**Report 1 – Introduction**

1. Project Information

* Project name: **Just Walk Out Library**
* Abbreviation: **JWL**
* Product Type: **Web Admin & Mobile App**
* Start Date: **January 5, 2017**
* End Date:

1. **Introduction**

Nowadays, library is the regular place that many people come to learning or borrowing books. However, almost current library systems use traditional way to serve the customers. It takes much time to queueing and not easy to manage the books.

We build a system, which help managers, customers to solve their current problems. With this system, it takes less time to waiting for check out with the librarian.

1. **Current Situation**
   * For borrowing book in a library, the borrowers usually end up queueing in a long line and hence waste much time before checking out with the librarians.
   * In case a borrower borrows many books, he/she needs to bring it with him/her and wait for turn. It is ever worse when the borrower has to wait for a long time with a pile of heavy books on his/her hand.
2. **Problem Definition**

Because of current situation, we found that the traditional process has many advantages and disadvantages below:

* Advantages:
* Take advantage of human communication.
* No technical skills needed.
* No need to bring smartphone along.
* Disadvantages:
* Borrowing books on the rush hour might take too much time to waiting check out.
* The librarian has to work all time when have many customer, difficult to manage borrowed books.

1. **Proposed Solution**

Our proposed solution is build a system named “JWL”, which use NFC, QR Code, RFID technologies for borrowing book easy and efficient. In addition, our solution is also help librarian manage book easier. For customer, only need to use smartphone to check in and out when borrow book, the system will detect automatically and notify manager. Customer can manage their borrowed book. For manager, no need spend time to serve customer when they come to borrow book, just manage on the computer.

1. **Functional Requirements**

Customer component:

* Edit information/password.
* View borrowing/borrowed books.
* Borrow books.
* Get notifications when borrowing books are about to be returned.
* Make wish list about an unavailable book, so that user can receive notification when the wanted book is back on shelf.
* Search for books (by name, author, category, topic).
* Deactivate account.

Admin component:

* Manage books’ information: insert, update and delete information.
* Manage customers: insert, update, activate, deactivate accounts.
* Tracking which books a customer are borrowing.

1. **Role and Responsibility**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No** | **Full Name** | **Role** | **Position** | **Contact** |
| 1 | Kiều Trọng Khánh | Project Manager | Supervisor | [khanhkt@fpt.edu.vn](mailto:khanhkt@fpt.edu.vn) |
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*Table 1: Roles and Responsibilities*