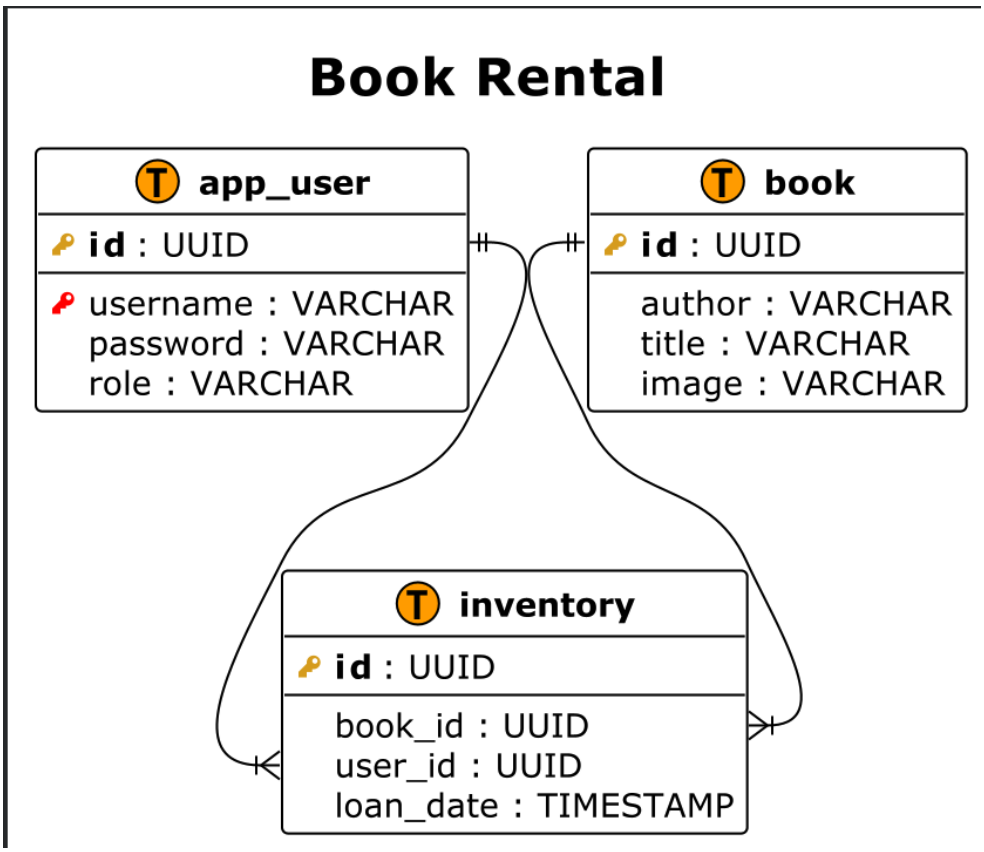
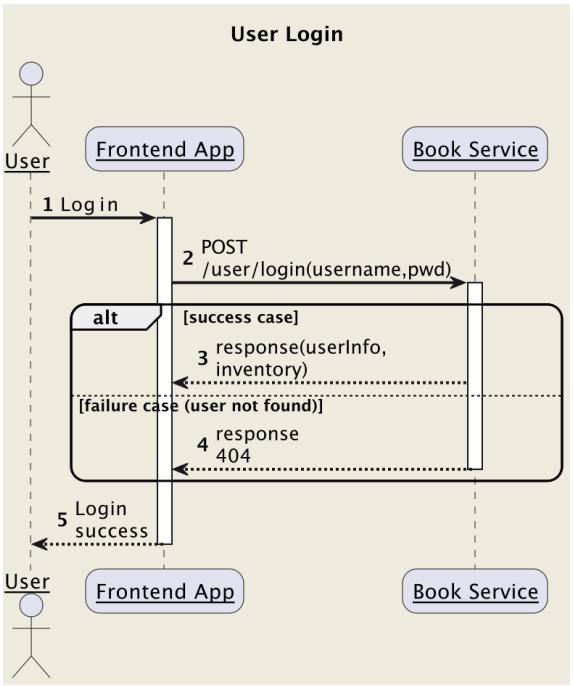
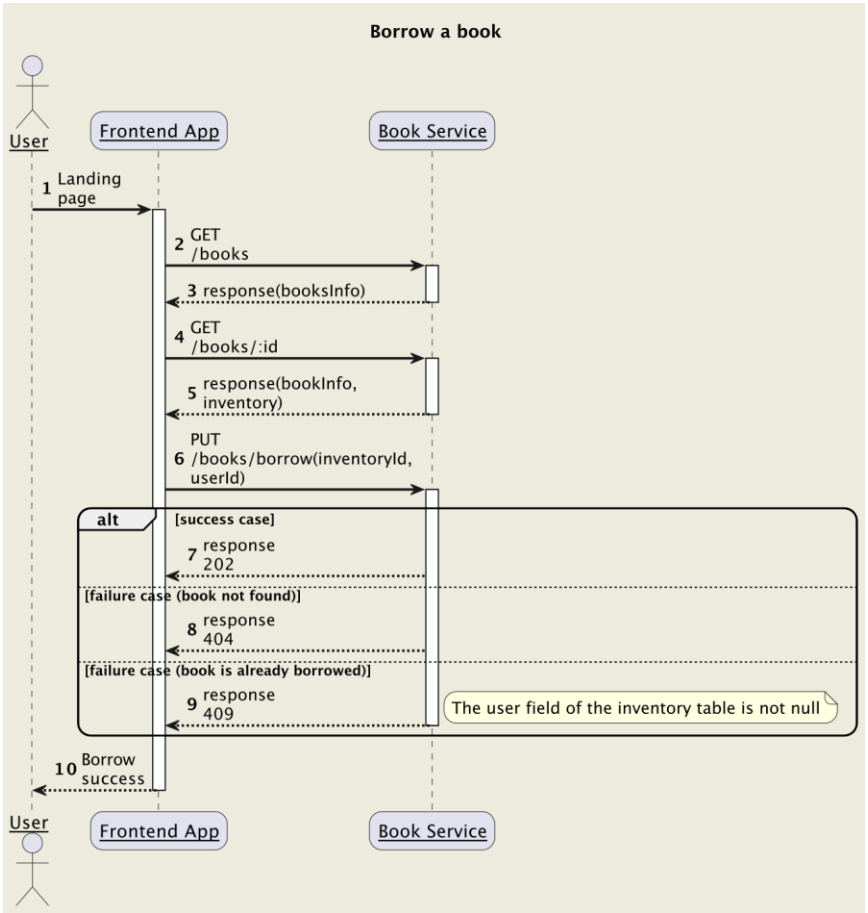
Book Rental App

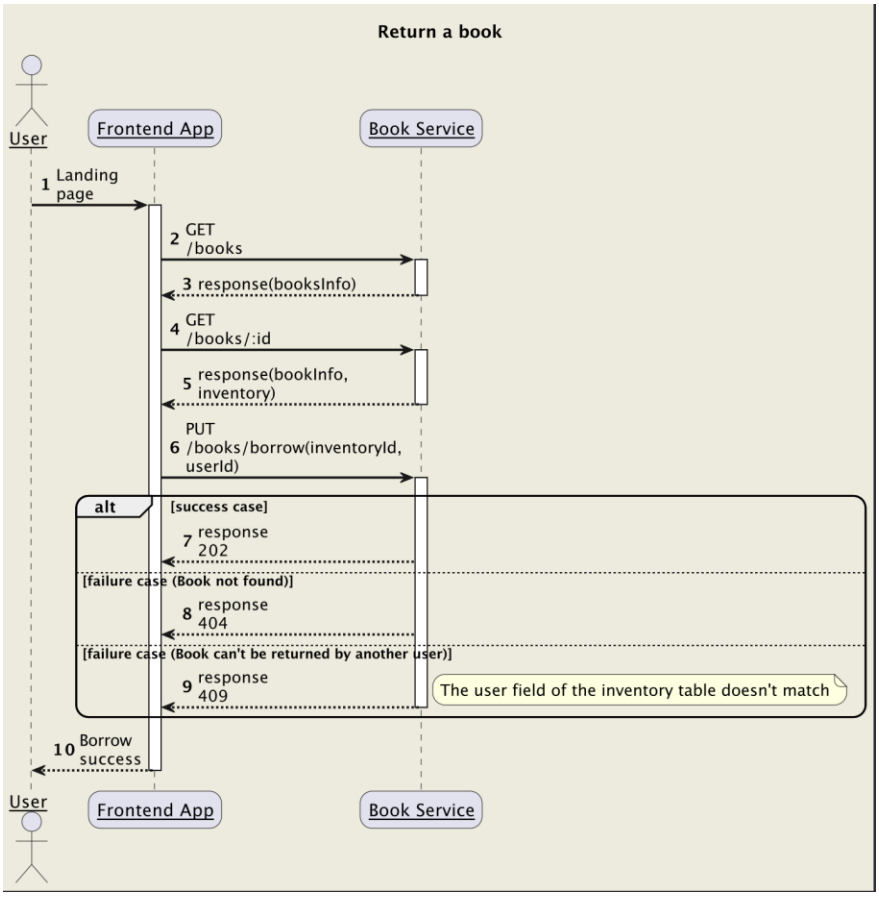
ERD:



Sequence Diagrams:



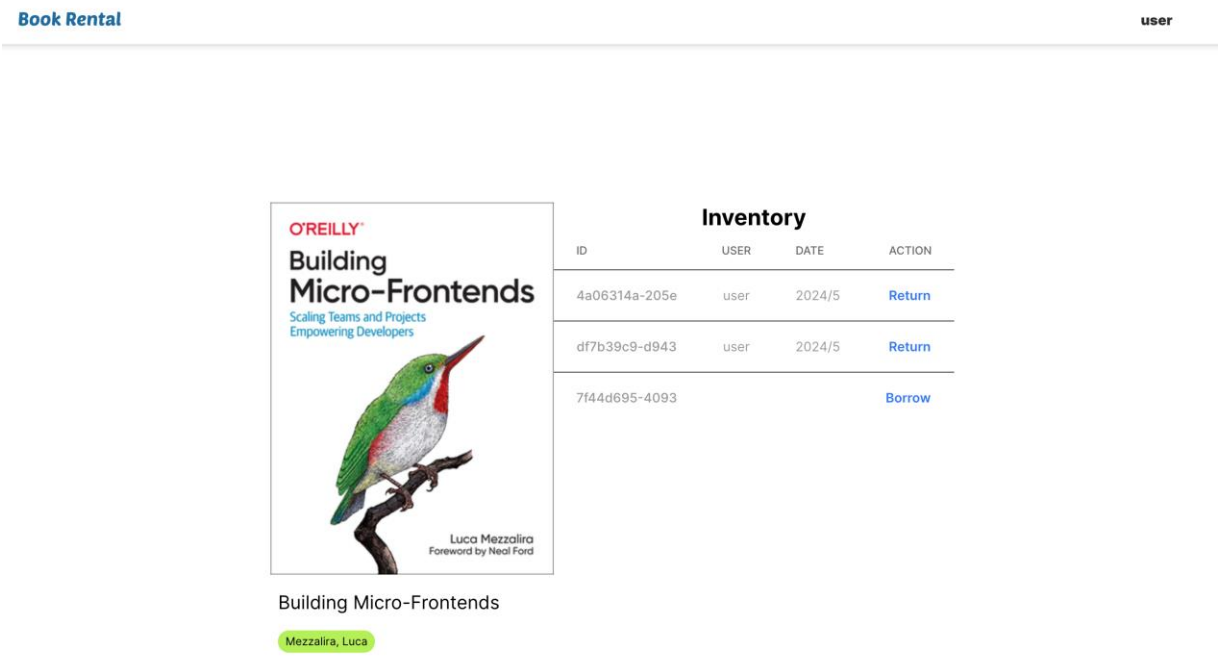

Borrow a book
User
Frontend App
Book Service
1 Landing page
2 GET /books
3 response(booksInfo)
4 GET /books/:id
5 response(bookInfo, inventory)
6 PUT /books/borrow(inventoryId, userId)
alt
[success case]
7 response 202
[failure case (book not found)]
8 response 404
[failure case (book is already borrowed)]
9 response 409
The user field of the inventory table is not null
10 Borrow success
User
Frontend App
Book Service


Return a book
User
Frontend App
Book Service
1 Landing page
2 GET /books
3 response(booksInfo)
4 GET /books/:id
5 response(bookInfo, inventory)
6 PUT /books/borrow(inventoryId, userId)
alt
[success case]
7 response 202
[failure case (Book not found)]
8 response 404
[failure case (Book can't be returned by another user)]
9 response 409
The user field of the inventory table doesn't match
10 Borrow success
User
Frontend App
Book Service

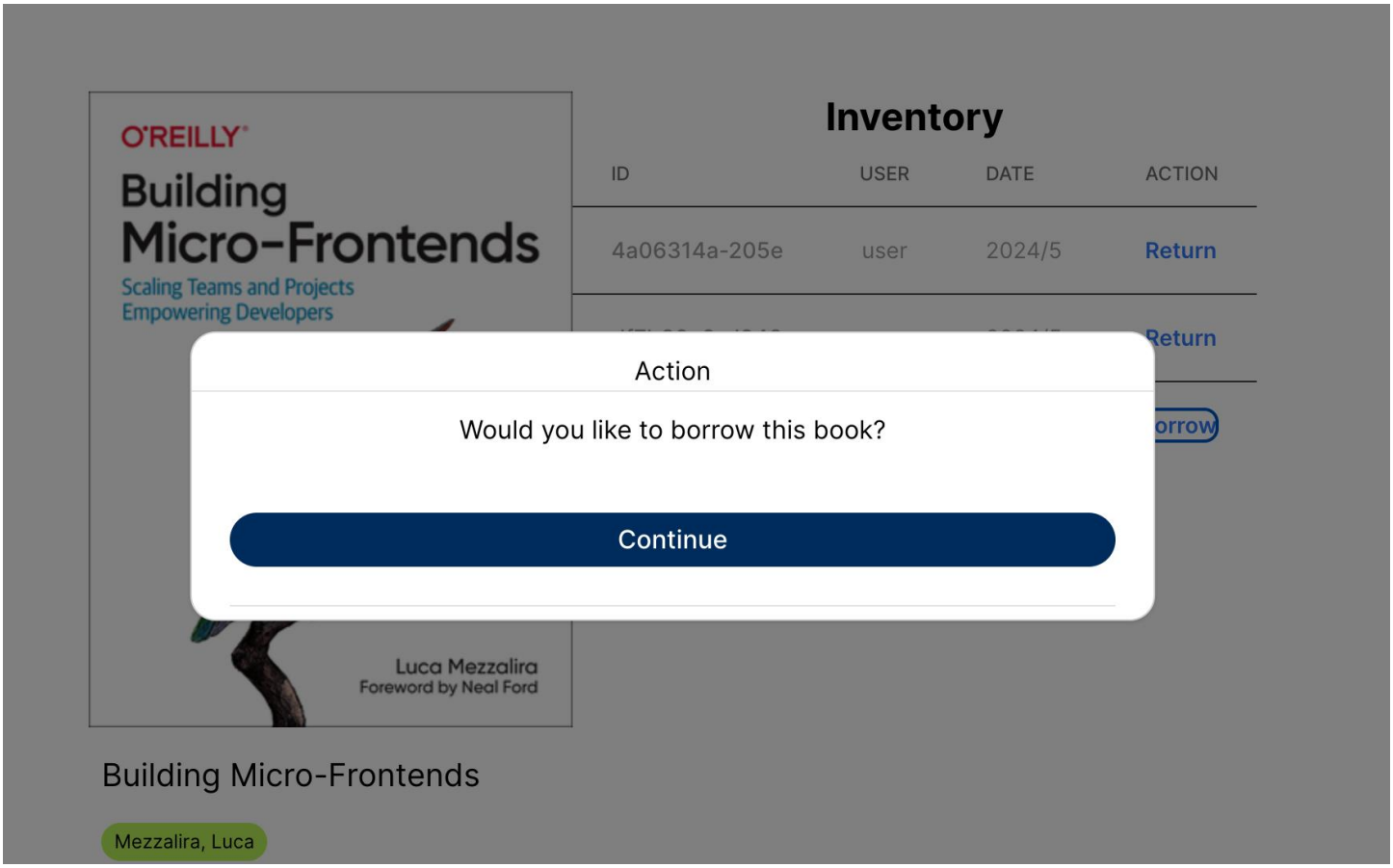
Views:

Landing Page:

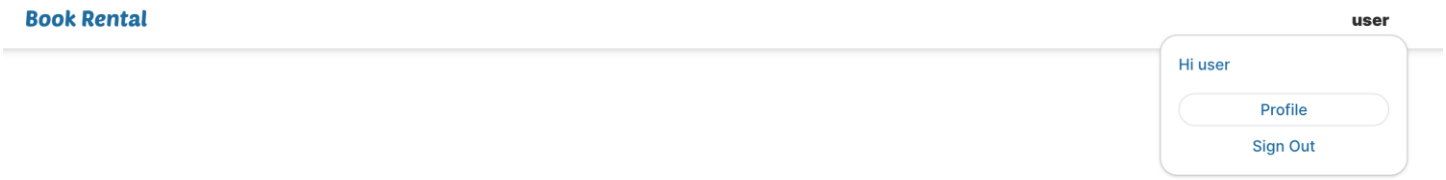
Detail Page:



Borrow / Return modal:



User Popover:



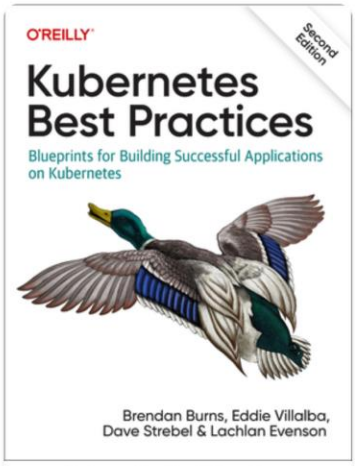
Profile page:

Profile

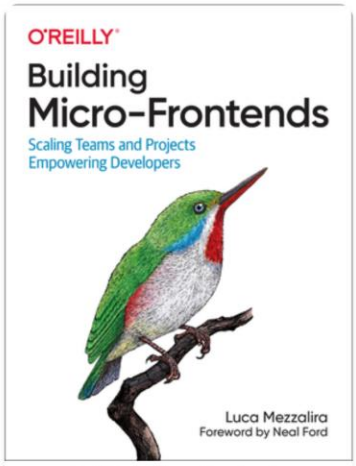
Name
user

Role
USER

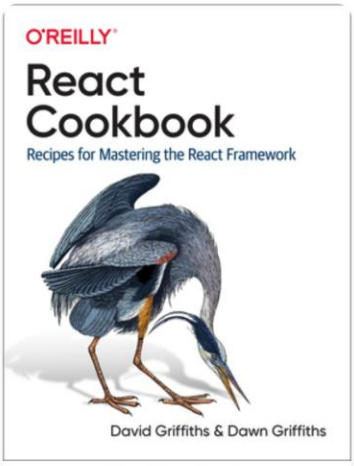
Borrowed Books



Kubernetes Best Practices



Building Micro-Frontends



React Cookbook