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Epam
Java Web Training Capstone Project
Book Reservation application

What web app would it be?

It will be a website to manage book reservation in a library

Who is this project for?

For readers to reserve books remotely, for taking them later

What needs will it satisfy?

Reader's needs to reserve a book without reaching to the library, and library's need to not be too crowded, and to attract more readers

Requirements

Functional

- The application must let the user to search through the books
- Show if a book is available or not
- Show books' descriptions
- Show the user's reservation history
- Mark the book not available after it is reserved
- Mark the book available after it is returned (must let the admin to manually change its availability)
- Let the admin add new books

Non-functional

- 24/7 booking
- Pleasant design
- Understandable user interface

Use cases

Title: Search title

Primary actor: Reader

Success scenario: The reader searches for a book with a title. The application returns matching books to the user. The result will also contain the availability of the books.

Extension: In case of nothing was found, the application notifies the user.

Title: See book description

Primary actor: Reader

Success scenario: The reader enters the description section of a book. The application returns all the information available for that book

Precondition: The reader has searched for a book with a title, and the application has returned the matching ones

Title: See reservation history

Primary actor: Reader

Success scenario: The reader enters the reservation history section. The application returns the user's book reservation history

Extension: If the user has no reservation history yet, then the application notifies about it

Title: Reserve book

Primary actor: Reader

Success scenario: The reader reserves a book. The book becomes unavailable for other users. The reservation adds to the reservation history of the user

Precondition: The reader has searched for a book, and the book is available

Title: Change status manually

Primary actor: admin

Success scenario: The admin changes the availability of a book to one of the options.

Precondition: The admin has searched the book.

Title: Add book

Primary actor: admin

Success scenario: The admin fills in the information for the new book and adds the book to the application.

Objects and classes

User

Book

Author

Genre

Reservation