CITS4401 Software Requirements and Design
Week 4: Writing use cases
22 March 2023

Reading:
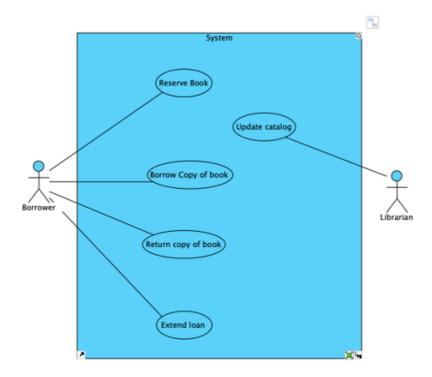   1. Pressman Chapter 7 Requirements Modelling.
    2. Bruegge and Dutoit Chapter 4 Requirements Elicitation.
    3. Fowler UML Distilled Chapter 9 Use cases.

1. Core Concepts

a)   What is the difference between a use case and a scenario?
b)   What does a UML use case diagram show?

Solution:

2. Reading UML use case diagrams

Use English sentences to explain the model that is described by the UML use case diagram above. 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.
Do you have any questions about the given model? Explain any problems you have identified.

You may be able to suggest some improvements

Solution

3. Modifying a UML use case

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

Use case name	PlanTrip
Flow of events	
1	The driver activates her computer and logs into the trip-planning web service
2	The driver enters constraints for a trip as a sequence of destinations
3	Based on a database of maps, the planning service computes 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 trip by name in the planning service database for later retrieval

(a) Identify the actor(s) involved in this use case.
(b) Assume the driver can access a help feature when entering the trip constraints. Modify the use case above to include this feature. You need only show the extra steps. There 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.

Solution