

AAA Battery

Library Management System

Backlog



Team Name: AAA Battery	2
Project Team Information	2
Product Backlog	2
High-Priority User Stories	2
Medium-Priority User Stories	3
Low-Priority User Stories	4
Sprint Backlog	5
Sprint 1 Goal	5
Sprint 1 Backlog (High-Priority Tasks)	5
Sprint 2 Goal	6
Sprint 2 Backlog	6
Sprint Prioritization Notes	7
Trello Board	7
Sprint 1 end/Sprint 2 start:	7

Sprint 2 Middle:	8
Sprint 2 Middle:	8
Sprint 2 end:	9
Version Control (Github Repository)	9

Team Name: AAA Battery

Project Team Information

Roles	Assigned Members
Project Manager/Lead	Ayesha Ejaz
Scrum Master	Aisha Siddiq
Requirement Engineer	All
Developers	All
Testers	Ayesha Ejaz, Aisha Siddiq
UI Designers	Abdullah Zubair Ghouri

Product Backlog

High-Priority User Stories

1. User Login (L & B)

As a user, I want to log in securely so that I can access my account and borrowing history.

- ☒ Backend API implemented
- ☒ Frontend page exists

2. User Registration (B)

As a new user, I want to register an account so that I can use the library system.

- ☒ Backend API implemented
- ☒ Frontend page exists

3. **Add Items (L)**

As a librarian, I want to add new content to the library system so that it stays updated.

- ☒ Backend API implemented
- ☒ Frontend page exists

4. **View All Items (L & B)**

As a borrower, I want to view all available content so that I can decide what to borrow.

- ☒ Backend API implemented
- ☒ Frontend page exists

5. **Search and Filter Library Items (L & B)**

As a user, I want to search and filter through the library items so that I can quickly find the content I need.

- ☒ Backend API not implemented
- ☒ Frontend integration required

6. **Request Items (B)**

As a borrower, I want to request unavailable content to be added to the library catalogue, so that I can borrow them.

- ☒ Backend API implemented
- ☒ Frontend page exists

7. **View My Requests (B)**

As a borrower, I want to view my requests so that I can track their status.

- ☒ Backend API implemented
- ☒ Frontend page exists

8. **View Requests Log & Accept/Reject Them (L)**

As a librarian, I want to view all requests and accept/reject them so that I can manage library lending.

- ☒ Backend API implemented
- ☒ Frontend page exists

9. **Borrow Items (B)**

As a borrower, I want to borrow content from the library so that I can use it for a specified duration.

- ☒ Backend API implemented
- ☒ Frontend page exists

10. **Returning Borrowed Items (B)**

As a borrower, I want to return borrowed content so that I can free my account for other items.

- ☒ Backend API not implemented
- ☒ Frontend integration required

Medium-Priority User Stories

11. **Change Password (L & B)**

As a user, I want to change my password so that I can secure my account.

- ☒ Backend API implemented
- ☒ Frontend page exists

12. Password Recovery (L & B)

As a user, I want to recover my password so that I can regain access to my account if I forget it.

- ☒ Backend API not implemented
- ☒ Frontend integration required

13. Charge Fines (L)

As a librarian, I want to charge fines to borrowers based on timestamps so that library policies are enforced.

- ☒ Backend API not implemented
- ☒ Frontend integration required

14. Monitor Fine Logs (L)

As a librarian, I want to monitor borrower fine logs so that I can send notifications to users with unpaid fines, and maintain system security and integrity.

- ☒ Backend API not implemented
- ☒ Frontend integration required

15. Monitor Borrow Logs (L)

As a librarian, I want to monitor borrowing activity logs so that I can track system events and security.

- ☒ Backend API not implemented
- ☒ Frontend integration required

16. Borrower Notifications

As a borrower, I want to receive notifications when my requested content is available.

- ☒ Backend API not implemented
- ☒ Frontend integration required

Low-Priority User Stories

17. Email Verification (B)

As a user, I want to verify my email after registration so that I can confirm my identity.

- ☒ Backend API not implemented
- ☒ Frontend integration required

18. Subscribe to the System (B)

As a borrower, I want to subscribe to the system so that I can access premium features like borrowing priority and notifications.

- ☒ Backend API not implemented
- ☒ Frontend integration required

19. Subscription Management (L)

As a librarian, I want to add/cancel user subscriptions so that I can manage premium features.

- [X] Backend API not implemented
- [X] Frontend integration required

20. Deadline Extension Requests (B)

As a borrower, I want to request an extended deadline so that I can avoid overdue fines.






- [X] Backend API not implemented
 - [X] Frontend integration required
-


Sprint Backlog

Sprint 1 Goal

Set up the project with a Next.js frontend and a Spring Boot backend. Implement HTTP-only cookie-based JWT authentication in the backend. Develop login and registration endpoints to test authentication. Automate deployment of the backend to Heroku and the frontend to Vercel.

Sprint 1 Backlog (High-Priority Tasks)







- 1. Set Up Next.js Frontend & Spring Boot Backend**
 - Task: Initialize Next.js and Spring Boot projects with proper directory structures.
 - Owner: Full-Stack Developer
 - Status: Completed 
- 2. Automate Backend Deployment to Heroku**
 - Task: Set up CI/CD pipeline to automatically deploy Spring Boot backend to Heroku.
 - Owner: DevOps Engineer
 - Status: Completed 
- 3. Automate Frontend Deployment to Vercel**
 - Task: Configure Vercel to deploy the Next.js frontend on push to the main branch.
 - Owner: DevOps Engineer
 - Status: Completed 
- 4. Implement HTTP-Only Cookie JWT Authentication (Backend)**
 - Task: Configure Spring Boot security to use JWT stored in HTTP-only cookies.
 - Owner: Backend Developer
 - Status: Completed 
- 5. Develop Login & Registration Endpoints (Backend)**
 - Task: Implement authentication endpoints for user login and registration.
 - Owner: Backend Developer
 - Status: Completed 

6. **Develop User Login and Registration Pages (Frontend)**
 - Task: Connect the frontend login form with the backend authentication API.
 - Owner: Frontend Developer
 - Status: Completed 

Sprint 2 Goal

Populate the library with items and implement the request and borrowing functionality, allowing users to view and search for items and borrow them.

Sprint 2 Backlog

1. **Develop API for Adding Library Items (Backend)**
 - Task: Implement API to add library items to the system.
 - Owner: Backend Developer
 - Status: Completed 
2. **Develop Add Items Page (Frontend)**
 - Task: Allow librarians to add new items via the frontend UI.
 - Owner: Frontend Developer
 - Status: Completed 
3. **Implement Request Items API (Backend)**
 - Task: Develop API for borrowers to request library items.
 - Owner: Backend Developer
 - Status: Completed 
4. **Develop Request Items Page (Frontend)**
 - Task: Implement user requests for borrowing items.
 - Owner: Frontend Developer
 - Status: Completed 
5. **Implement Borrow Items API (Backend)**
 - Task: Develop API for borrowers to officially check out requested items.
 - Owner: Backend Developer
 - Status: Completed 
6. **Develop Borrow Items Page (Frontend)**
 - Task: Allow borrowers to check out available items in the library.
 - Owner: Frontend Developer
 - Status: Completed 
7. **Develop Search & Filter Items (Frontend-Backend)**
 - Task: Enable search and filtering functionality for the library catalog.
 - Owner: Full-Stack Developer

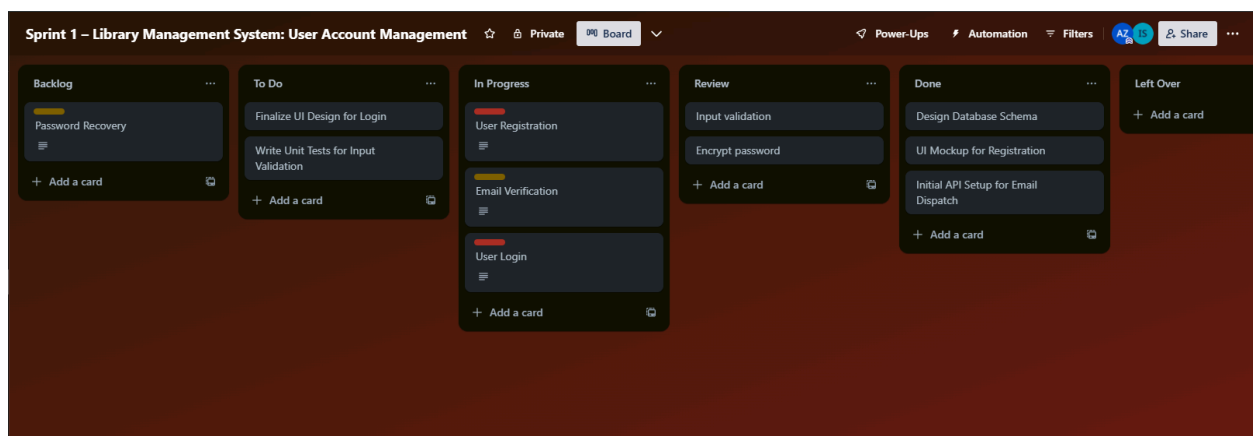
- Status: To Do ⌚
8. **Implement View All Items API (Backend)**
 - Task: Fetch available library items from the database.
 - Owner: Backend Developer
 - Status: Completed ✓
 9. **Implement View My Requests API (Backend)**
 - Task: Display borrower's requested items by fetching data from the backend API.
 - Owner: Backend Developer
 - Status: Completed ✓
 10. **Implement View All Requests & Accept/Reject Them (Backend)**
 - Task: Fetch borrower's requested items from database, and change their status.
 - Owner: Backend Developer
 - Status: Completed ✓

Sprint Prioritization Notes

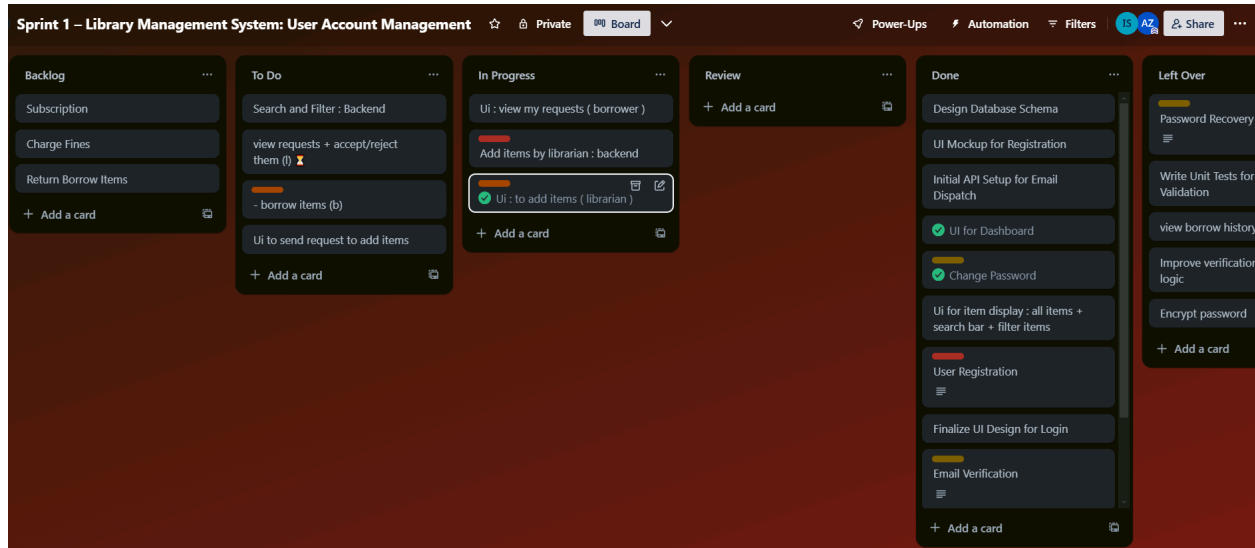
- **Current Focus:** Completing core library functionality like login, registration, item requests, viewing available books, and borrowing.
- **Next Sprint:** Complete remaining user stories, and integrate frontend with backend.
- **Dependencies:** Frontend integration relies on available backend APIs.

Trello Board

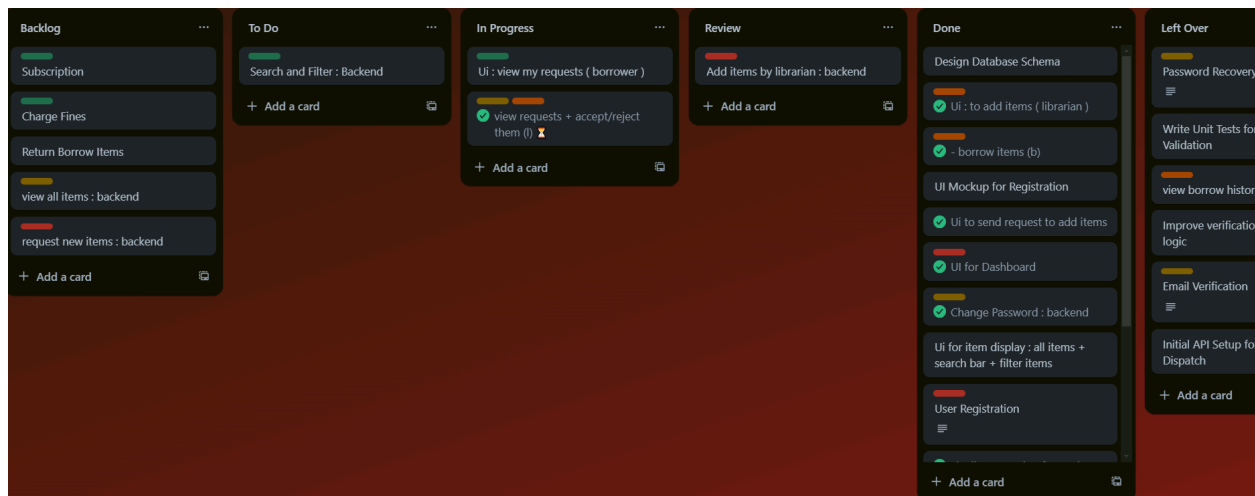
Sprint 1 end/Sprint 2 start:



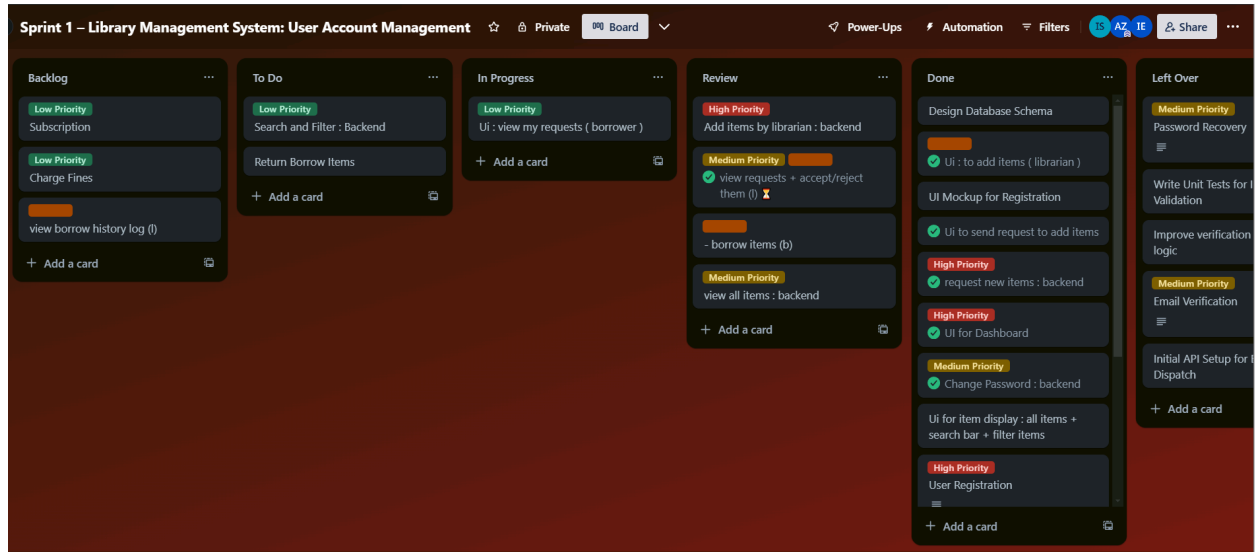
Sprint 2 Middle:



Sprint 2 Middle:



Sprint 2 end:



Version Control ([Github Repository](#))

aaa-battery Public

Pin Unwatch 1 Fork 0 Star 0

main 3 Branches 0 Tags

Go to file Add file Code

Commit History:

Commit	Author	Message	Time
d763838	aye-shadow	chore: subscription package setup	2 hours ago
		chore: cleaning up frontend backend url links	yesterday
		Update .gitignore	last week
		Initial commit	7 months ago
		chore: cleaning up frontend backend url links	yesterday

Project Setup Guide

Before running any part of this project, ensure you have the following installed:

- Node.js: version 22
- JDK: version 17
- Maven: version 3.9.9

Running the Frontend

- Navigate to the `frontend` directory:







About: [aaa-battery.vercel.app/](#)
Readme
Apache-2.0 license
Activity
0 stars
1 watching
0 forks

Releases: No releases published
[Create a new release](#)

Packages: No packages published
[Publish your first package](#)

Contributors: 2
aye-shadow Ayesha Ejaz
AishaSid

Deployments: 107
Production 2 hours ago
Preview 9 hours ago

 Abdullahzg All frontend done ✓	02c3832 · 9 hours ago	63 Commits
 backend	fix: removed lazy loading of requests in borrower	12 hours ago
 frontend	All frontend done	9 hours ago
 .gitignore	Update .gitignore	last week
 LICENSE	Initial commit	7 months ago
 README.md	chore: cleaning up frontend backend url links	yesterday

Videos Links

Frontend :

https://drive.google.com/file/d/1EnlePLcZTrNHZNQuzXy29WMOsC8XVy7L/view?usp=drive_link

Backend :

<https://screenrec.com/share/WXUrVltBES>