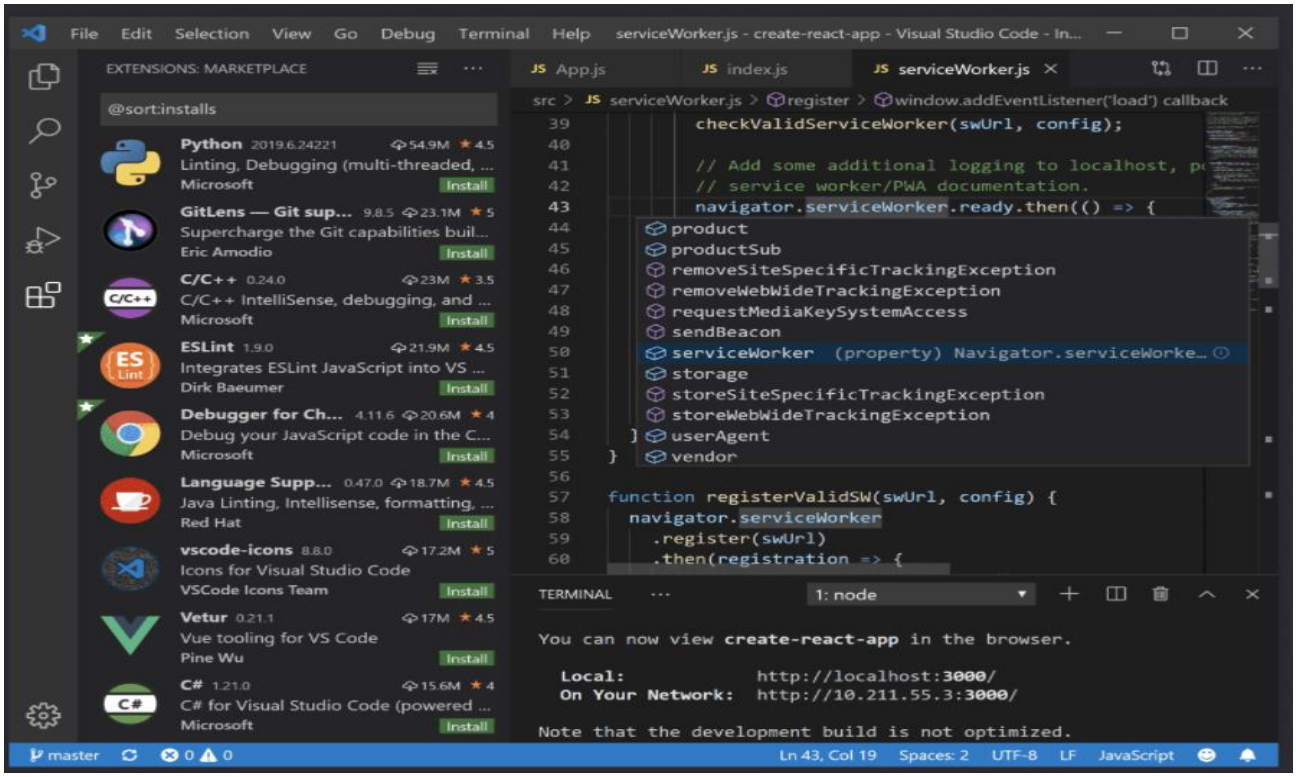
VS Code is a free code editor, which runs on the macOS, Linux, and Windows operating systems.

VS Code is lightweight and should run on most available hardware and platform versions. You can review the System Requirements to check if your computer configuration is supported.

Features :-

- Visual Studio Code is a source-code editor that can be used with a variety of programming languages, including Java, Javascript, GO, Node.js, Python and C++.
- It is based on the Electron framework, which is used to develop Node.js Web applications that run on the Blink layout engine.
- Studio Code employs the same editor component (codenamed "Monaco") used in Azure DevOps (formerly called Visual Studio Online and Visual Studio Team Services).
- Instead of a project system, it allows users to open one or more directories, which can then be saved in workspaces for future reuse.
- Visual Studio Code includes multiple extensions for FTP, allowing the software to be used as a free alternative for web development.
- Code can be synced between the editor and the server, without downloading any extra software.


File Edit Selection View Go Run Terminal Help
Get Started - Visual Studio Code
Get Started
Start
New File...
Open File...
Open Folder...
Clone Git Repository...
Recent
MiniProject E:\
frontend E:\MiniProject
fullstack E:\
htmllearning E:\
New folder C:\Users\Dell\Desktop
More...
Walkthroughs
Get Started with VS Code
Discover the best customizations to make VS Code yours.
Learn the Fundamentals
Jump right into VS Code and get an overview of the must-have features.
Boost your Productivity
Show welcome page on startup


File Edit Selection View Go Debug Terminal Help
serviceWorker.js - create-react-app - Visual Studio Code - In...
EXTENSIONS: MARKETPLACE
@sort:installs
Python 2019.6.24221
Linting, Debugging (multi-threaded, ...
Microsoft
GitLens — Git sup...
Supercharge the Git capabilities buil...
Eric Amodio
C/C++ 0.24.0
C/C++ IntelliSense, debugging, and ...
Microsoft
ESLint 1.9.0
Integrates ESLint JavaScript into VS ...
Dirk Baeumer
Debugger for Ch...
Debug your JavaScript code in the C...
Microsoft
Language Supp...
Java Linting, Intellisense, formatting, ...
Red Hat
vscode-icons 8.8.0
Icons for Visual Studio Code
VSCode Icons Team
Vetur 0.21.1
Vue tooling for VS Code
Pine Wu
C# 1.21.0
C# for Visual Studio Code (powered ...
Microsoft
App.js
index.js
serviceWorker.js
src > serviceWorker.js > register > window.addEventListener('load') callback
checkValidServiceWorker(swUrl, config);
// Add some additional logging to localhost,
// service worker/PWA documentation.
navigator.serviceWorker.ready.then(() => {
product
productSub
removeSiteSpecificTrackingException
removeWebWideTrackingException
requestMediaKeySystemAccess
sendBeacon
serviceWorker (property) Navigator.serviceWorke...
storage
storeSiteSpecificTrackingException
storeWebWideTrackingException
userAgent
vendor
function registerValidSW(swUrl, config) {
navigator.serviceWorker
.register(swUrl)
.then(registration => {
TERMINAL
1: node
You can now view create-react-app in the browser.
Local: http://localhost:3000/
On Your Network: http://10.211.55.3:3000/
Note that the development build is not optimized.
master
Ln 43, Col 19 Spaces: 2 UTF-8 LF JavaScript

Postman

Postman is the collaboration platform for API development. Postman simplifies each step of building an API and streamlines collaboration so you can create better APIs—faster.

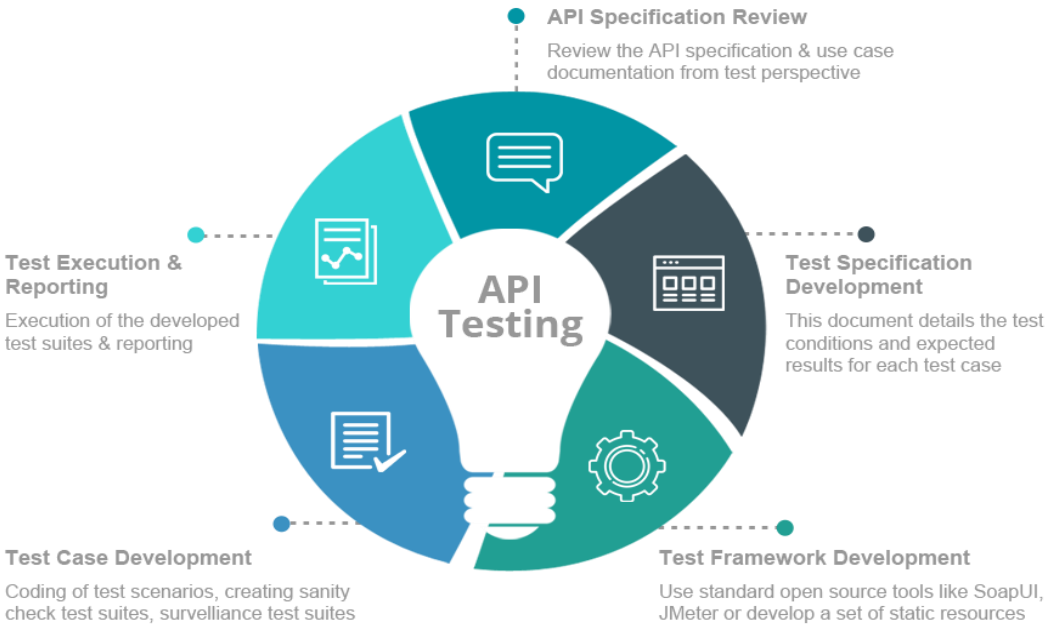
Postman is one of the most popular software testing tools which is used for API testing. With the help of this tool, developers can easily create, test, share, and document APIs.

This tutorial will help in understanding why Postman is so famous and what makes it unique when compared to other API testing tools. All the examples in this tutorial are tested and can be imported in Postman.

Terminologies Related to Postman

1. **API**
   Application Programming Interface (API) is software that acts as an intermediary for two apps to communicate with each other. We use APIs whenever we use an application like Twitter, Facebook, sending text messages, or checking the weather over the phone.

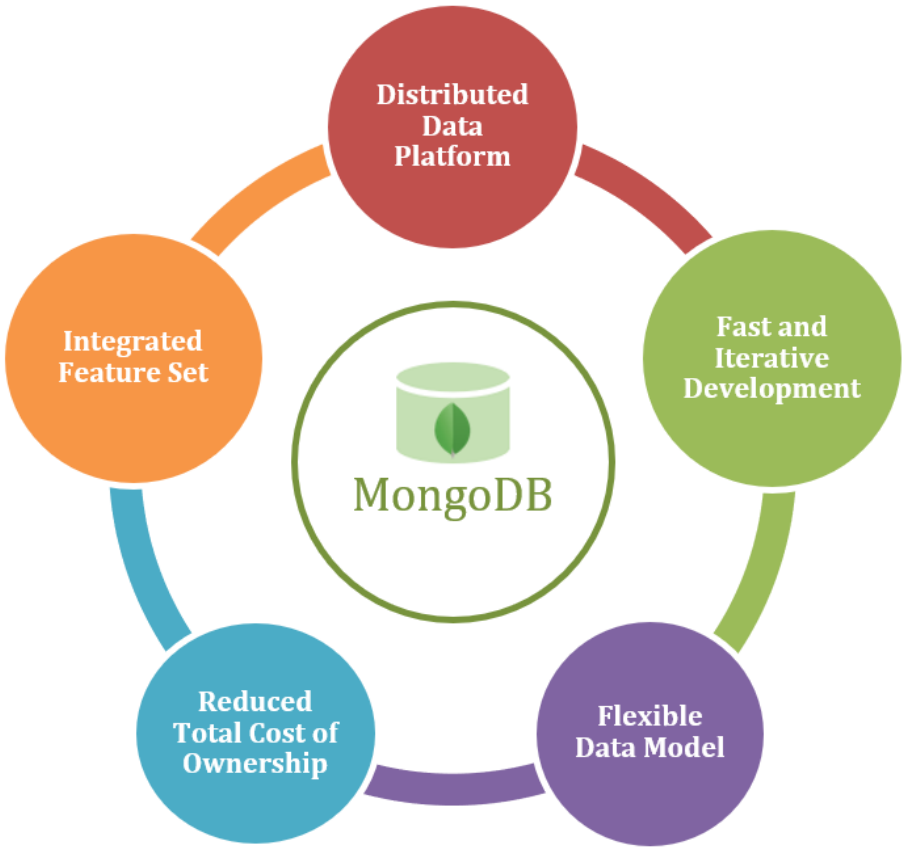
2. **HTTP**
   HTTP (Hypertext Transfer Protocol) is the collection of rules for the transmission of data on the World Wide Web, like graphic images, text, video, sound, and other multimedia data. The Web users implicitly make use of HTTP as soon as they open their Web browser.



MongoDB Compass

MongoDB Compass is a GUI for MongoDB. It is also known as MongoDB GUI. MongoDB allows users to analyse the content of their stored data without any prior knowledge of MongoDB query syntax. When we explore exploring our data in the visual environment, we can use Compass GUI to optimize performance, manage indexes, and implement document-validation.

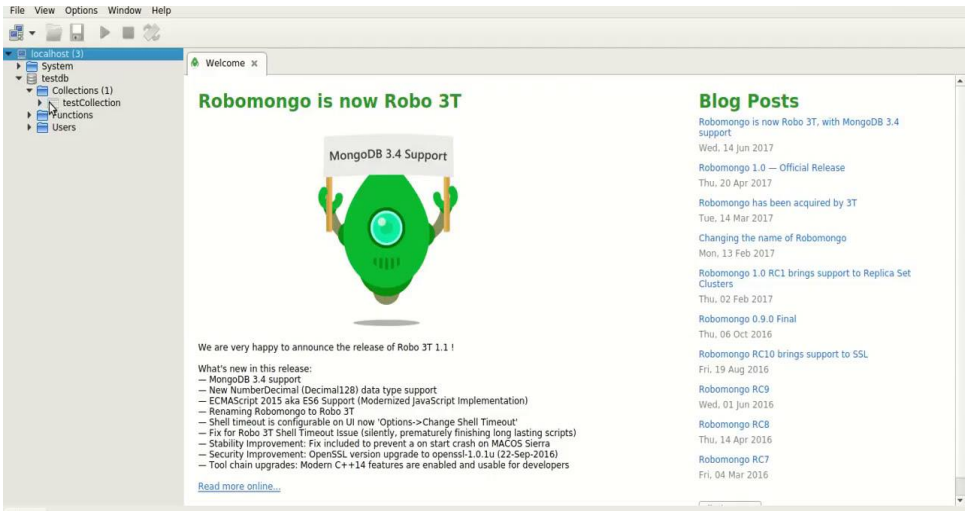
All the versions of MongoDB Compass are opensource (i.e., we can freely deploy and view the repositories of all MongoDB GUI versions). The source repositories of MongoDB compass can be found on the following link of GitHub



Robo3T

Robo 3T, formerly known as Robomongo is a popular resource for MongoDB hosting deployments. It provides a Graphical User Interface (GUI) to interact with bricks of data through visual indicators rather than text based interface. It is free and lightweight. We can call it a management tool for MongoDB that is shell-centric and cross-platform. It is not supported by JSON. It is highly specific to be used with MongoDB administrative tools for carrying out GUI-based tasks. Moreover, its shell cannot be embedded into Mongo Shell being given access to the CLI and GUI in MongoDB.

Additionally, Robo 3T is a volunteered open source project and is free of cost for the public. If we make use of it with Mongo Shell, we can easily manipulate MongoDB documents like edit, delete and view. It is published under the General Public License version 3 by Free Software Foundation.



Chapter 06

Methodology

We are using React based Webpage Portal as the frontend with the backend made using Node.js, Express.js and MongoDB database. To see what's inside the website the user has to visit the website. The application will keep records of ratings on different books provided by different readers after reading the book from the library.

The modules used in this app are listed as follows:

1. Landing Page
2. Book Catalogue Page
3. View Book Details Page
4. Add Ratings Page
5. Add Book Page (accessible only to library administrator)

Chapter 07

Implementation Details

Webpage based Portal :

We are working on this in two parts viz frontend and backend. Firstly, we are working on backend after that will move towards frontend. There might be some changes in the backend while working with frontend.

1. **Backend development：** The project commences with designing of fundamental book schema and rating schema. We will use APIs for creating different routes. Fiction Passion Board will display the books of a library. The data will be sent to backend using APIs.

   An application program interface (API) is a set of routines, protocols and tools for building software applications. Basically, an API specifies how software components should interact.

   The data will be sent in JSON format.

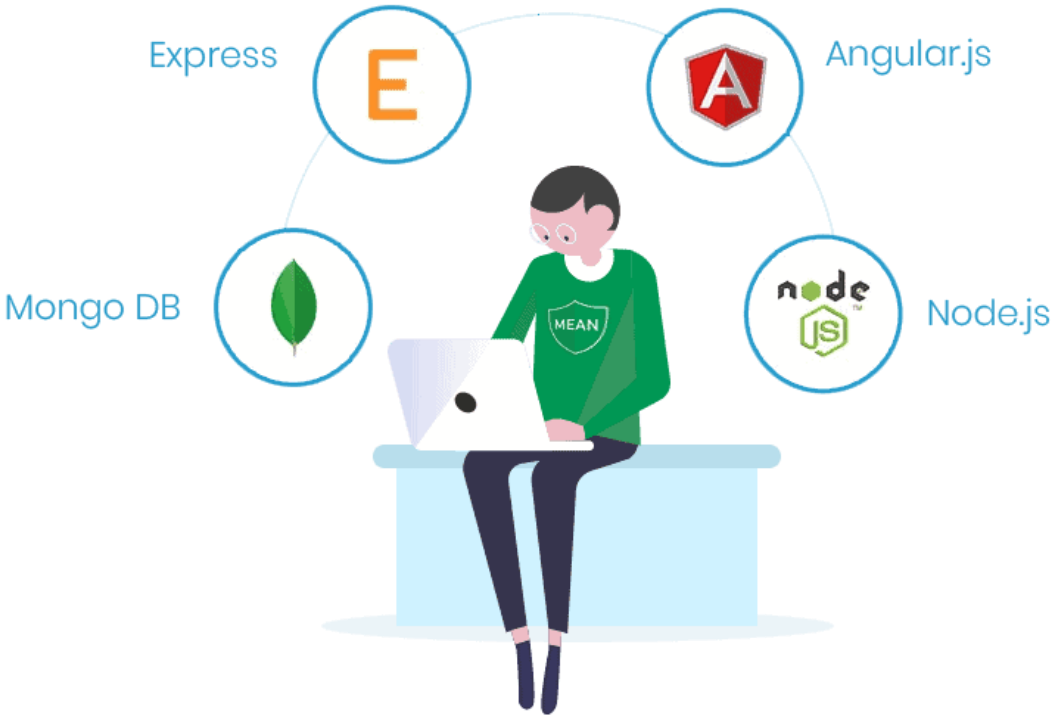
   JSON is a lightweight data-interchange format it is easy for humans to read and write. It is easy for machines to parse and generate.

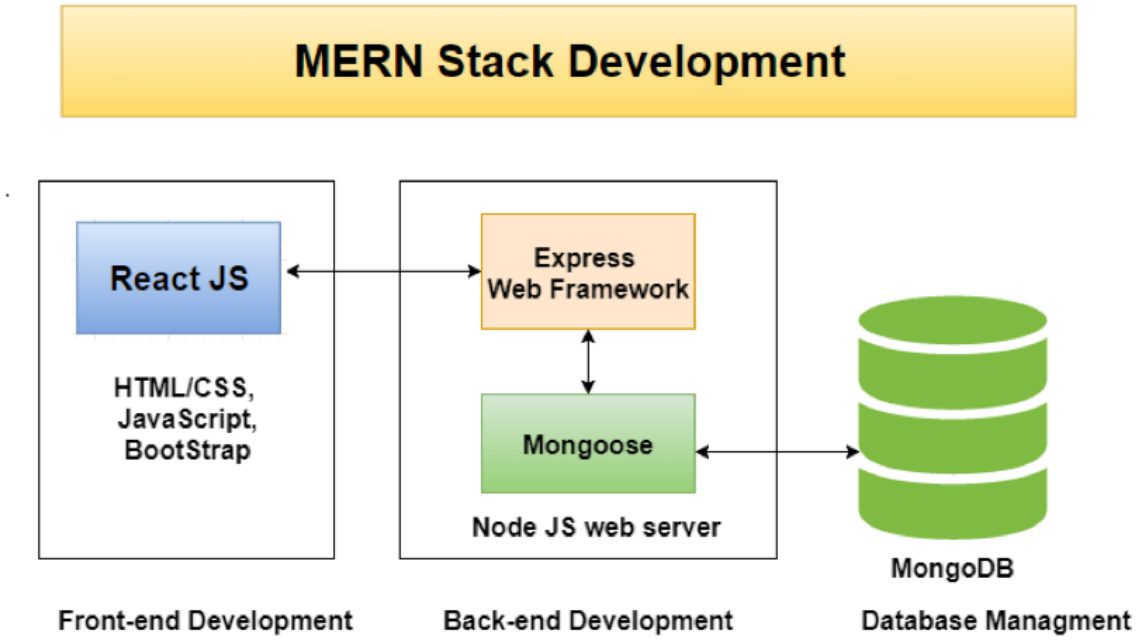
   We are using MongoDB Atlas for cloud storage during development phase because of its flexibility and scalability of document database, available as a fully managed service.

   MongoDB Atlas is the global cloud database service for modern applications. Deploy fully managed MongoDB across AWS, Azure, or GCP. Best-in-class automation and proven practices guarantee availability, scalability, and compliance with the most demanding data security and privacy standards.

   Express is a minimal and flexible Node.js web application framework that provides a robust set of features to develop web and mobile applications. It facilitates the rapid development of Node based Web applications. Following are some of the core features of Express framework –

   - Allows to set up middlewares to respond to HTTP Requests.
   - Defines a routing table which is used to perform different actions based on HTTP Method and URL.


Express
Angular.js
Mongo DB
Node.js
MEAN

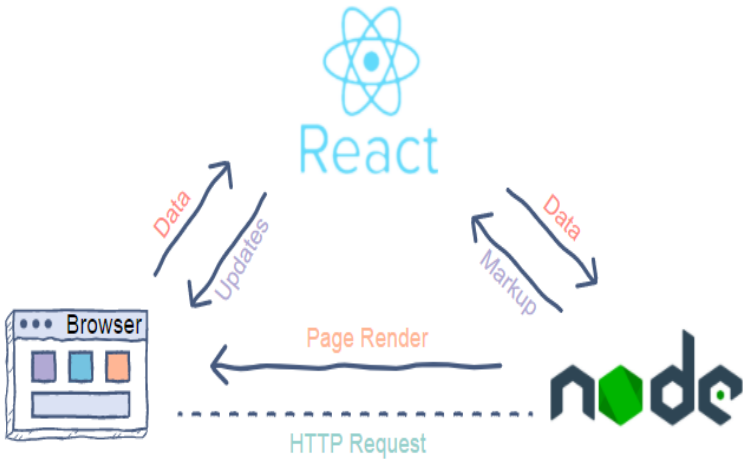

MERN Stack Development
React JS
HTML/CSS,
JavaScript,
BootStrap
Front-end Development
Express
Web Framework
Mongoose
Node JS web server
Back-end Development
MongoDB
Database Managment

2. **Frontend development** : We will be using React.Js, HTML, Bootstrap for frontend development part.

   React JS is an open-source JavaScript library for building user interfaces – usually for single-page and mobile applications.

   A user interface in React is built around components. Each of these components is a Javascript function defined by the user.

   React applications are usually built around a single HTML element, often called the root node.



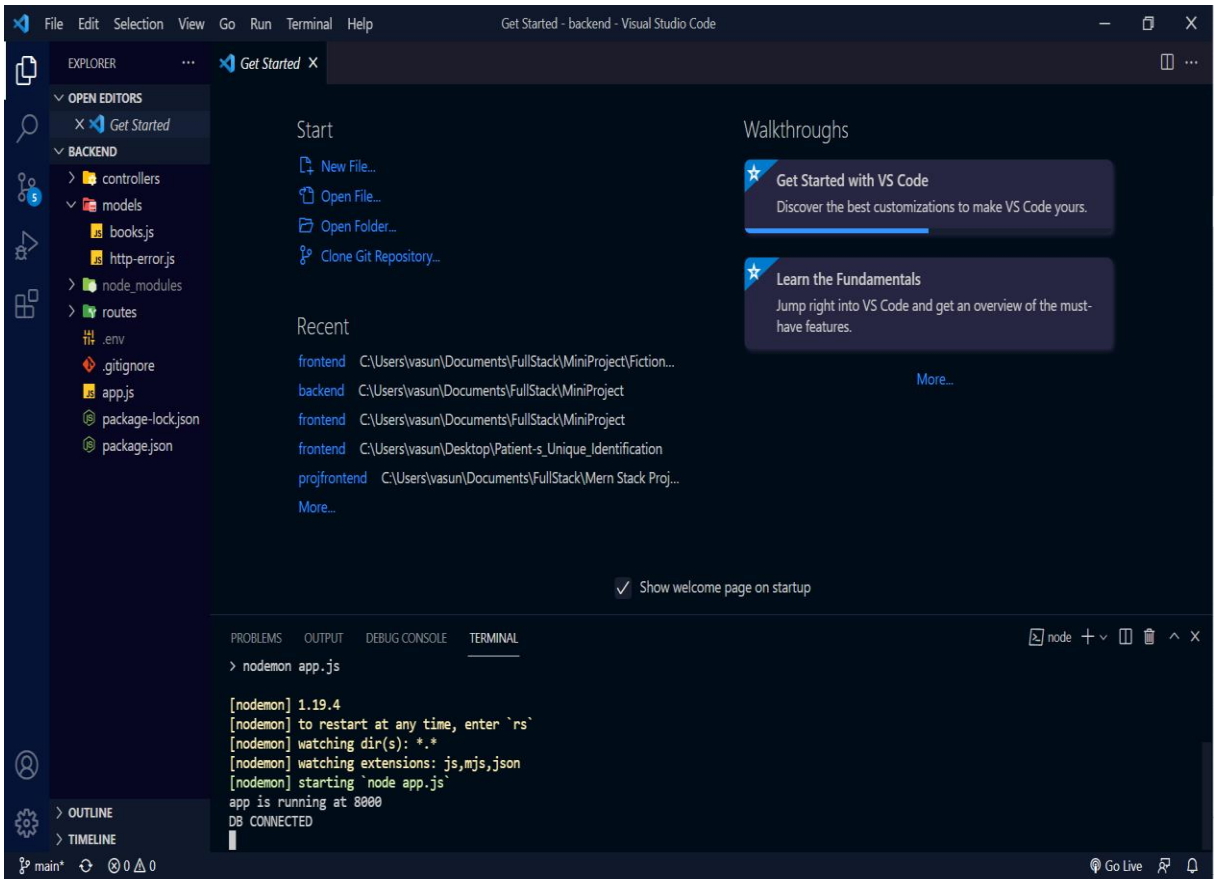
   These components optionally accept inputs, i.e. props (properties), and return React elements that describe exactly how a section of the UI (user interface) should appear accordingly.
   React applications are usually built around a single HTML element, often called the root node.
   On the home page, there will be basic functionalities like various books with their basic details like name, author name, publication, etc. But for rating the contents of the book user have to navigate to the rating page by using the button provided.

Chapter 09
SCREENSHOT

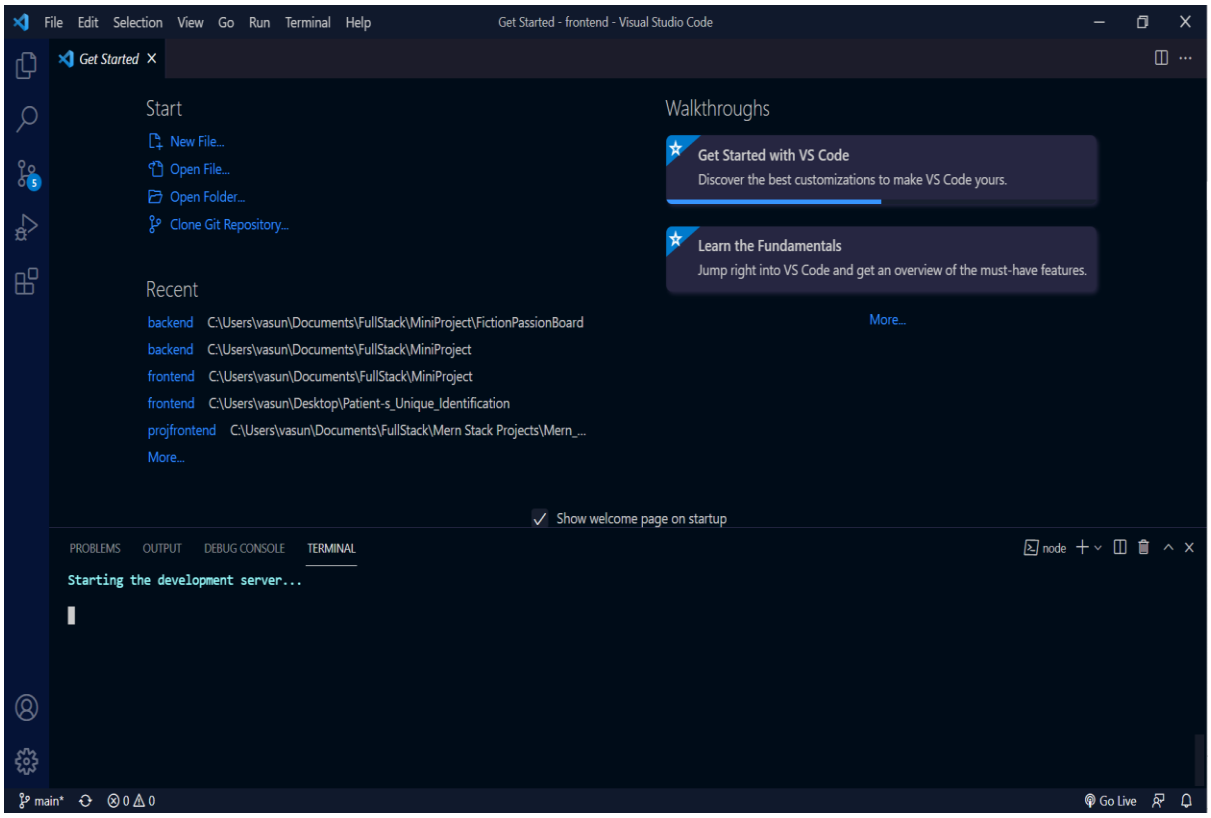
Webpage based Portal:

Successfully linked Project with MongoDB: -

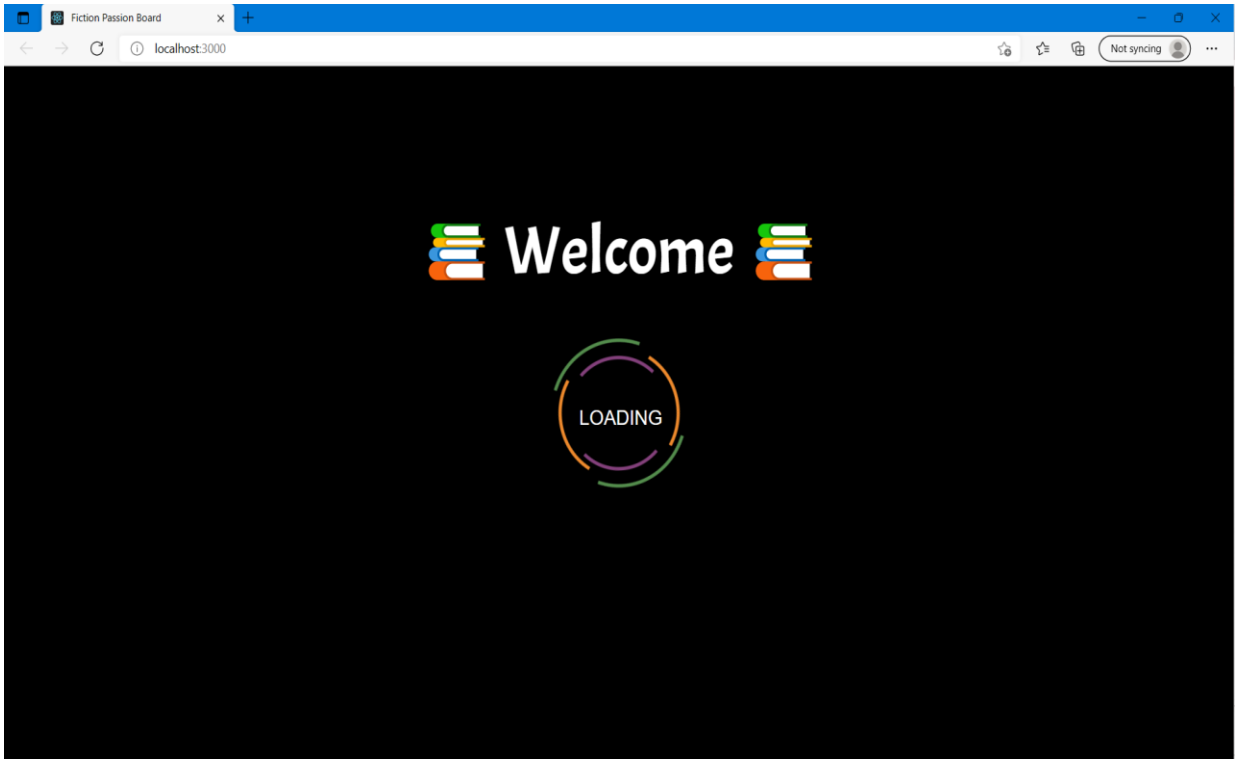
Running Backend



Running Frontend

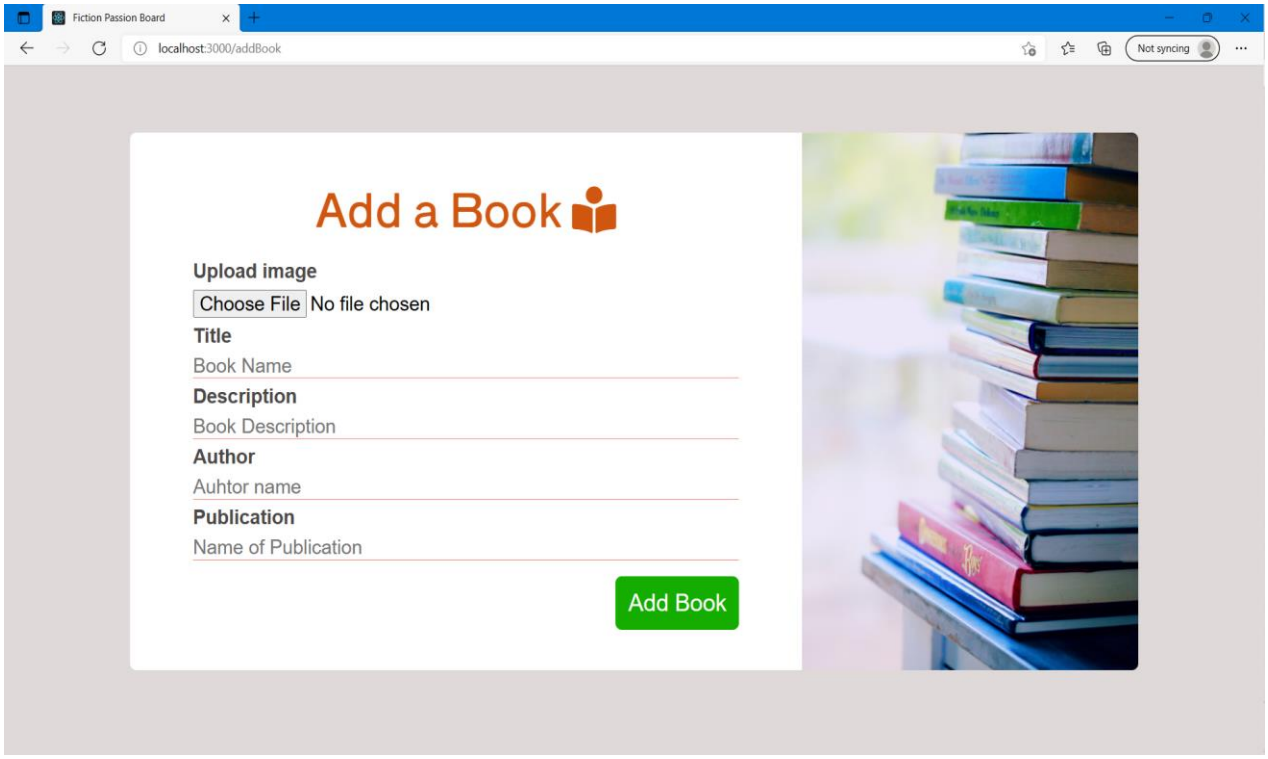


Landing Page

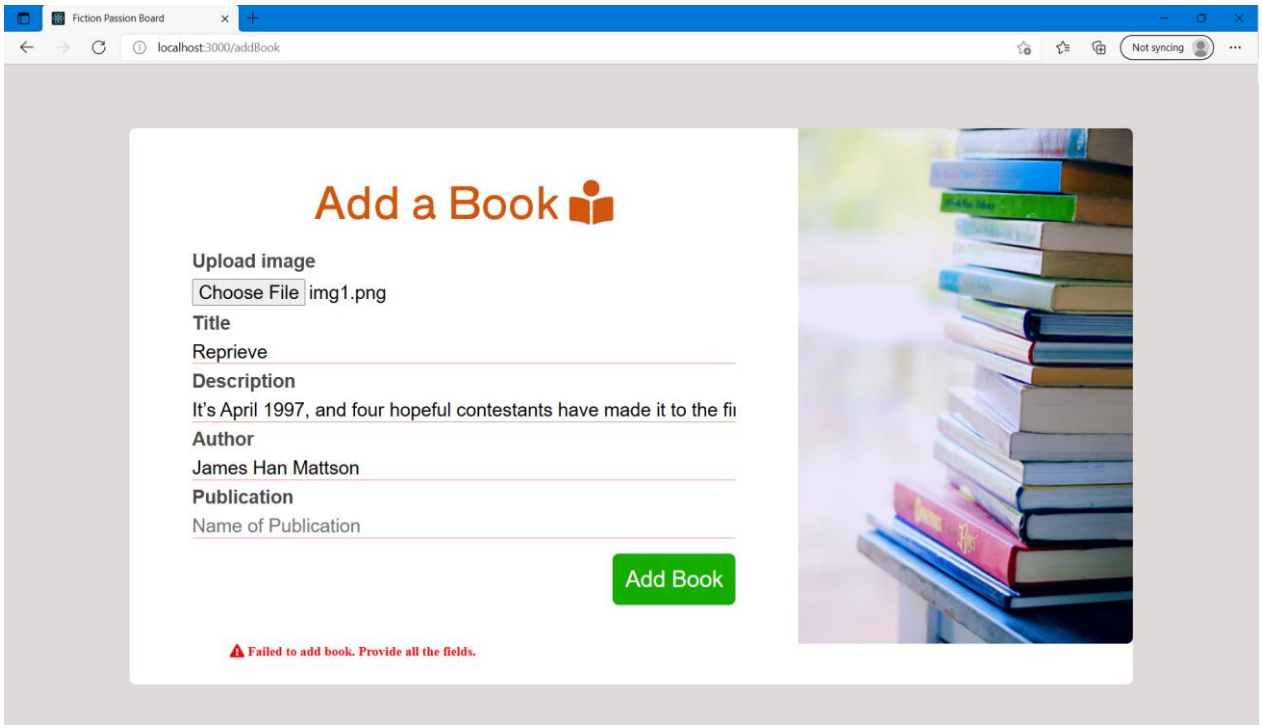


Home Page when no books are saved in the database

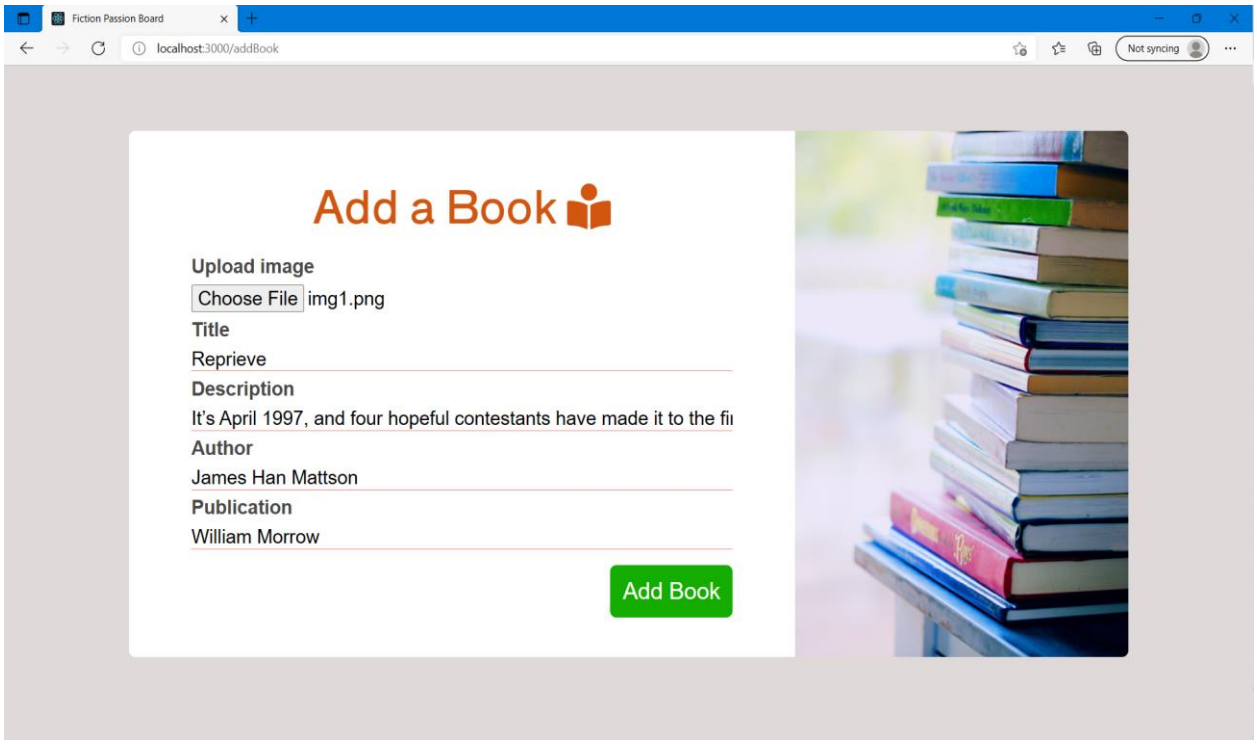
Admin Dashboard to add books to the database



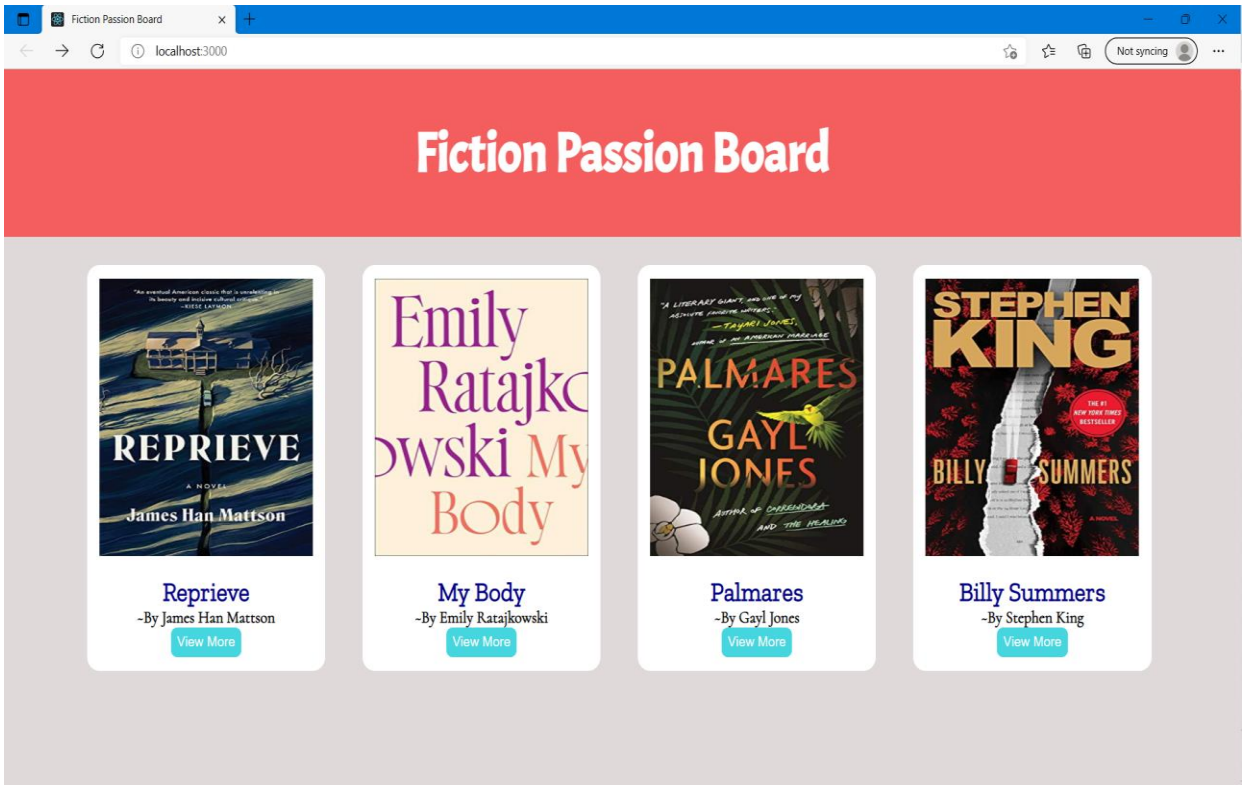
Displaying error when all the required fields are not provided.

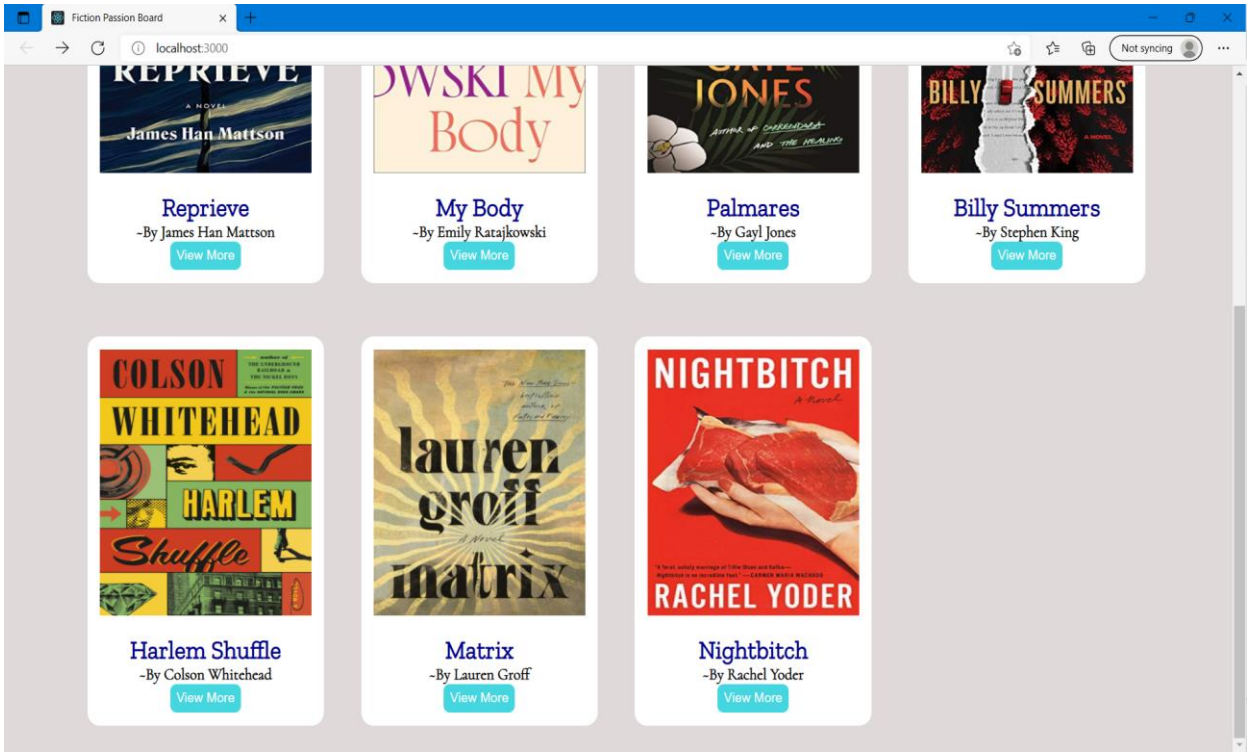


Providing all the required data for a book to saved into the database

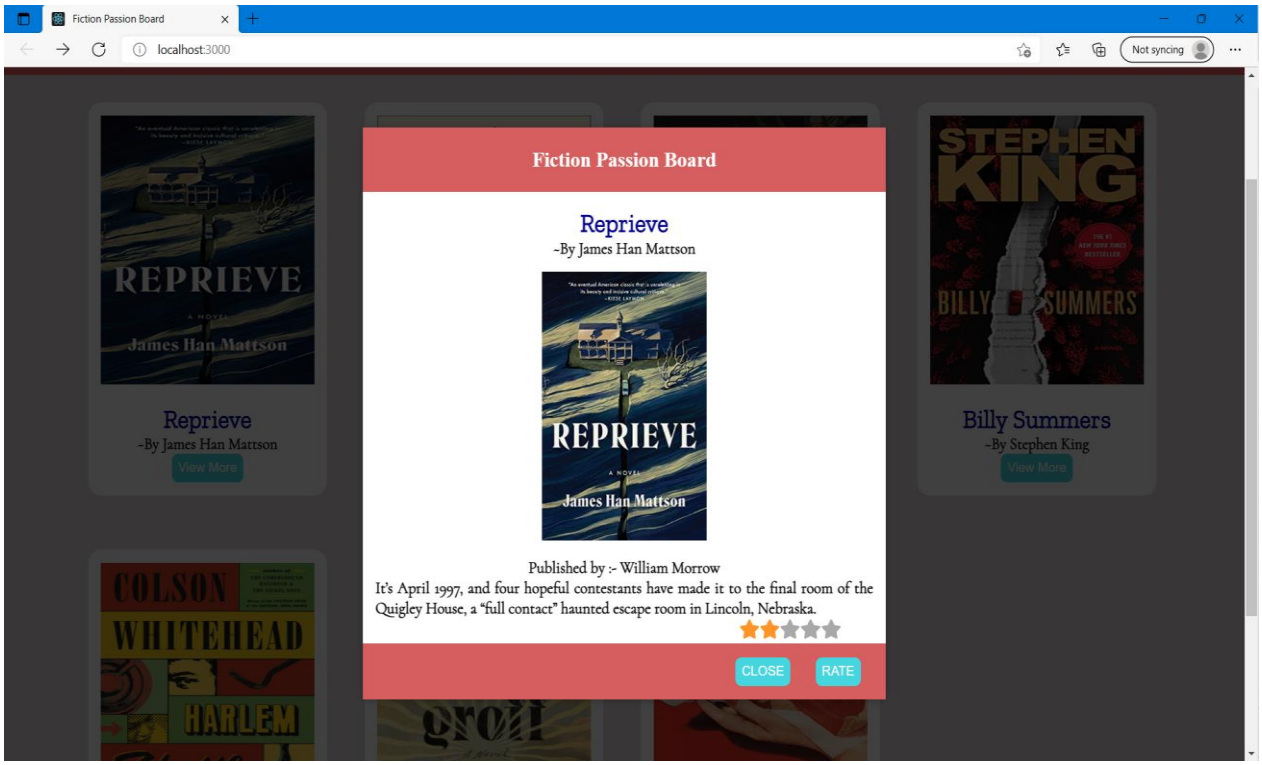


Home page when books are saved into the database

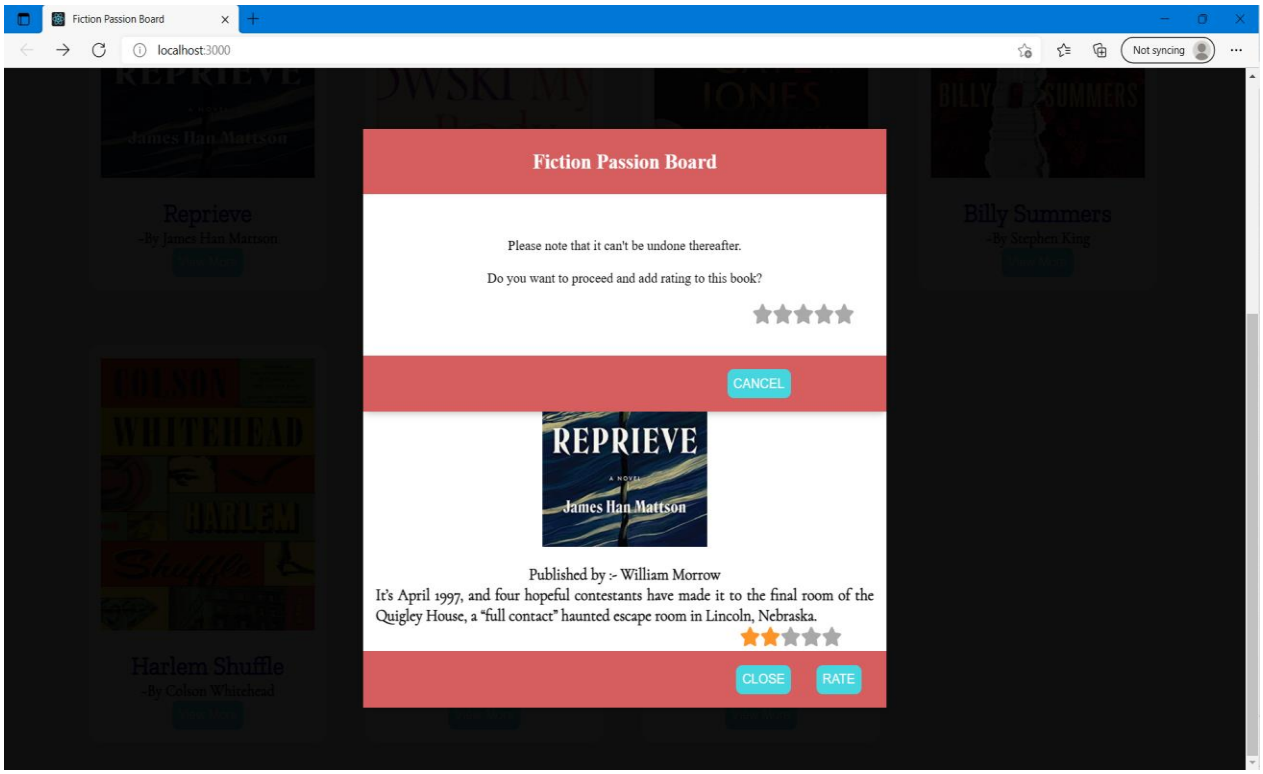




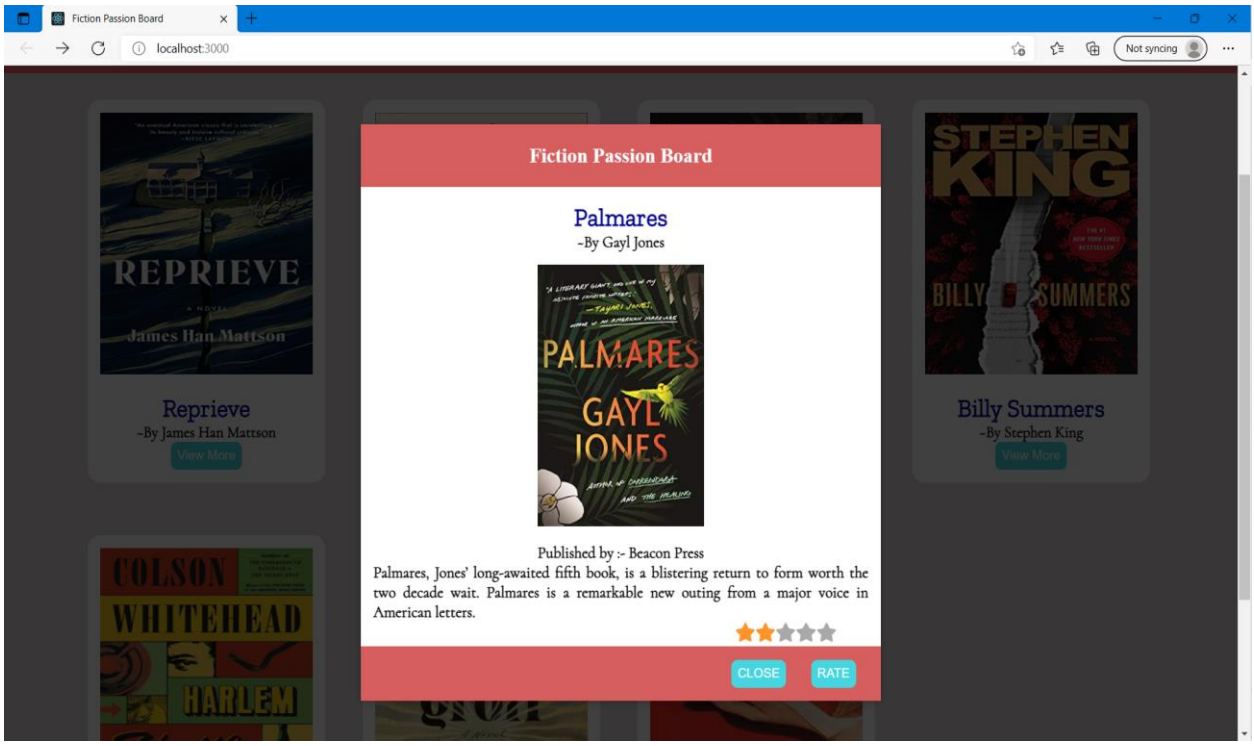
Book details view and ratings view



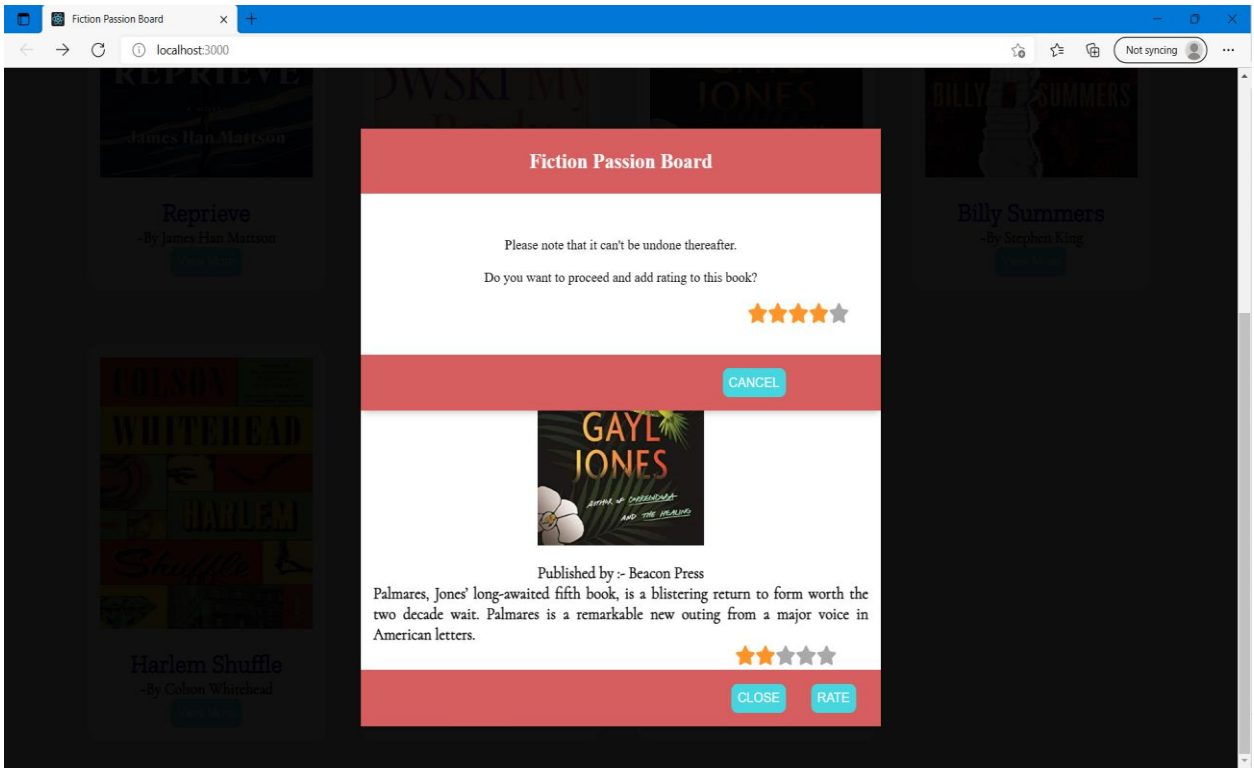
Add Review Page for Book 1



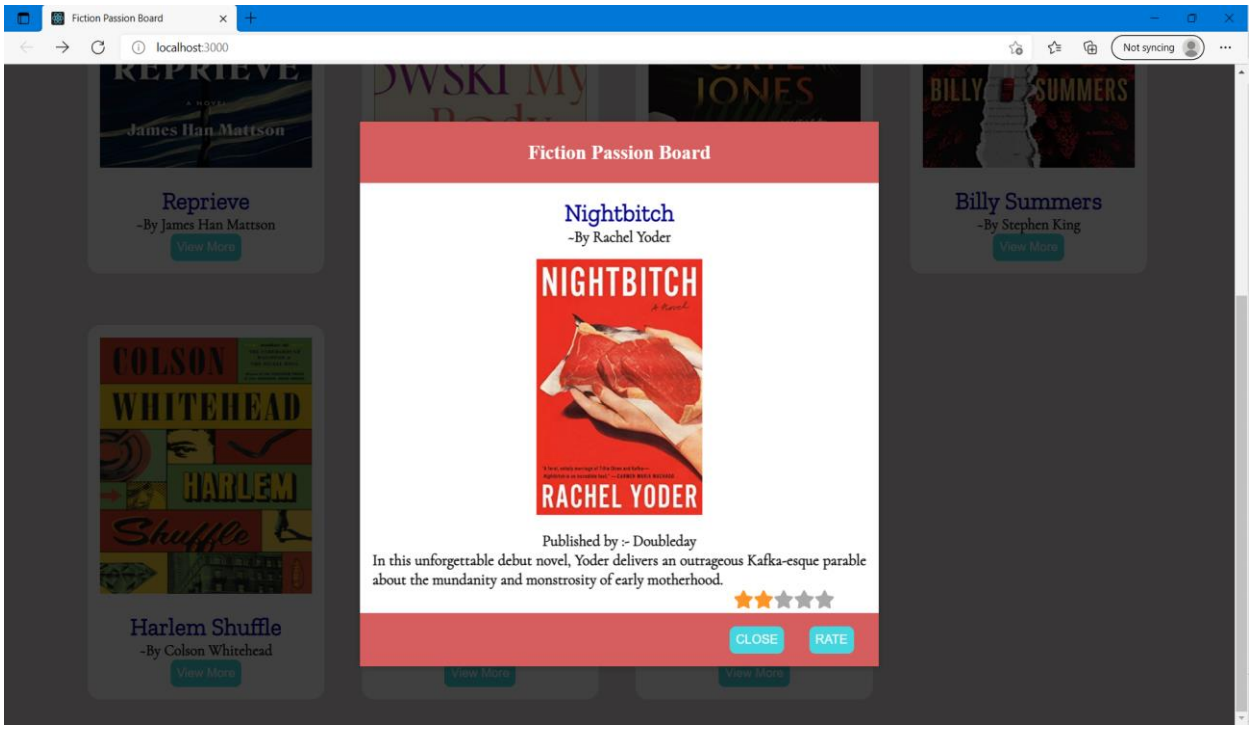
Book2 details view



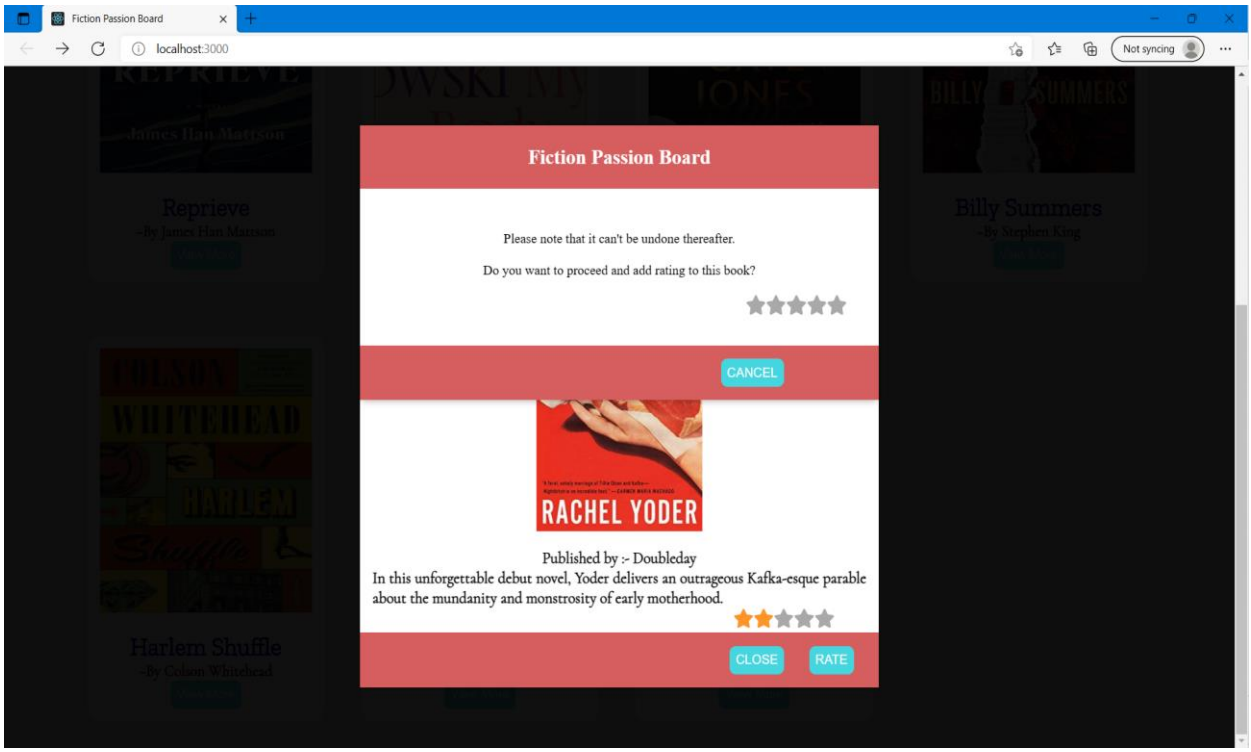
Book2 add rating page



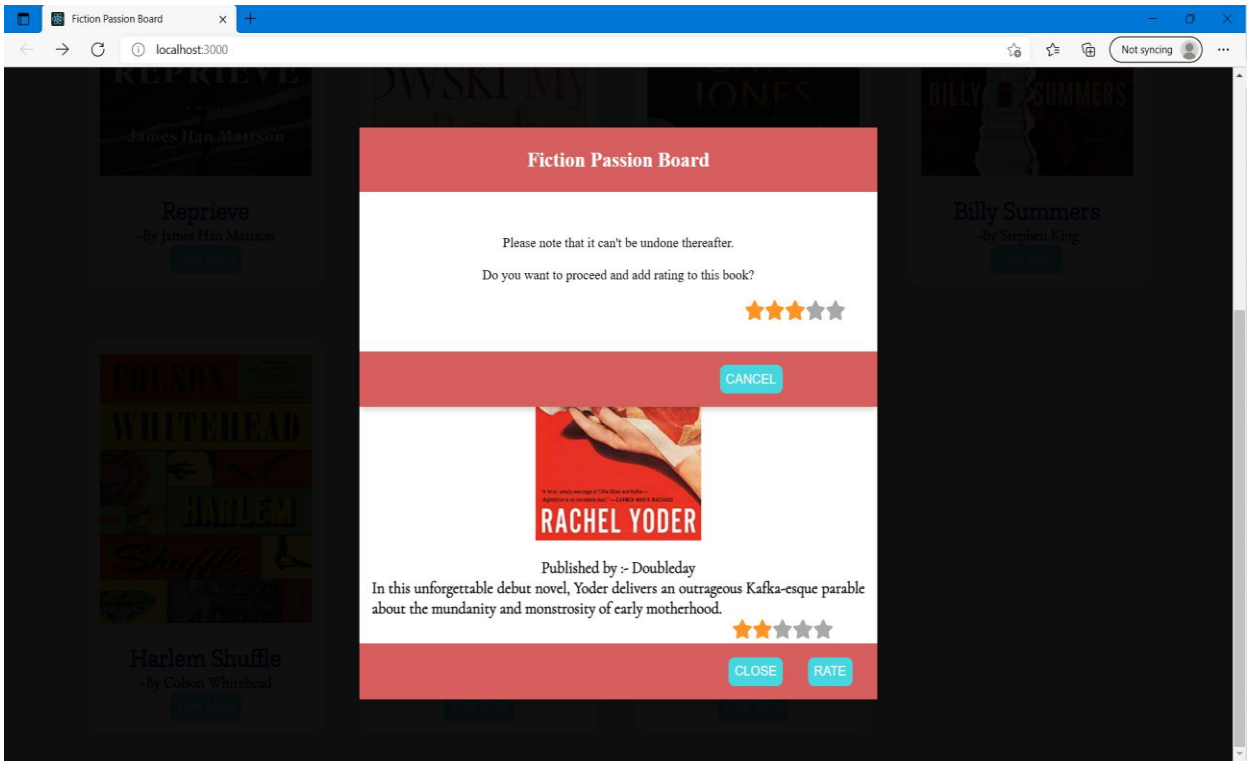
Book3 details view page



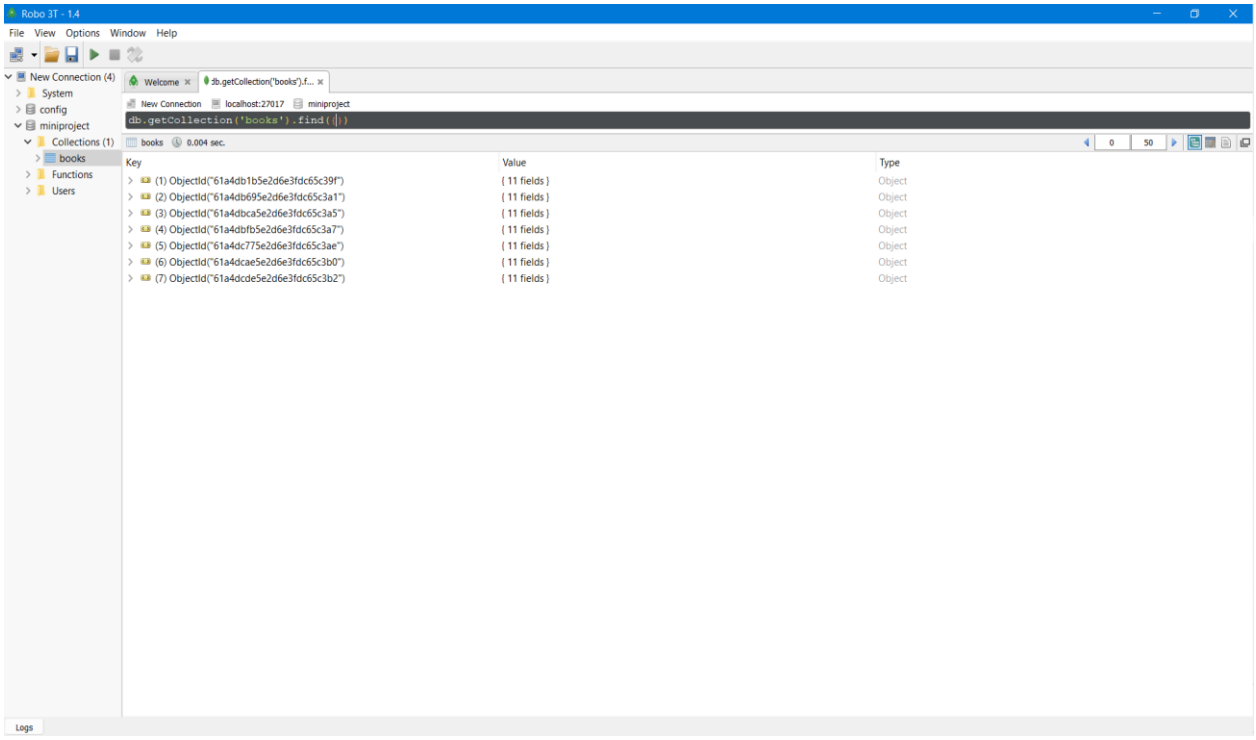
Book3 add rating page



Adding ratings to Book3



Database after adding the books



Details of the book added to the database