

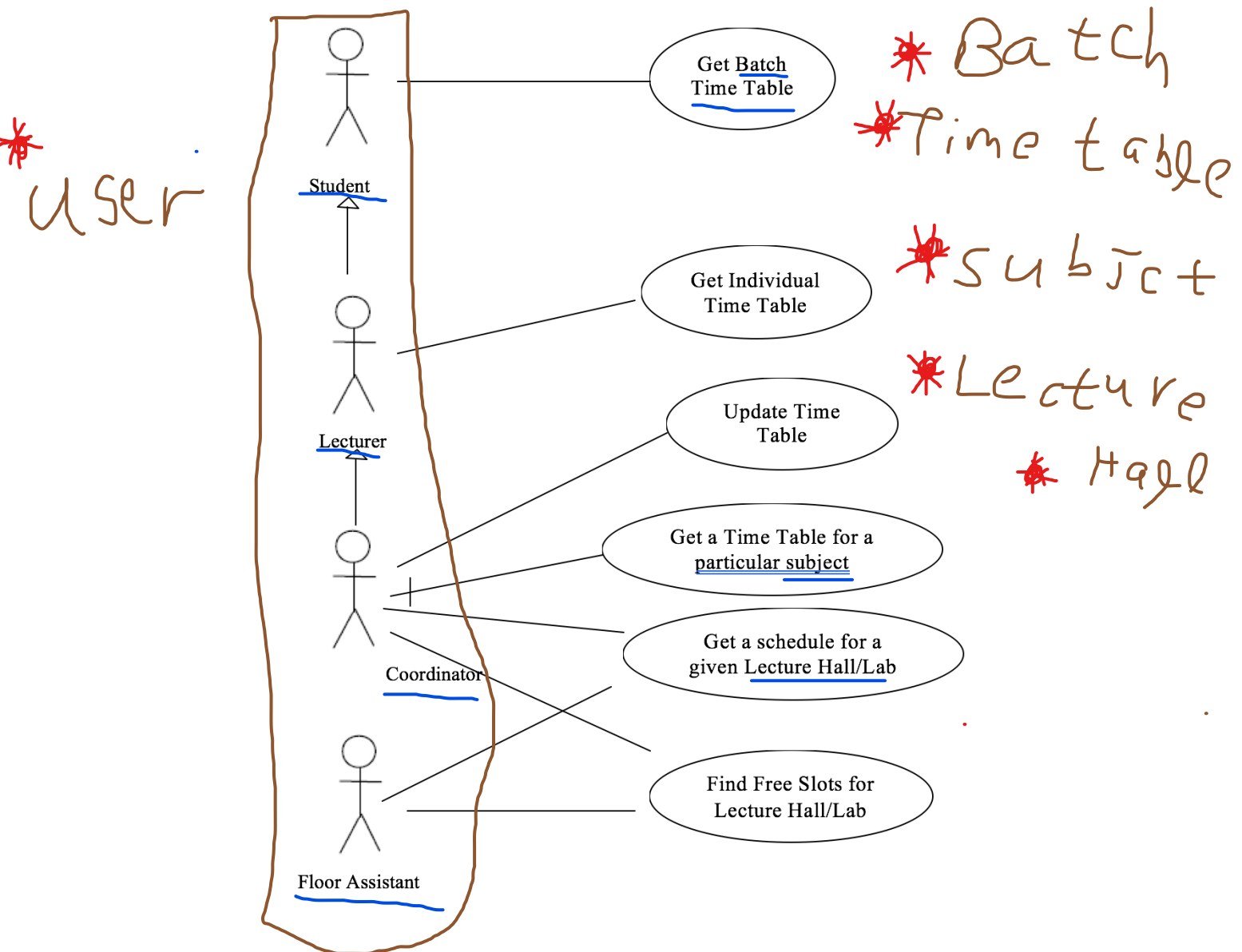
## IT1050 –Object Oriented Concepts

Semester 2, 2021

In this Lab we will discover classes using the CRC method. You can use the CRC cards template given in this week to fill in the CRC cards for the following scenario. Once you complete all exercises given in the lab sheet, you can submit your word document, renamed with your student registration number to the link provided.

### Time Tabling Software System for SLIIT

The following is a brief specification of a Time Tabling Software for SLIIT.



Use Case No : 01

Use Case Name : Get Batch Time Table

Main Flow :

1. The user logs into the system
2. The system displays Menu
3. User Selects Get Batch Time Table
4. The system prompts the user to select year and batch
5. User selects year and batch
6. System displays Batch Time table

Use Case No : 02

Use Case Name : Get Individual Time Table

Main Flow :

1. The lecturer logs into the system
2. The system displays Menu
3. User Selects Get Individual Time Table
4. System displays Individual Time table

Use Case No : 03

Use Case Name : Update Time Table

Main Flow :

1. The coordinator logs into the system
2. The system displays Menu
3. Coordinator selects Subjects/Lecturers/Lecture Halls/Labs/Batches/Time Table
4. Coordinator updates relevant data.

Use Case No : 04

Use Case Name : Get Time Table for a particular subject

Main Flow :

1. The coordinator logs into the system
2. The system displays Menu
3. Coordinator selects Time Table for a particular subject
4. The system prompts for the subject
5. The coordinator enters the subject
6. The system displays the subject specific timetable.

Use Case No : 05

Use Case Name : Get a schedule for a particular lecture Hall/Lab

Main Flow :

1. The coordinator **logs into** the system
2. The system **displays Menu**
3. Coordinator selects schedule for a Lecture Hall/Lab
4. The system prompts for the Lecture Hall/Lab
5. The **coordinator enters the Lecture Hall/Lab**
6. The system displays the schedule for a particular Lecture Hall/Lab

Use Case No : 06

Use Case Name : Find free slots for a Lecture Hall/Lab

Main Flow :

1. The user **logs into** the system
2. The system displays Menu
3. user **selects Find Free slots for a Lecture Hall/Lab**
4. The system prompts for the Lecture Hall/Lab
5. The user enters the Lecture Hall/Lab
6. The system **displays** the free slots for a particular Lecture Hall/Lab

### **Exercise - #1 – Brain storming session to identify classes**

1. Go through the scenario given above and do a noun verb analysis and identify the classes. (You need not include this in the submission).
2. Fill the CRC cards for the classes you have identified and write the responsibilities and collaborations. You may refine classes by analyzing the scenario further.

### **Exercise - #2 – Identify the Responsibilities and Collaborations using CRC cards.**

1. Identify properties and methods for each class.
2. Go through the classes once again and make further adjustments as necessary.

**Note:** You need not implement the methods. Only write the prototypes of the methods.