IT1050 – Object Oriented Concepts   **Semester 1, 2017**

In this Tutorial we will focus on identifying classes, responsibilities and collaborators appropriately to model the CRC Cards.

Exercise 1 - Noun Verb Analysis and CRC Cards

This tutorial based on online library system scenario of the university. Mainly there are three types of users in university library system, staff, the librarian and students. All the members must login to the system to return and borrow a particular book. Furthermore students can reserve work space for their studies as well.

Below are 5 use cases for a library system.

  Your task is to draw CRC cards by identifying classes, responsibilities and collaborations.

Use Case No	1
Use Case Name	Borrowing book
Primary Actor	Student, Staff Member
Main Flow	1. The user logs into the system.
	2. User enters details of books to be borrowed.
	3. System checks availability of books
	4. System calculates the return date.
	5. System updates the member details as he/she has borrowed the books.
	6. Update the borrowed details of the book that has been borrowed.
	7. System displays the confirmation message.

Use Case No	2
Use Case Name	Return book
Primary Actor	Student, Staff Member
Main Flow	1. User enter details of the books to be returned.
	2. System identifies the member and update the member who have borrowed the book.
	3. System updates the book that they have been returned.

Use Case No	3
Use Case Name	List of Books Borrowed
Primary Actor	Student, Staff Member
Main Flow	1. The user logs into the system.
	2. User selects Books Borrowed option from Menu
	3. System checks details of Books Member has borrowed
	4. System shows details of books borrowed and dates they need to be returned

Use Case No	4
Use Case Name	List of Overdue Books
Primary Actor	Librarian
Main Flow	1. The user logs into the system.
	2. System checks the details of Borrowed Books
	3. System displays details of overdue books and member details

Use Case No	5
Use Case Name	Reserve work space
Primary Actor	Student, StaffMember
Main Flow	1. The user logs into the system.
	2. User specify the preferred day and time of the work space.
	3. System checks whether there is a space available.
	4. System gets member details
	5. System updates work space details.
	6. System sends a system email with the reservation id.