

<Project Name>	
Architecture Notebook	Date: <dd/mmm/yy>

<Library Automation System> Architecture Notebook

1. Purpose

This document describes the philosophy, decisions, constraints, justifications, significant elements, and any other overarching aspects of the system that shape the design and implementation.

2. Architectural goals and philosophy

It can run on older systems with older jdk versions supported by the Java 1.80 jdk version. There may be a need to maintain when there are too much records on the system. And also mysql version must be **5.7.18**

All computers connected to the system must be connected to each other via a common network. Log records for extreme conditions are stored. When the system is turned back on, the system starts again from the log records.

3. Assumptions and dependencies

Mysql database system is preferred for dependency on database system. In terms of ease of programming, Java was chosen as an object oriented language in order to more easily identify objects. In order to reduce system dependency, unique ID process is used instead of barcode system. If a user has a fine on a book he borrowed, he can not get a new book from scratch without paying the fine.

4. Architecturally significant requirements

<http://www.oracle.com/technetwork/java/javase/downloads/index.html>

You can use the link for jdk updates.

5. Decisions, constraints, and justifications

- A user can buy up to 3 books, so that a reasoned user can not buy too many books on his own
- The fact that the person with fine can not buy a new book, reduces the possibility that I can not get the books back.

6. Architectural Mechanisms

Architectural Mechanism 1

File system

A database containing system information All user and book information in the database system . In this system, values such as name, surname e-mail address, password, books brought, books returned are stored. It also includes editing, adding, deleting functions for users and adding s and editing functions for books.

Architectural Mechanism 2

Control Mechanism

In this mechanism, the operations in the system are controlled. In this system, controller such as user name and password match control function, book limit control, fine existing control, list of searched books are made.

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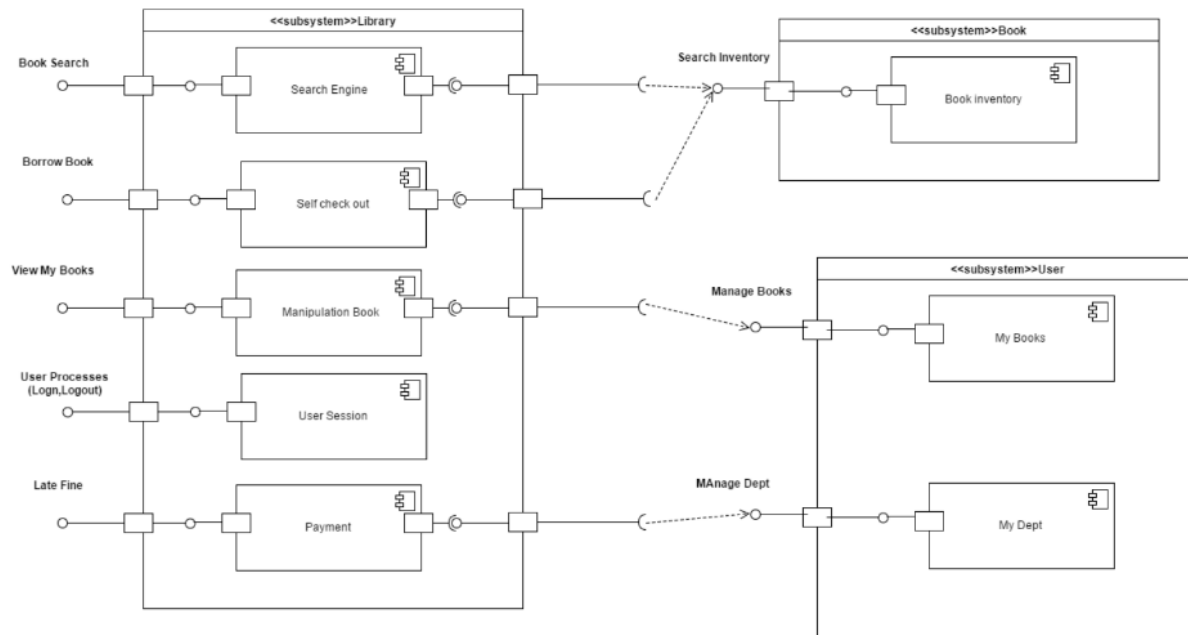
7. Key abstractions

User: system user contain , administrator , normal user.

Book: Contain all books in system

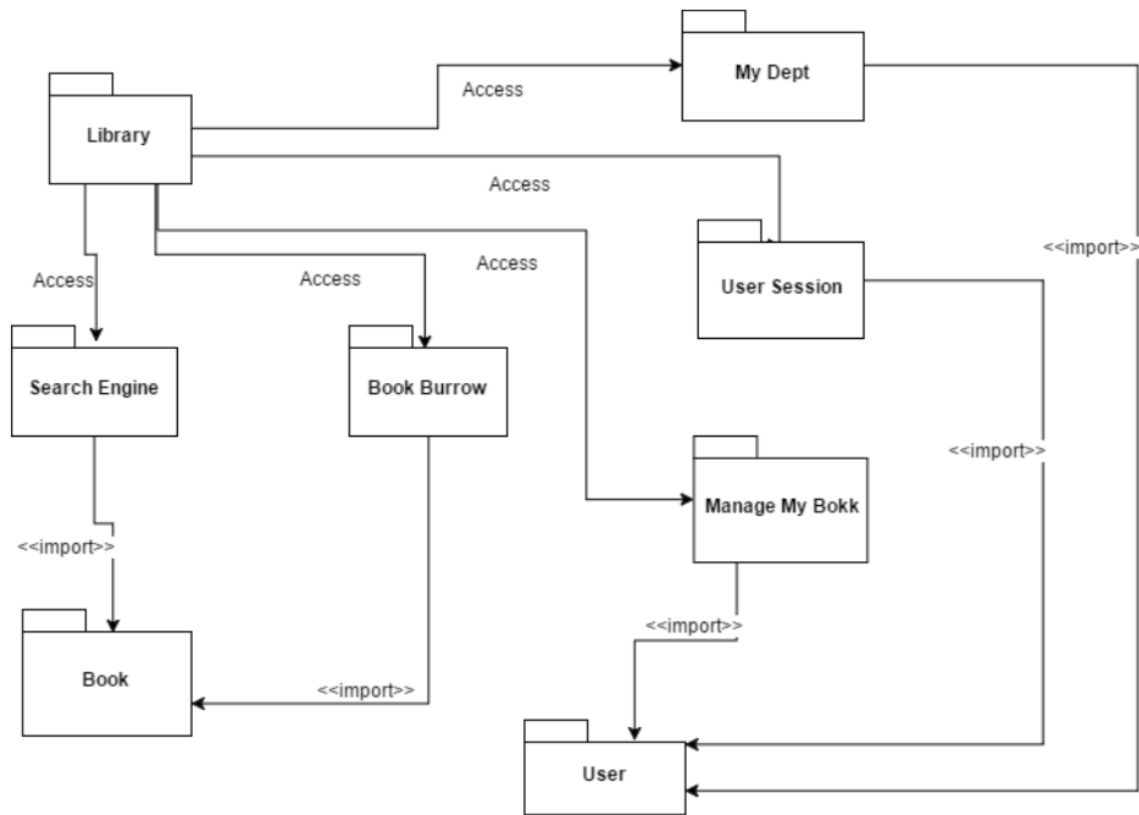
File System : contain all information about library system

8. Layers or architectural framework



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9. Architectural views



Recommended views

- **Logical:** Describes the structure and behavior of architecturally significant portions of the system. This might include the package structure, critical interfaces, important classes and subsystems, and the relationships between these elements. It also includes physical and logical views of persistent data, if persistence will be built into the system. This is a documented subset of the design.
- **Operational:** Describes the physical nodes of the system and the processes, threads, and components that run on those physical nodes. This view isn't necessary if the system runs in a single process and thread.
- **Use case:** A list or diagram of the use cases that contain architecturally significant requirements.