#### Microservices arbeidskrav

For my Project I will be developing a Booking Application for Library Bookings, similar to Deichman. Users will be able to explore through the library inventory, read descriptions and reserve books. A user can use the search feature to search for keywords and authors. The Book service will contain information about books available in the library. The library-catalog service will contain information about the books available in the library and where they are in this imaginary library building.

There will be a user service that handles registration, login, and user information. For login, the service will communicate with an authentication service. The application will have an API – gateway and discovery server for load balancing.

#### **User stories:**

1.

As a library patron, I want to be able to search for available books by title, author, or genre so that I can easily find and reserve the materials I'm interested in.

Acceptance Criteria/ Requirement:

The search functionality should allow users to search by book title, author, or genre.

The search results should display relevant information such as book availability and location within the library.

Users should be able to click on a result to view more details about a book.

2.

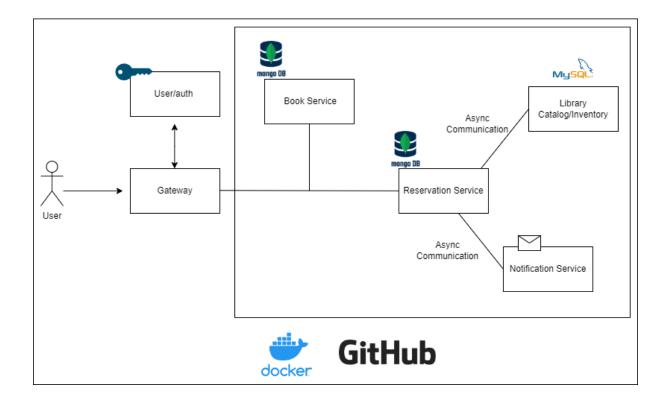
As a library patron, I want to receive a notification when my reserved book is available for pickup, so I can pick it up at my convenience.

Acceptance Criteria/Requirement:

The Notification Service should send an email notification when a reserved book is ready for pickup.

The email should include details about the reserved book and instructions for pickup.

#### **Architecture:**



# Project-prototype:

My project prototype consists of Features such as:

- Reserve Books in the library and receive a notification email.
- See information of books
- Search for Books based on Author, keywords, or Genre.
- Application should have load balancing.
- Able to register and log in to user.

# Ideal project:

My ideal project, aside from the prototype requirements, should include:

- User able to see booking history.
- User able to renew loans that are close to expiring date.
- User get recommendations based on rent history.

# Minimal project:

Worst case scenario, I will cut the user and notification services. The client will be able to explore the books available (no search feature) and put in a booking. When reserving, the user would input information, name, and phone number etc. Then receive feedback in application that reservation is complete.