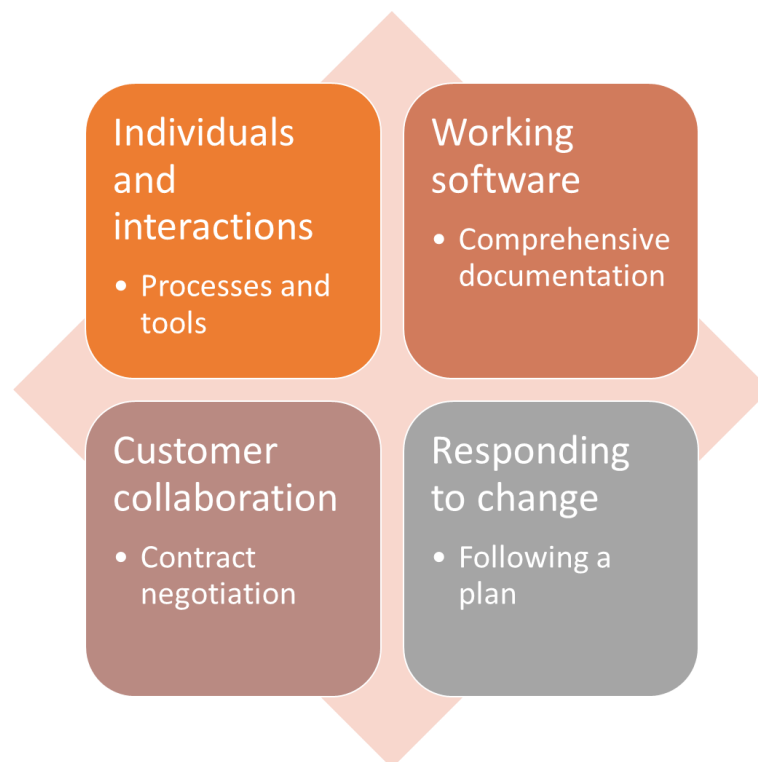# ECSE205L - Software Engineering
Lab 05 – User stories and use-case diagram

In the world of Agile software development, the industries focus of more development as compared to high planning and documentation. Following are the four principles of Agile development practices:

Hence, following these principles, requirements development phase leads to the development of user stories (requirements as scenarios on cards) instead of large document for capturing requirements/services of the system under development.

Follow the system below and think about the requirement phase.

BU Library System (BULS)

BULS will allow performing all necessary procedures for librarians and users. According to customer requirements, the software to be developed will consist of three databases:

- Item's database (books, journals, magazines, newspapers, diploma thesis, etc)
- User's database
- A small Access-based database with information about digital items, that College has (software, music) integrated with Item's database

BULS will also provide all necessary services for databases such as creating, deleting, updating and searching for information. Users will be able to access the library site (web-based) through the Internet or through the library's LAN-connected computers, scattered throughout the library for sending the request, receiving information about the status of the books or renewing them. The design of the product interface to be developed will be supported by Microsoft IE, Netscape Navigator, and Opera browsers. User interfaces will be intuitive and easy-to-use.

Some of the points that your requirements engineering team listed after talking to various stakeholders.

1. The BULS should store all information about librarians and users.
2. The BULS allow searching items by author, title or keywords.
3. The BULS should allow librarians to add, delete and modify items in the database, and check availability of the items.

4. The BULS should generate request reports for librarians every day, on a base of which librarians could make decisions about acquiring or retirement the item.

5. The BULS should create a notification and send it to users by e-mail automatically after an item's overdue.

6. The BULS should allow users to get their personal information and status.

7. The BULS should provide to search, request and renew items either from the library computers (BULMS application) or from outside the library through College site (web-based) though the Internet.

8. The BULS should provide access to previous Access-based databases, online databases.

Part 1

Now, as a requirement engineer of an agile development team, you have to **create user stories for BULS**. Download the template from LMS and use that to create your user stories. Take your time to go through the links to refresh your knowledge:

User Stories:

https://www.mountaingoatsoftware.com/agile/user-stories

Acceptance Criteria:

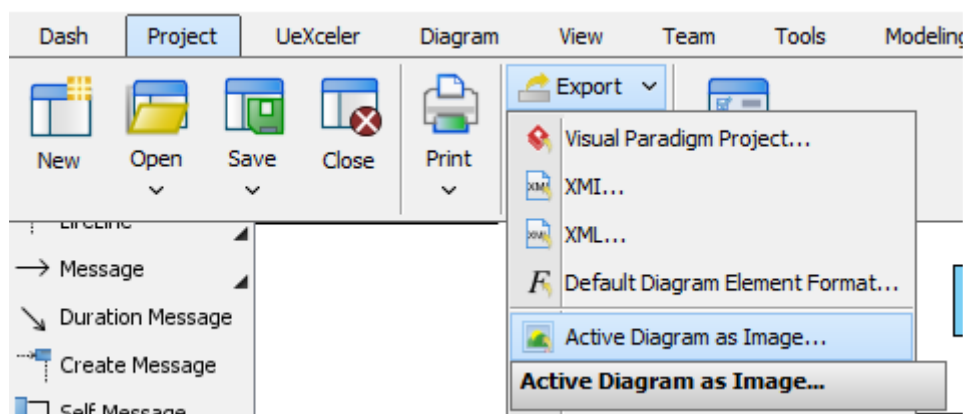https://rubygarage.org/blog/clear-acceptance-criteria-and-why-its-important

Part 2

Our requirement analyst team lead wants us to have documentations for clear communication of the system requirements to design as well as development teams.

Hence, the requirement analyst team lead wants you to **develop the Use Case Diagram** (a type of Behavioural diagram) for the BU Library System using a UML tool.

NOTE: This assignment is about developing UML diagrams. Hence, your UML notations (i.e. start-point, endpoint, shapes, associations, etc) must be correct.

Make sure to save your entire project (on USB drive/cloud/email) if you want to continue your work from home.

Export your diagrams (see image above) as .jpeg image and submit one User stories file and one use-case diagram (2 files in total) as your assignment.