

## **Team 5 - Sprint 3 review report**

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### **What has been done in this Sprint:**

- 90% user stories complete
- FXML pages created for all scenes & components
- Frontend components for Main Page, My Profile Page, My Bookings page, Search books by: author, category, language & availability
- Frontend header component
- Book & Author components
- Connected service layer to UI to complete user stories
- UI components dynamically change with authentication
- Search and categorization added
- User profile page with ability to modify data & change password
- Reservation system implemented
- Controller was split into sub-controllers based on page functionality
- Restructured View - only one class
- Jenkins file
- Improvements in Model
- Docker
- More Unit tests & Coverage tests
- Project Diagrams (Interface, Package, Sequence, Class)

Diagrams can be found in the presentation slides:

[https://docs.google.com/presentation/d/1w61Wrby2G4wtmjL4jYGdpcS4H6T7\\_dOztmswvgH3PIU/edit#slide=id.gc6fa3c898\\_0\\_5](https://docs.google.com/presentation/d/1w61Wrby2G4wtmjL4jYGdpcS4H6T7_dOztmswvgH3PIU/edit#slide=id.gc6fa3c898_0_5)

### **Highlights:**

- 110 test cases
- One view
- Multiple sub-controllers
- Docker
- Jenkins file
- MVC structure
- JavaFx for frontend
- JUnit test
- Mockito, a Java-based mocking framework, was used for testing.
- Testcontainers for managing and running Docker containers were part of the integration tests.
- Used Maven shade plugin to run Jar file with JavaFX locally (not compatible with Docker, so will switch back in SPrint 4)

### **User stories that were covered in Sprint 3:**

**Total 24**

1. As a student, I want to search for books by title, author, or subject so that I can find the book I need quickly.(View FXML Functionality)
2. Design a page to show the search result based on the name of the book. (View FXML and Service Layer Integration)
3. As a student, I want to search for books by title so that I can easily find the book I'm looking for based on its name. (View FXML and Service Layer Integration)
4. Design how lists of books will appear in search, handle large amount of books and also response when no books are found that match the criteria (Frontend)
5. As a student, I want to search for books by category so that I can find books related to a particular topic.(View FXML Functionality)
6. As a user, I want to search multiple books that belong to the same author, So that I can view all works by a specific author.(View FXML and Service Layer Integration)
7. Design the author page to show the author's information and user can also check the books that a particular author has written. (Frontend)
8. As a user, I want to search for books that include multiple authors, So that I can find books written by collaborative authors or by more than one contributor.(View FXML and Service Layer Integration)
9. As a student, I want to see a list of books that match my search criteria so that I can easily choose which book to check out. (View FXML and Service Layer Integration)
- 10.As a student, I want to be informed if no books match my search query so that I can try a different search term (Frontend Functionality)
11. As a student, I want to be informed if no books match my search query so that I can try a different search term.(View FXML and Service Layer Integration)
- 12.Add elements for advance searching, to show only books that are available
- 13.As a registered user, I want to update my personal information (e.g., name, email, password, and profile details), So that my account remains up to date and accurate. (View FXML and Service Layer Integration)
- 14.Design UI for user information page, where user can check their personal information and change/update their information
- 15.As a registered user, I want to view the total number of books I have currently reserved, So that I can keep track of my active reservations and manage them accordingly. (View FXML and Service Layer Integration)
- 16.As a user, I want to reserve a book so that I can ensure it will be available for me when I need it.

17. As a user, I want to cancel a reservation so that others can reserve the book if I no longer need it.
18. As a user, I want to see the real-time availability status of books so that I can make decisions based on current data.
19. As a user, I want the system to prevent multiple users from reserving the same book at the same time in real-time.
20. As a user, I want to extend my book reservation if I need more time, So that I can keep the book for a longer period without losing my reservation.(View FXML and Service Layer Integration)
21. As a user, I want to receive a notification when I successfully reserve a book, So that I am informed about my reservation status and details. (View FXML and Service Layer Integration)
22. Design user bookings page for user to handle their bookings, where user can return book or extend book lending period (Frontend)
23. Design the notification system for notifying users of incoming due dates or books that are close to availability date. (Frontend)
24. As a user, I want to reset my password if I forget it so that I can regain access to my account.(View FXML and Service Layer Integration)

## Links:

Trello Board:

<https://trello.com/invite/b/6788ea103ea28c75cef5c85e/ATTlddcf1421d4a63da4c3a7c6cdc146bf64D89467D5/sprint-3>

Project Plan:

<https://docs.google.com/document/d/1cBcAMCsVLn4YdTJM0GVeyacR28mT-nDtQAtnz6zaK-U/edit?tab=t.0#heading=h.i5rl37uape1g>

Product Vision:

[https://docs.google.com/document/d/1Qx3SjP0i-4q8esQl8oSoVJ3i1KyWueDi\\_WeF6HdgCiw/edit?tab=t.0](https://docs.google.com/document/d/1Qx3SjP0i-4q8esQl8oSoVJ3i1KyWueDi_WeF6HdgCiw/edit?tab=t.0)

Figma UI Blueprint/Prototype:

<https://www.figma.com/design/X7R1B4GjCMiose5WzugAeH/Luku-Library?node-id=0-1&t=9U1t0CaPzW5wkWEX-1>

Project repository:

<https://github.com/S-Vilka/Luku>

Time tracking:

<https://docs.google.com/spreadsheets/d/1eZd5gefDUNXUTLmKXAKxe8vcABDskQgsFFfQB-iQHcw/edit?usp=sharing>