

Computer Engineering Program

# Personal Media Library for iOS Devices

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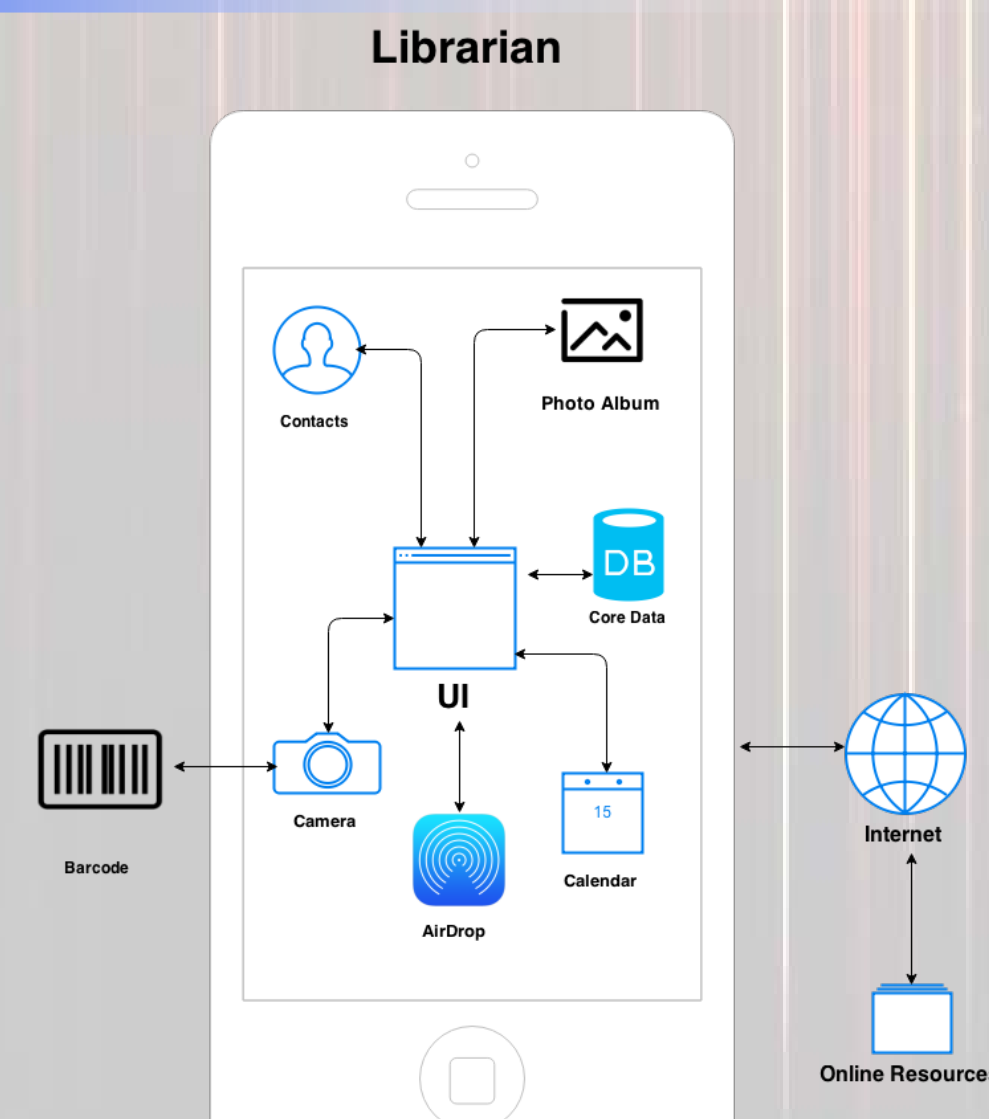
## Introduction

The project aims to develop a personal media library on iOS. Our library management app Librarian, caters exclusively to home or private libraries. It is a comprehensive solution that helps users to catalog their books, movies, music and video games on their smartphones. It provides an item circulation platform that hosts and facilitates the lending of media to family and friends.

## Objectives

- Barcode Scanning: Scan barcode to get item's isbn
- Data Crawling: Fetch item details from Goodreads API by its isbn
- Database: Save/retrieve item data and loan records into Core Data
- Camera: Take photos for the cover image of the media item
- Circulation: Exchange item and personal info via AirDrop
- Contacts: Fetch personal info from local contact lists
- Calendar: Notify user of the due date by adding an event to the calendar

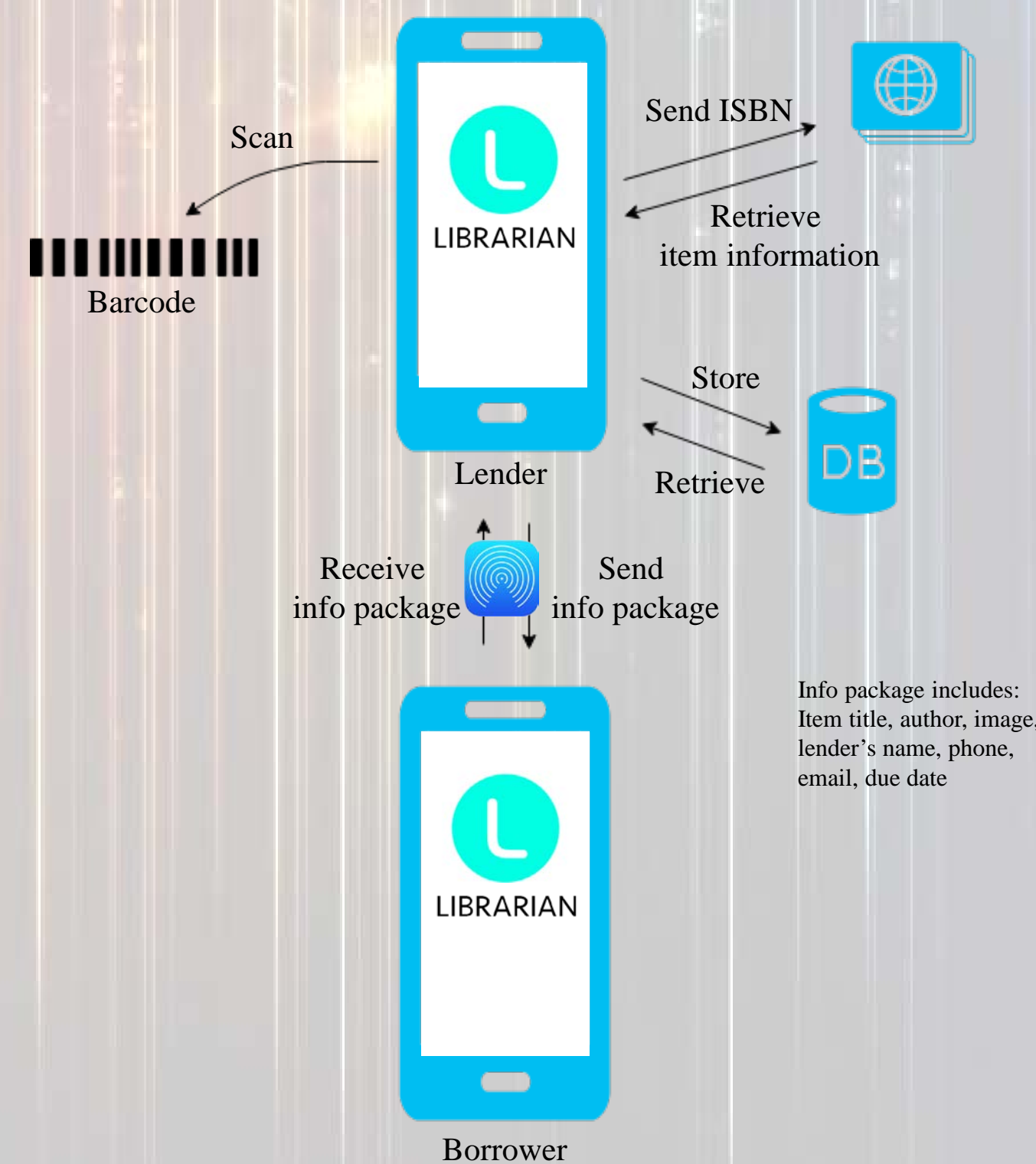
## System Overview



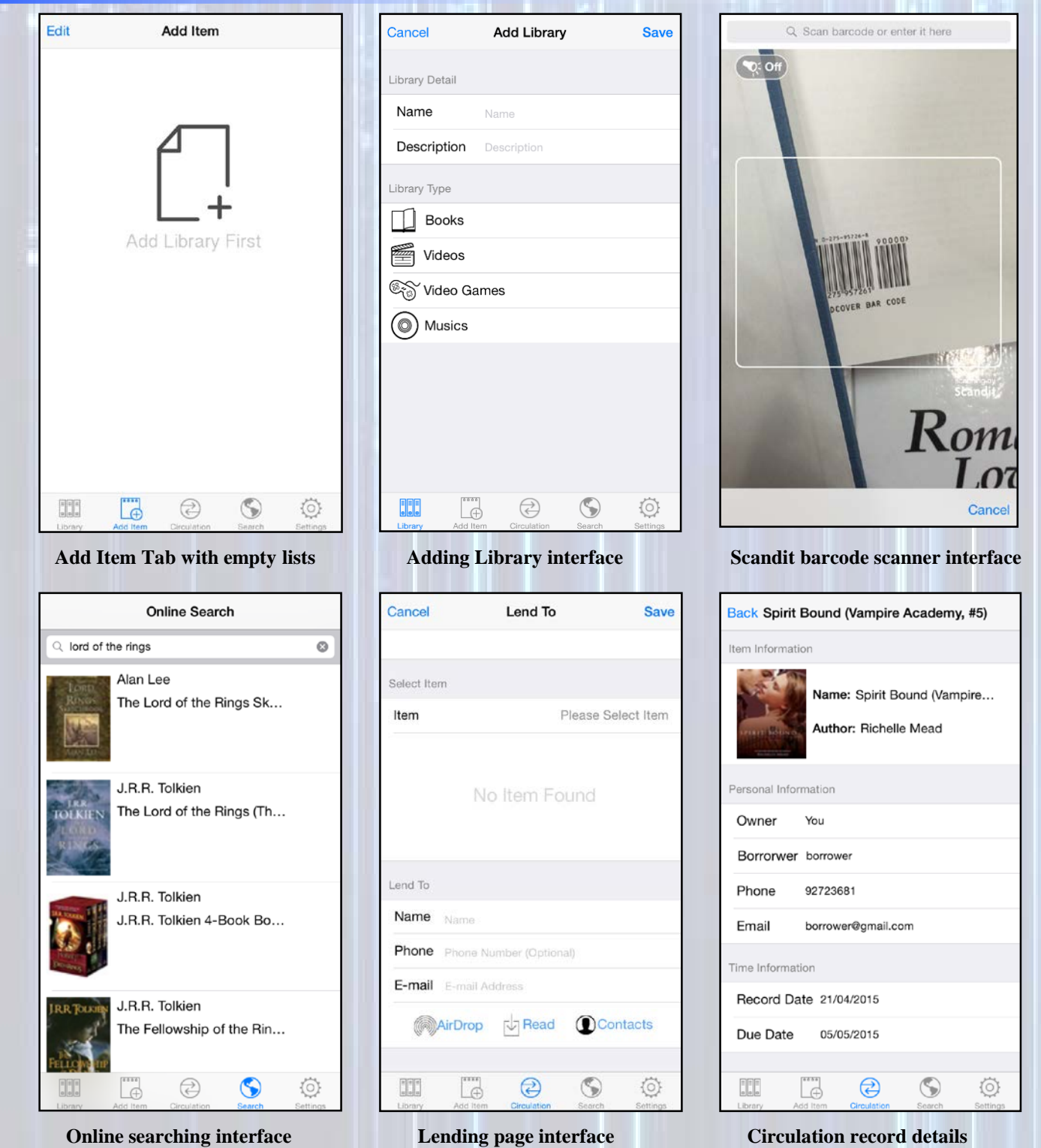
## Procedures

### Adding a media item and lending out:

- 1) Scan barcode
- 2) Auto-retrieve item details from online resource database
- 3) Store item info into Core Data
- 4) Select item info from library
- 5) AirDrop info package to borrower
- 6) Get personal info of the borrower via AirDrop or by manual input
- 7) Create loan record on local database
- 8) Set due date reminder



## User Interface



## Conclusion

In this project, we have designed and implemented a user-friendly application that serves as a personal media library. Although we are satisfied with the results, there is still much room for future development that would enhance the system and increase its business value. Besides improving the basic functions to optimize user experience in the future, we would focus more on the social interaction features, such as creating a profile page for every user, providing statistics on their library collections, and allowing them to comment on each others' collections.