

SECP1013-04

LOW FIDELITY PROTOTYPE PROJECT

E-LIBRARY MANAGEMENT SYSTEM

GROUP 6



OUR CLIENTS



Problem Statement

Most of the libraries still implementing the traditional way of bookkeeping. Manual organisation is really challenging. It takes some time for admin to register new books, handle loaned books from customers and updating it.



Clients

Libraries especially public and big libraries that still using the old way needs this technology

TEAMWORK



we created multiple meetings to understand and discuss the project and to distribute the tasks between us and find solutions.

What we used

The Online Library Management System (OLMS) is a system that keeps track of the books in the library, their authors, the library members to whom books are provided, the library personnel, and everything else. This proposal offers an RFID-based Library Management System that will allow for quick transaction flow and will make it easy to handle the issue and return of books from the library without the need for human bookkeeping.



What is RFID?

- RFID is an abbreviation for "radio-frequency identification"
- It refers to a technology in which digital data contained in RFID tags or smart labels is acquired by a reader using radio waves.
- RFID tags and smart labels are small, flexible tags.
- An RFID tag or label is similar to barcoding in that the data from the tag or label is acquired by a device that then records the information in a database.
- RFID tag data can be read even when the tag is not directly in front of the reader, whereas barcodes must be aligned with an optical scanner.





WHY RFID?

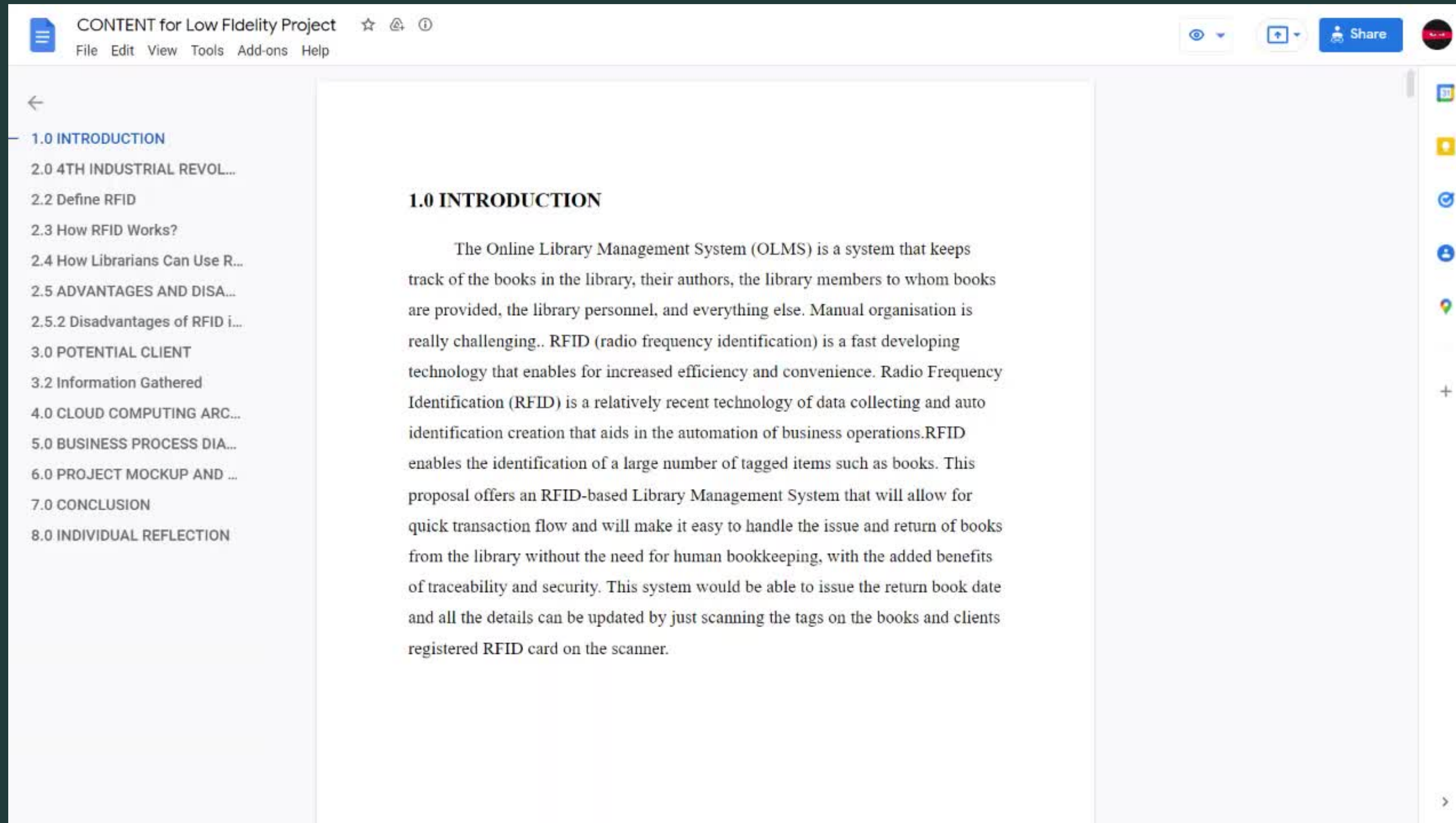
- Self charging discharging
- Streamlined Inventory Management
- Faster Circulation
- Easy stock verification
- High level of security

THE PURPOSE OF OUR TECHNOLOGY

- to make it easier for the user to lend and return the book
- reduction of staff duties
- To allow better accuracy in book collection management



THIS IS THE FULL REPORT



CONTENT for Low Fidelity Project ☆ 🔄 ⓘ
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1.0 INTRODUCTION

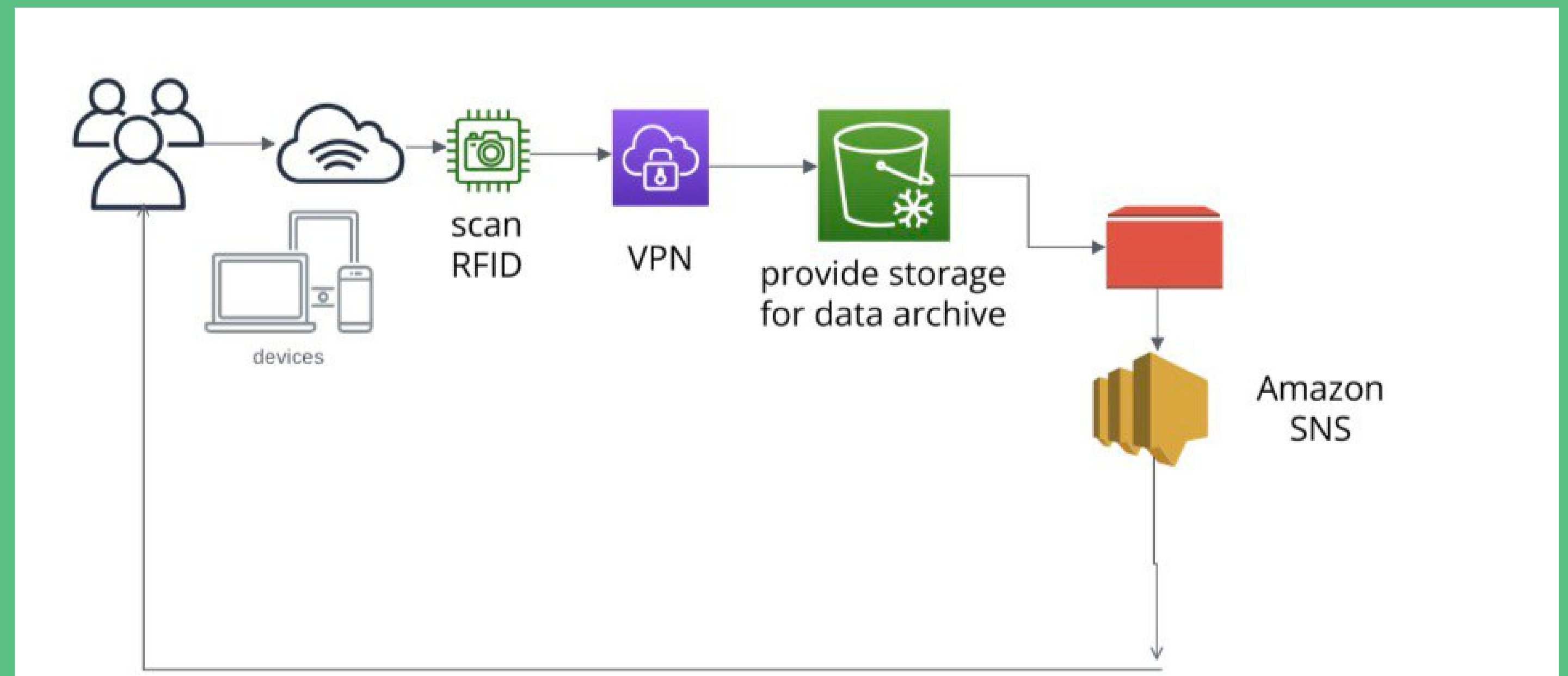
The Online Library Management System (OLMS) is a system that keeps track of the books in the library, their authors, the library members to whom books are provided, the library personnel, and everything else. Manual organisation is really challenging.. RFID (radio frequency identification) is a fast developing technology that enables for increased efficiency and convenience. Radio Frequency Identification (RFID) is a relatively recent technology of data collecting and auto identification creation that aids in the automation of business operations. RFID enables the identification of a large number of tagged items such as books. This proposal offers an RFID-based Library Management System that will allow for quick transaction flow and will make it easy to handle the issue and return of books from the library without the need for human bookkeeping, with the added benefits of traceability and security. This system would be able to issue the return book date and all the details can be updated by just scanning the tags on the books and clients registered RFID card on the scanner.



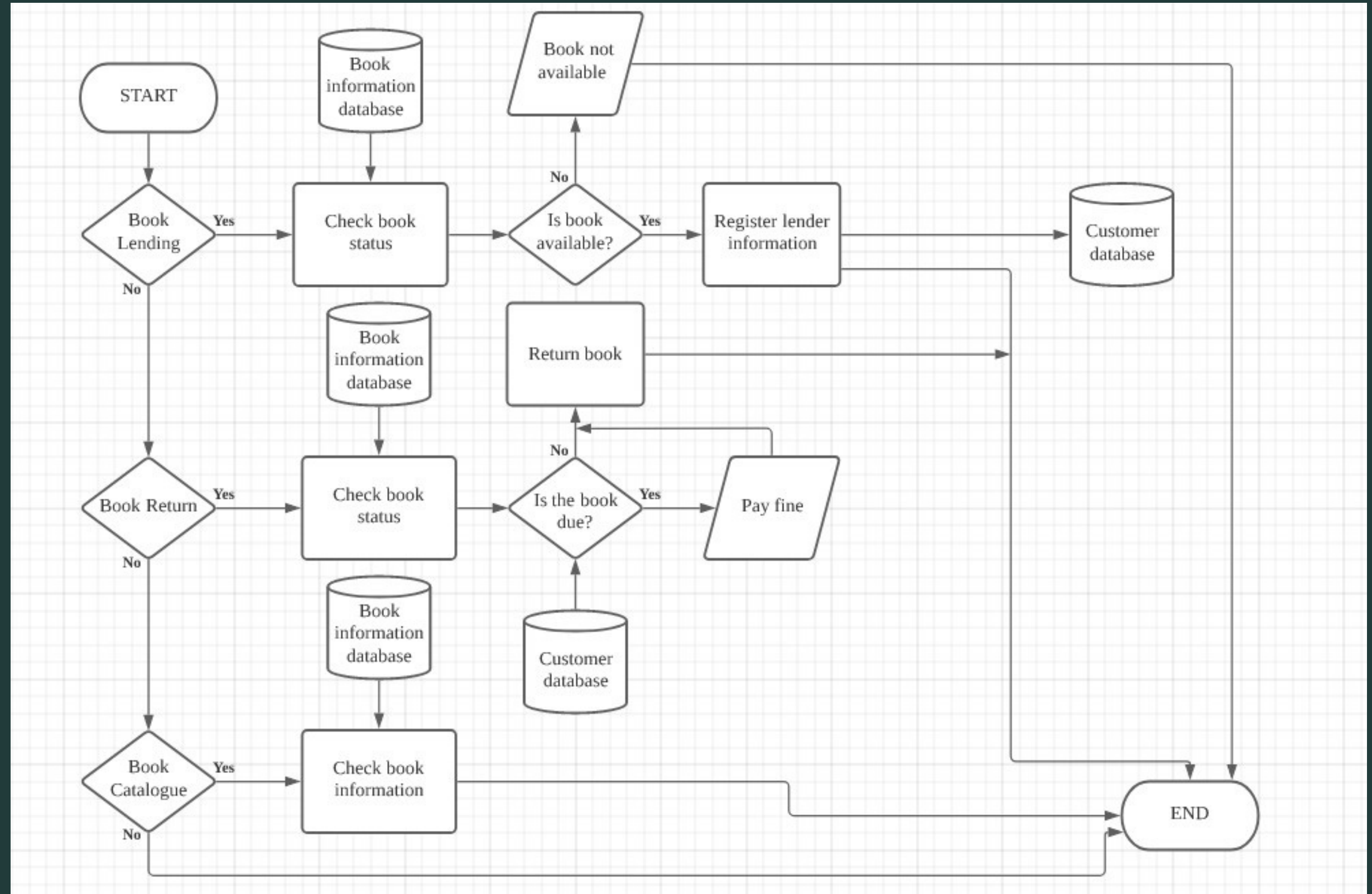
AWS ARCHITECTURE



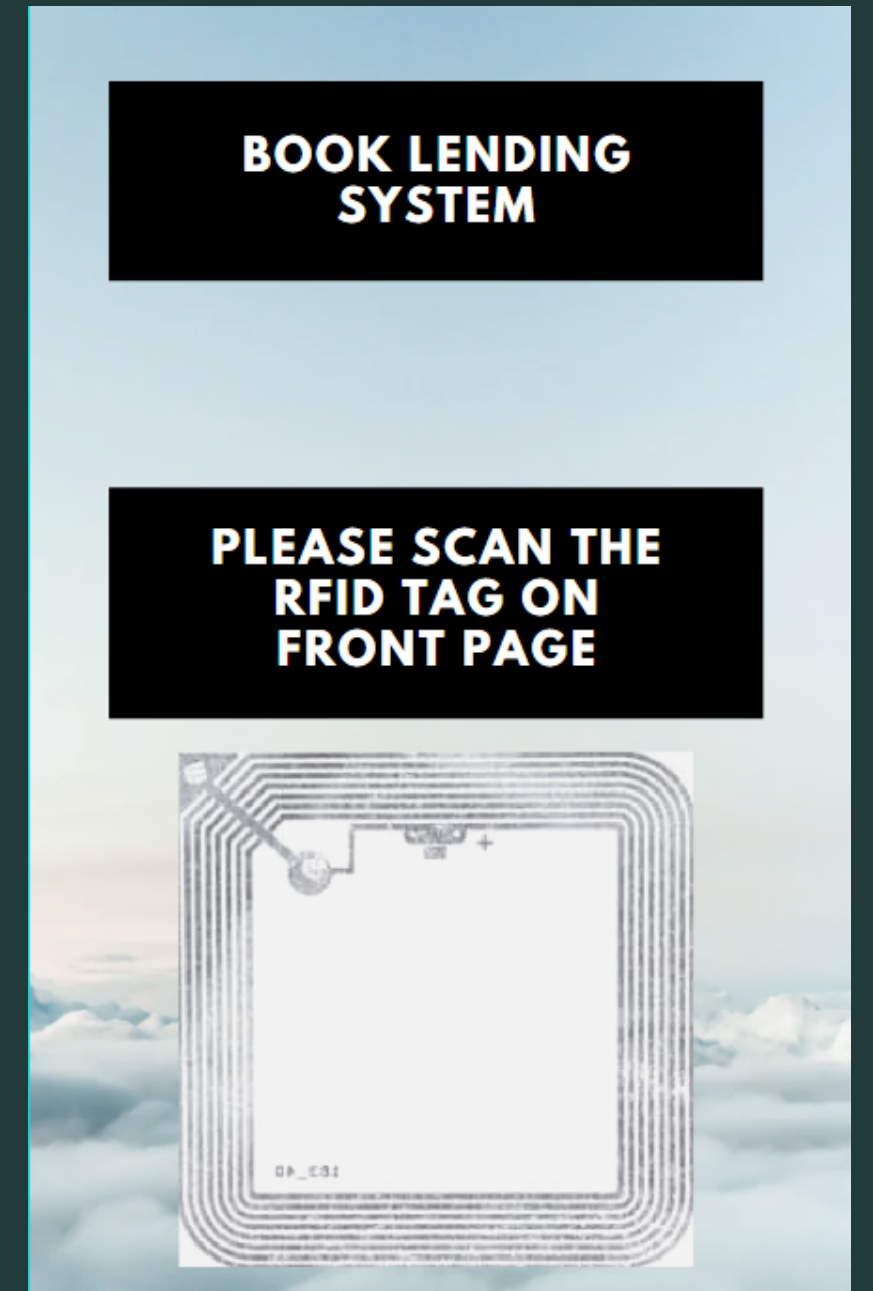
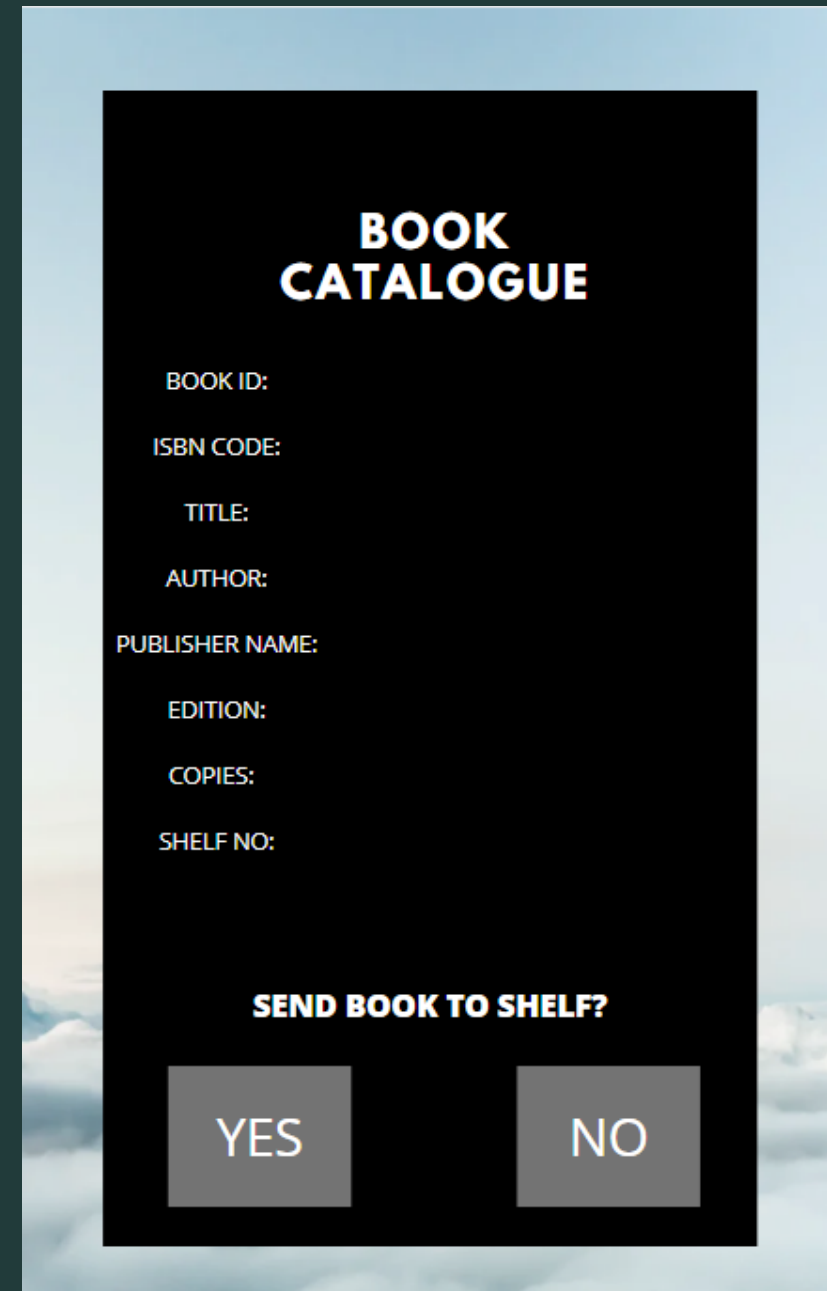
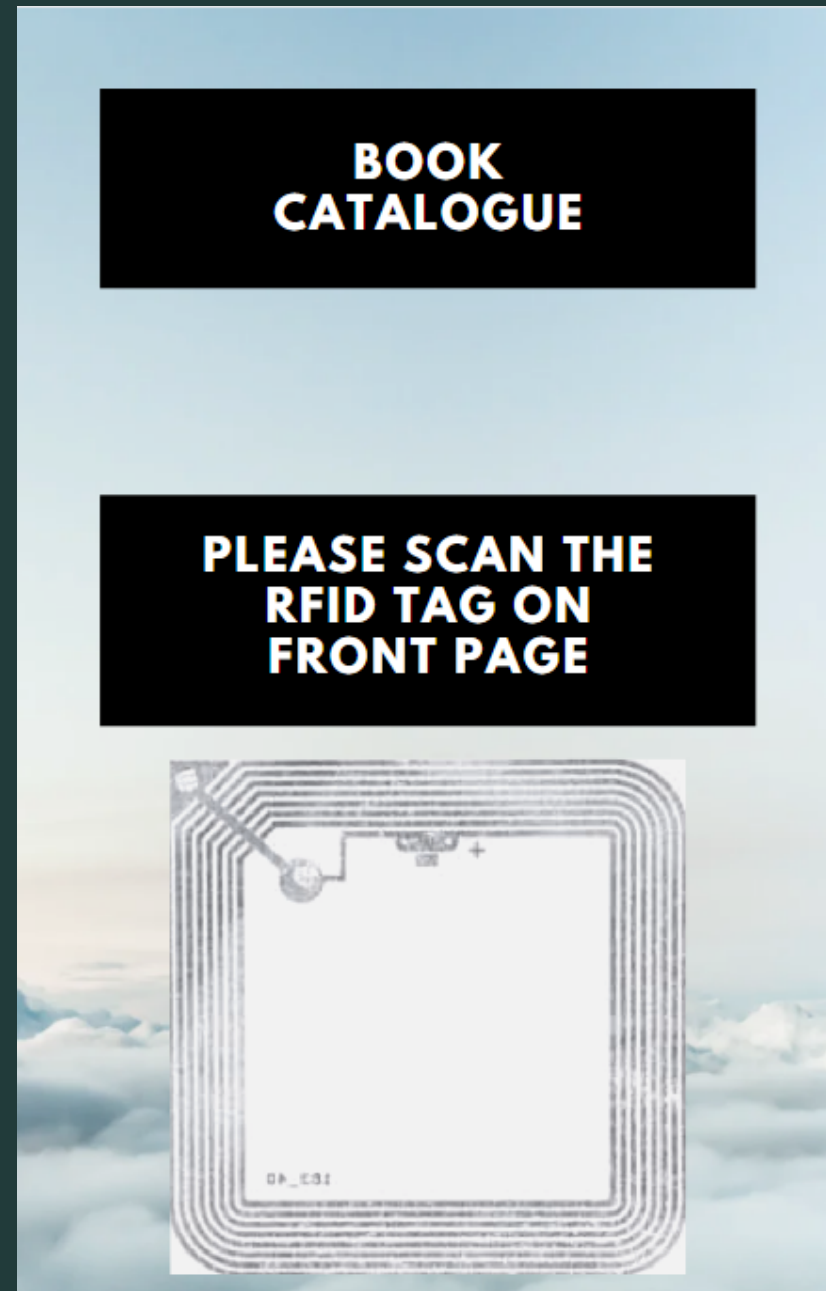
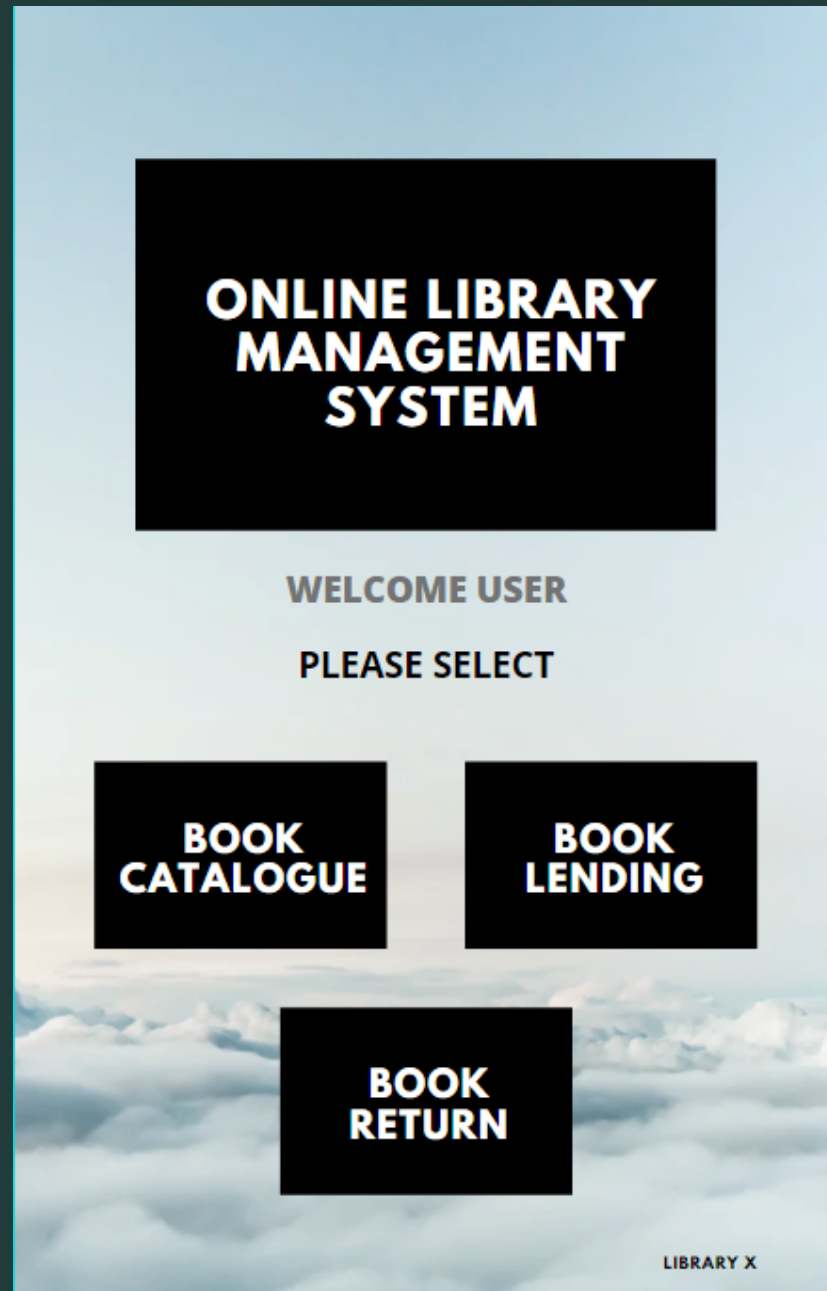
DESIGN



BUSINESS PROCESS FLOW DIAGRAM



PROJECT MOCKUP



PROJECT MOCKUP

BOOK LENDING

BORROWER NAME:

TITLE:
AUTHOR:
DATE
LOANED:
DUE DATE :

CONFIRM?

YES

NO

BOOK RETURN SYSTEM

**PLEASE SCAN THE
RFID TAG ON
FRONT PAGE**



BOOK RETURN

BORROWER NAME:

TITLE:
AUTHOR:
DATE
LOANED:
DATE
RETURNED:

CONFIRM?

YES

NO

THANK YOU

*Thank
you!*

