#### Current Situation and Disadvantages

There are some types of library management as below:

- Manual traditional library management:  
+ All book borrowing and returning activities are manual.  
+ Users select books, then come to librarian position to fill a form. To borrow a book, users have to fill information of that book such as: ID, title, writer, etc.  
+ Librarians have to check that information. Then he/she decides which books users can borrow.

- Library management using barcode:

+ Each book has a barcode. Each book can be identified by a barcode. All barcodes are different with each other.  
+ When users want to borrow a book, librarian will use a scanner to read the barcode. Book information is showed on computer screen.  
Current library management methods have some disadvantages:

- In manual traditional method:  
+ Users have to do many steps to borrow books. They have to fill all required information of books.  
+ The time for each user to complete the borrowing process is so long. It waste users and librarians a lot of time.

- In method using barcode:

+ Barcode need to be seen clearly by scanner. If the barcode is not clear or any else problems with reading process, book information will not be read or will be wrong.