## Advanced Programming

Project: Library (Book borrow system)

due date: 1400.10.30

By:

## 1400.10.11

Develop a public library system (book borrowing model) in which you can borrow books. In this model a costumer is able to do the following:

- 1. Sea the available books on the library (the books are ordered alphabetically). Hint: You can use a simple database like SQL to manage the book list.
- 2. Borrow up to three books for the duration of maximum two weeks with the possibility of one week extension.
- 3. Request a "reserve" ticket for a book which is already borrowed by another costumer.
- 4. See the history of his orders with the exact order date.

In this model, the library officer is able to do the following:

- 1. Issue a receipt upon returning the books by the costumers
- 2. Issue the bill for penalty when the costumer does not return the book(s) on time (the amount of penalty is 2\$ per day up to a week and 5\$ afterwards.
- 3. See the status of the available books and books which are lent.
- 4. Accept the request from costumers and giving the book or put the book on hold (for a "reserve" request)

## In this project:

- $\bullet$  Please use OOP style and create at least two classes as "costumer" and "library".
- Please write a test script to test your code with different types of request.
- Please put sufficient comments for each step of your code.