CITS4401/3301 Software Requirement and Design – Week 3 Workshop

Reading: Lecture slides – Week 3 Parts 1 and 2

Task 1: Traceability table to manage requirements

You are developing a social media platform called "Connectify". The platform allows users to create profiles, connect with friends, share posts, and join groups. Users can also like, comment, and share posts created by their friends. As part of the development process, you need to ensure that your software requirements are well-tracked and managed.

Requirements:

1. Users must be able to create profiles with their name, email, and password.

2. Users should be able to search for and connect with friends by their names or email addresses.

3. Users can create posts with text, images, or videos.

4. Users should be able to join groups based on interests.

5. Users can like, comment, and share posts created by their friends.

Specific tasks: please draw a traceability table

a) Identify the main requirements mentioned above.

b) Create a **traceability table** that maps each requirement to its corresponding features or components in the "Connectify" social media platform.

c) Explain how the traceability table helps in managing the evolution of requirements throughout the software development lifecycle.

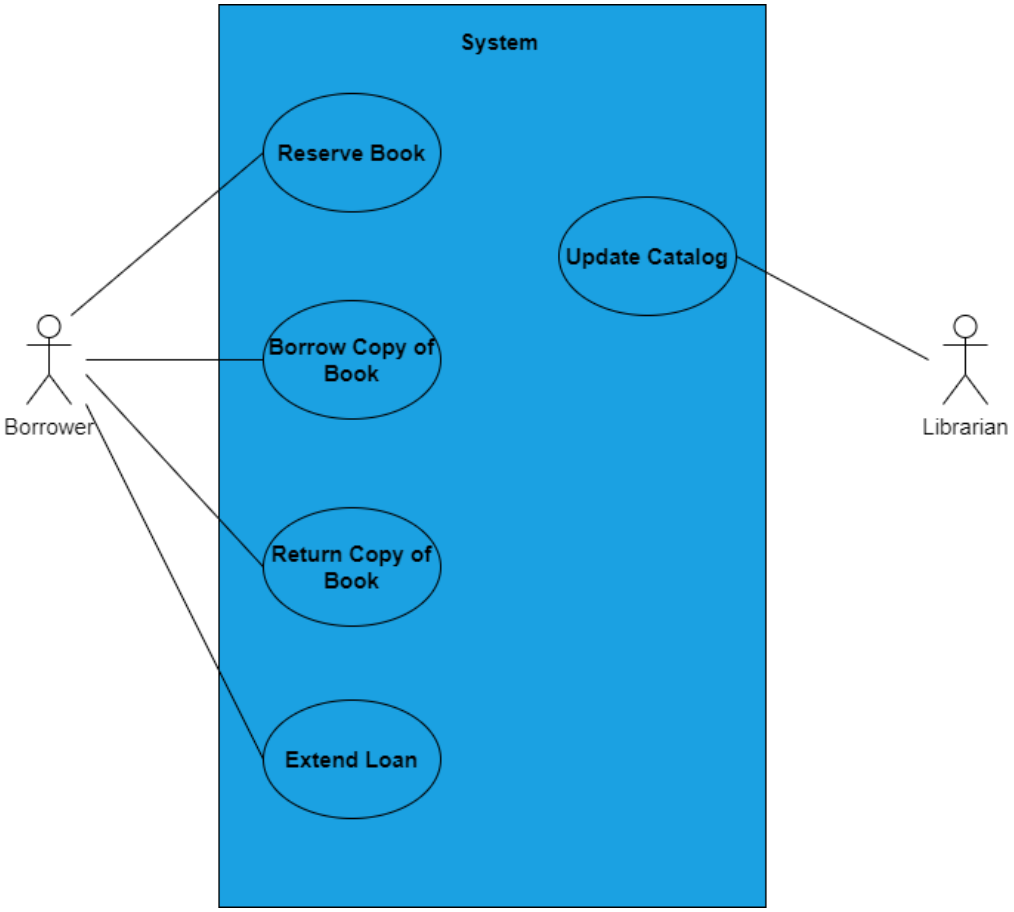
Task 2: Core concept (UML use case diagram)

1) What is difference between a use case and a design scenario?

2) What does a UML use cases have?

Task 3: Reading UML use case diagram

Use a couple of sentences to explain the model that is described by the UML use case diagram below. Remember that the purpose of (any) model is to aid in understanding the situation in which the problem occurs, as well as depicting a solution.



Task 4: Modify a UML use case

Consider the following use case for planning a trip using an online database maps:

Use case name	Plan Trip
Flow of events	
1	The driver activates her computer and logs into the trip planning web service
2	The driver enters constrainys for a trip as a sequence of destinations
3	Based on a database of maps, the planning service computers the shortest way of visiting the destinations in the order specified. The result is a sequence of segments binging a series of crossings and a list of directions
4	The driver can revise the trip by adding or removing destinations
5	The driver saves the planned trips name in the planning service database for later retrieval

Specific tasks:

a) Identify the actors involved in this use case:

b) Assume the drive can access a help feature when entering the trip constrains. Modify the use case above to include this feature. You need to only show the extra steps, this is no need to repeat the whole case.

c) Propose at least one alternative flow of events for this use case. Describe how you would incorporate the alternative flow into the given use case.