

Generic Library Managment

Members

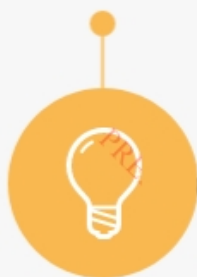
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Roadmap of the Project

Library Management Software Development Timeline Roadmap

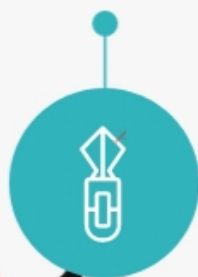
Aug(1/2) 2021

Ideation and Brainstorming



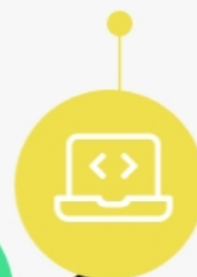
Sep(1/2) 2021

Database Planning and Design of Schema



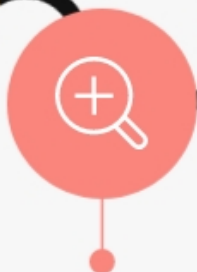
Oct 2021

Coding and Structuring



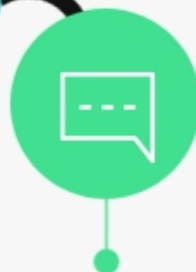
Aug(2/2) 2019

Research and Data Analysis



Sep(2/2) 2021

Roadmapping and Database Programming



Nov 2021

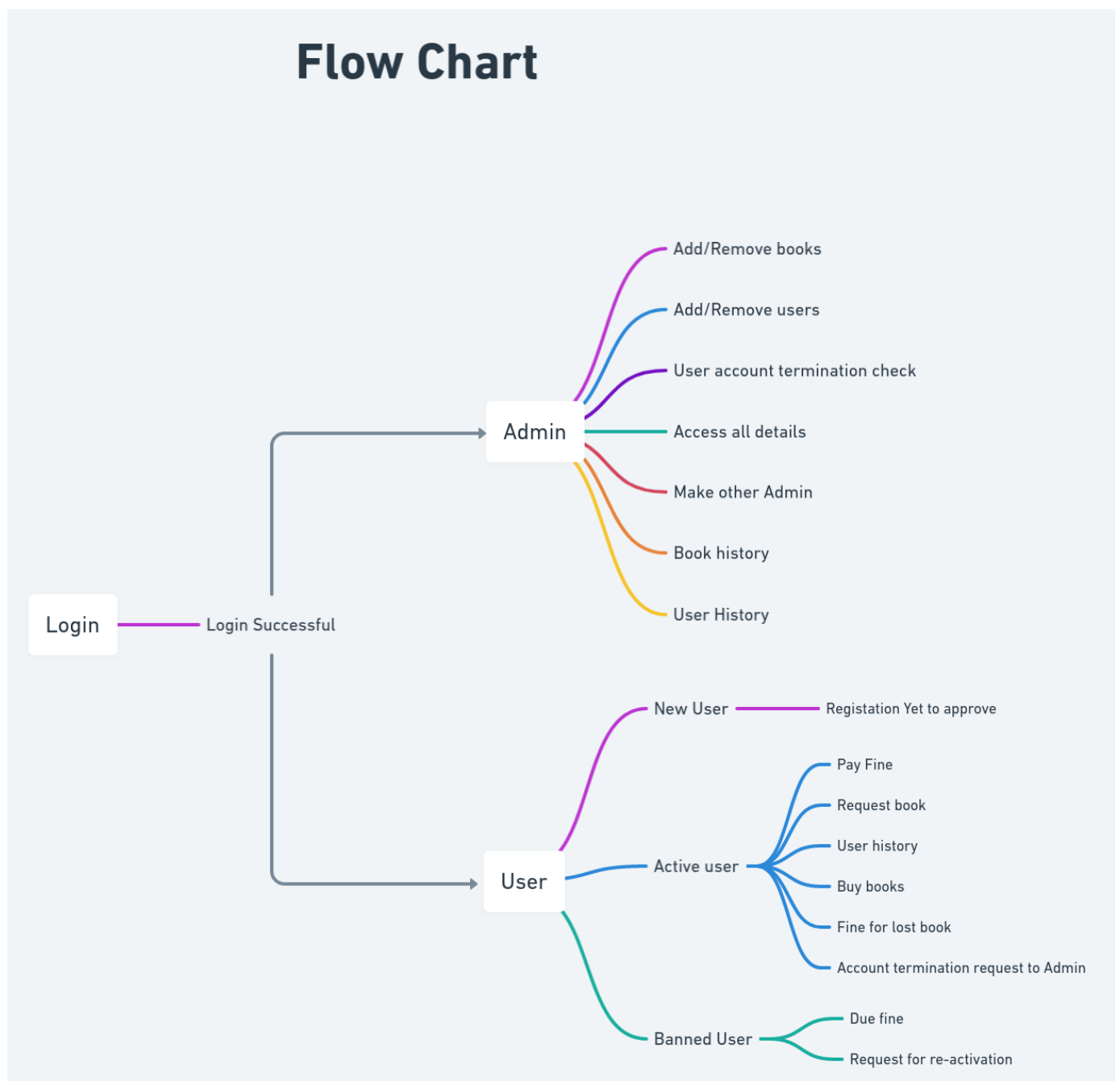
QA Testing & Launch



Project Description

- As the project name suggests automation in which the human input can be minimised and makes the work of librarian a lot easier and experience of user a lot simpler.
- This has some new features like requesting book from other students, buying books from catalogue, if available for sale and reviewing and rating books and feedback of experience etc.
- We can also track the history of users (books user has taken before and now).
- We can also track history of books (users who took the book previously and now).
- It makes library user and librarian work very simpler and easier.

Project Design Flow



Project Requirements/Features

1. Admin

- Add books
- Confirm registration of user
- Can see all user details
- Remove/add users
- Make others admin
- Can see the books taken by user
- Can track history of book (Users used)

2. User

There are 3 types of users

New registration	Active user	Old user
Registration yet to approve	Registration Approved	User in break/due fine
Shows Registration Pending	Can Access completely	Limited access

Active user features :

- Can lend max of 4 books.
- Request other user, if he needs a book taken by other user.
- Pays fine, if he lost the book or delays renewal of book.
- History of books he took.
- Can buy a book, if available to sale by another user or by library.
- Can generate and use the Library ID card in PDF
- Can give Feedback of experience while taking books

3. Other Features

- Automated emails to users, reminding for renewal of books
- Users can search books in the catalogue
- Lending/Taking books is of 3 categories
 - Take book from Library
 - Take book from other user
 - Buy book, if available for sale
- Automated emails on registration approval/banning/termination
- Automated generation of Library ID cards
- Different types of subscriptions for users

Software Specifications

Backend	Frontend
Django (Python)	HTML
MySQL(Database)	CSS
	JS

Non-functional Requirements

- Scalability and reliability is taken care by django, as it is simple, highly scalable and flexible.
- Security of the sensitive data transmission of users is taken care by django.
- We designed the database with high data integrity.
- The performance of the application will be good with the optimised queries in MySQL.
- Maintainability and Manageability of the application will be good, as we are following the best Software principles.
- MySQL is capable enough to scale the project to even higher.
- The portability of the application is high, as we are using one of the most popular framework.