



UNIC



COMP401 – SOFTWARE ENGINEERING

SOFTSING - ClientTsingDel (CDL)

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22-03-2022

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REVISION CHART

This chart contains a history of this document's revisions. The entries below are provided solely for purposes of illustration. Entries should be deleted until the revision they refer to has actually been created.

The document itself should be stored in revision control, and a brief description of each version should be entered into the revision control system. That brief description can be repeated in this section. Revisions do not need to be described elsewhere in the document except inasmuch as they explain the development plan itself.

Version	Primary Author(s)	Description of Version	Date Completed
Draft	SOFTSING	Initial draft created for distribution and review comments	21/03/2022
Preliminary	SOFTSING	A second draft incorporating initial review comments, distributed for final review	22/03/2022
Final	SOFTSING	First complete draft, which is placed under change control	30/03/2022
Revision 1	SOFTSING	Revised draft, revised according to the change control process and maintained under change control	TBD
Revision 2	SOFTSING	Revised draft, revised according to the change control process and maintained under change control	TBD
etc.	SOFTSING	TBD	TBD

1. Introduction

“Welcome to the future”

1.1 Purpose

First of all, the shop is selling books and stationery. At the same time, the shop gives special importance to the copy-center, since the copy-center is the most profitable part of the company. In this section of the company, their clients can print professional business cards, copies or laminations of documents. Furthermore, our client inside the company has professional painting materials such as pens, pencils, notepads, files etc. Finally, they have a different section for the books that they sell. The product will automatically inform the customers of any updates when available. Furthermore, it is self-contained due to the fact that the information regarding the books, painting materials and anything else included, are gonna be stored inside the software through a database that will be created. So that way the program will know about what needs to be done and when. Compared now with other similar products, the only thing that can be said is that it is a typical program service for the specific purpose of managing data and importing/exporting data when needed and suitable for the customer.

1.2 Scope - (More detailed version explained in Deliverable C)

1st BATCH:

ADD USER

Stimulus: User requests to create a new user in a specific quarter.

Response: The user is entered into the database

DELETE USER

Stimulus: User requests to delete a user in a specific quarter.

Response: The user is removed from the database

EDIT CUSTOMER

Stimulus: User requests to edit a user in a specific quarter.

Response: The user is successfully edited into the database

BENEFITS, OBJECTIVES AND GOALS

The main purpose of the above software features is to control the number of customers coming into our client's shop, by keeping track of them in the database that relates to the customers. So every customer has a unique ID. By doing so we won't have any collision with the same IDs. Hence, we will have a validation sort of mechanism, which will distinguish every customer in the database. **Also to keep in touch with them! The goal will be a customer who can be created, deleted and edited. PROGRAM WILL REQUIRE USER INPUT FOR THIS!**

2nd BATCH:

MESSAGE A CUSTOMER ABOUT OFFERS VIA EMAIL.

Stimulus: Users can send an email to multiple customers.

Response: Email sent successfully to the customers.

WILL INCLUDE A SPAM PRONE SECTION

UPDATING THE LOYALTY CARD NUMBER OF THE MEMBER.

Stimulus: Users can add loyalty points to each customer for each purchase.

Response: Loyalty points added to the customer database.

DONE AUTOMATICALLY BY THE SYSTEM

BENEFITS, OBJECTIVES AND GOALS

Our client will be able to message loyal customers via email, about special offers, special discounts or important updates. **AND For customers that have not purchased something for a long time, the program will inform the user for further action via sending a message, email as well...**Also the goal is that Email is received and the loyalty card is successfully updated. **PROGRAM WILL REQUIRE USER INPUT FOR THIS!**

3rd BATCH:

Customer Orders

Stimulus: We add the order of the customer.

Response: We update the database with the customer order.

Owner Orders

Stimulus: We need to add our order of supplies for our store.

Response: We update our database with our order.

BENEFITS, OBJECTIVES AND GOALS

The main purpose of this feature is to keep a database with customer orders as well as the stock left in the storage. Also, the user will be able to add orders to fill the storage that has sold. It involves the various orders for the book shop, for the sake of serving the customers. Goals are Orders made/delivered. **PROGRAM WILL REQUIRE USER INPUT FOR THIS!**

As for what the program should not do IS MAINLY TO:

- *NOT PRINT RECEIPTS (INSTEAD WILL BE DONE THROUGH EMAIL)*

1.3 Definitions, Acronyms, and Abbreviations

ClientTsingDel - Name Of Our Software Based Project

GitHub - Cloud Service regarding programming scripts

Trello - Shared Workspace for the project

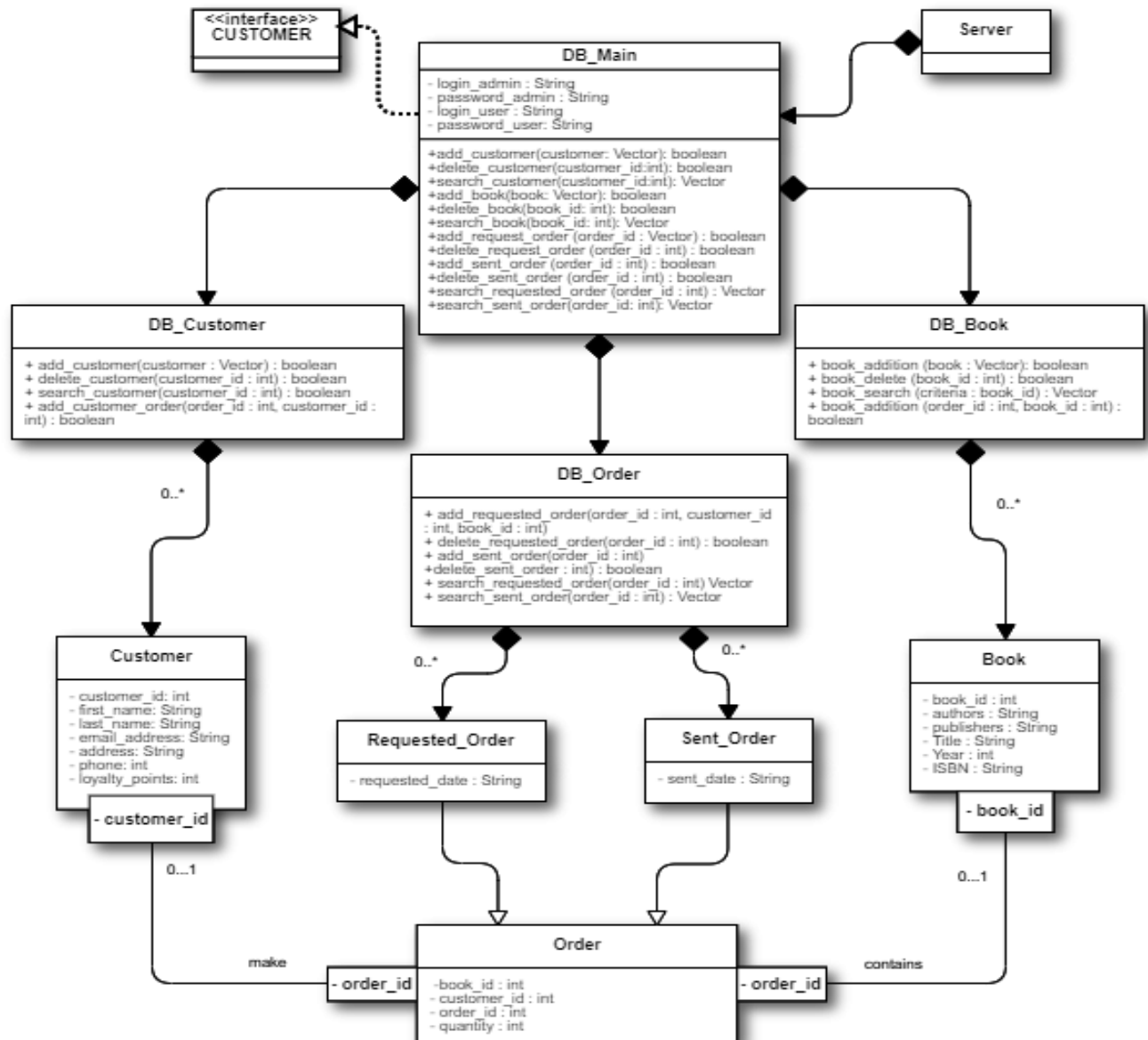
Google Drive - Cloud Service

Cacoo - Shared Diagram Dashboard Creations Platform

1.4 References

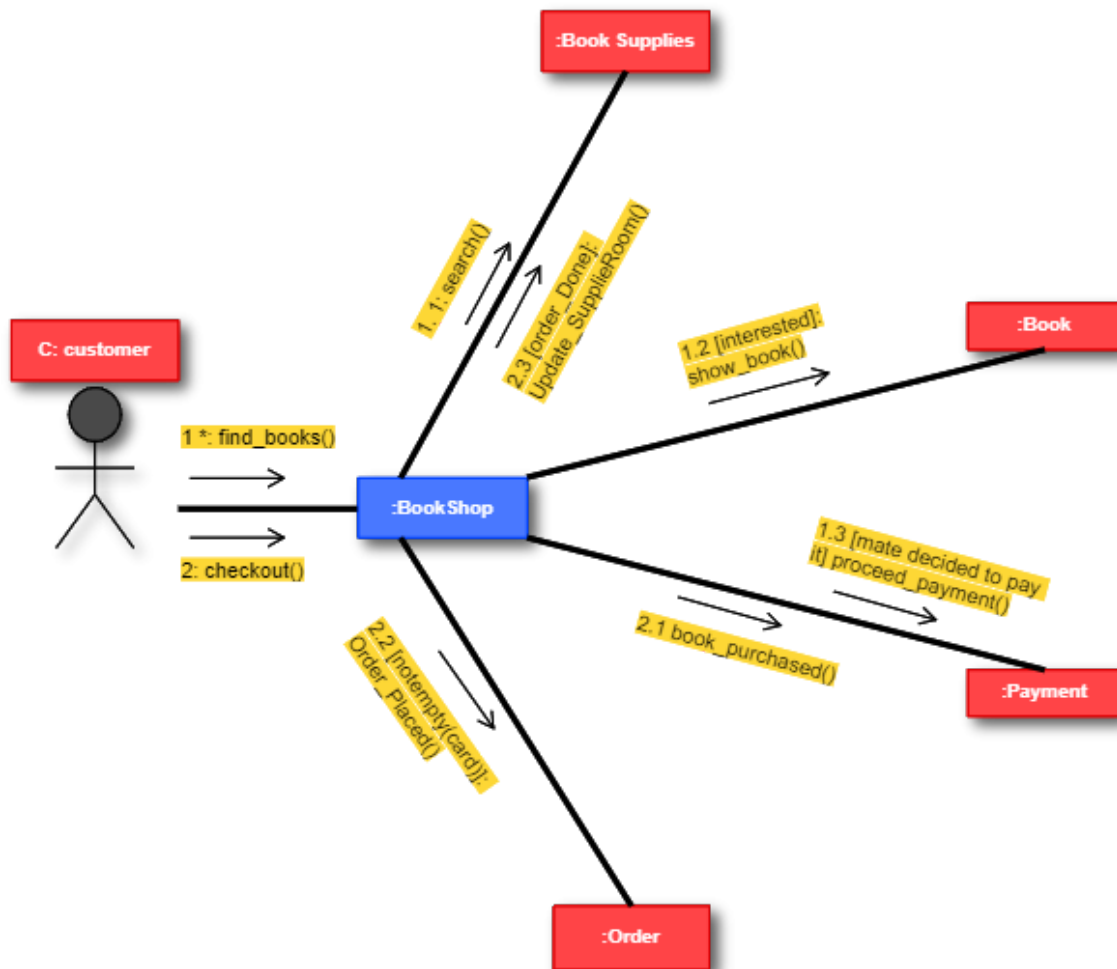
Did not need to reference any book since it is a work of our own!

2. Architecture (Detailed Representation)



3. Analytical Class Diagrams

interaction Bookshop



4. Sample Scenarios and diagrams

4.1 <Name of Scenario 1>

- **PURCHASE A BOOK**

4.1.1 Scenario description

The above scenario regards the process of purchasing a book from the book shop, provided with all the steps needed, starting from the customer all the way to the cashier.

4.2 <Name of Scenario 2>

- **REQUEST A BOOK COPY**

4.2.1 Scenario description

The above scenario regards the process of requesting to copy a book from the book shop, provided with all the steps needed, starting from the customer all the way to the cashier.

4.3 <Name of Scenario 3>

- **STAFF X MANAGER LOG IN / LOG OUT**

4.3.1 Scenario description

The above scenario regards the process of the staff logging in and out of the system as well as saving their log info for verification purposes.

4.4 <Name of Scenario 4>

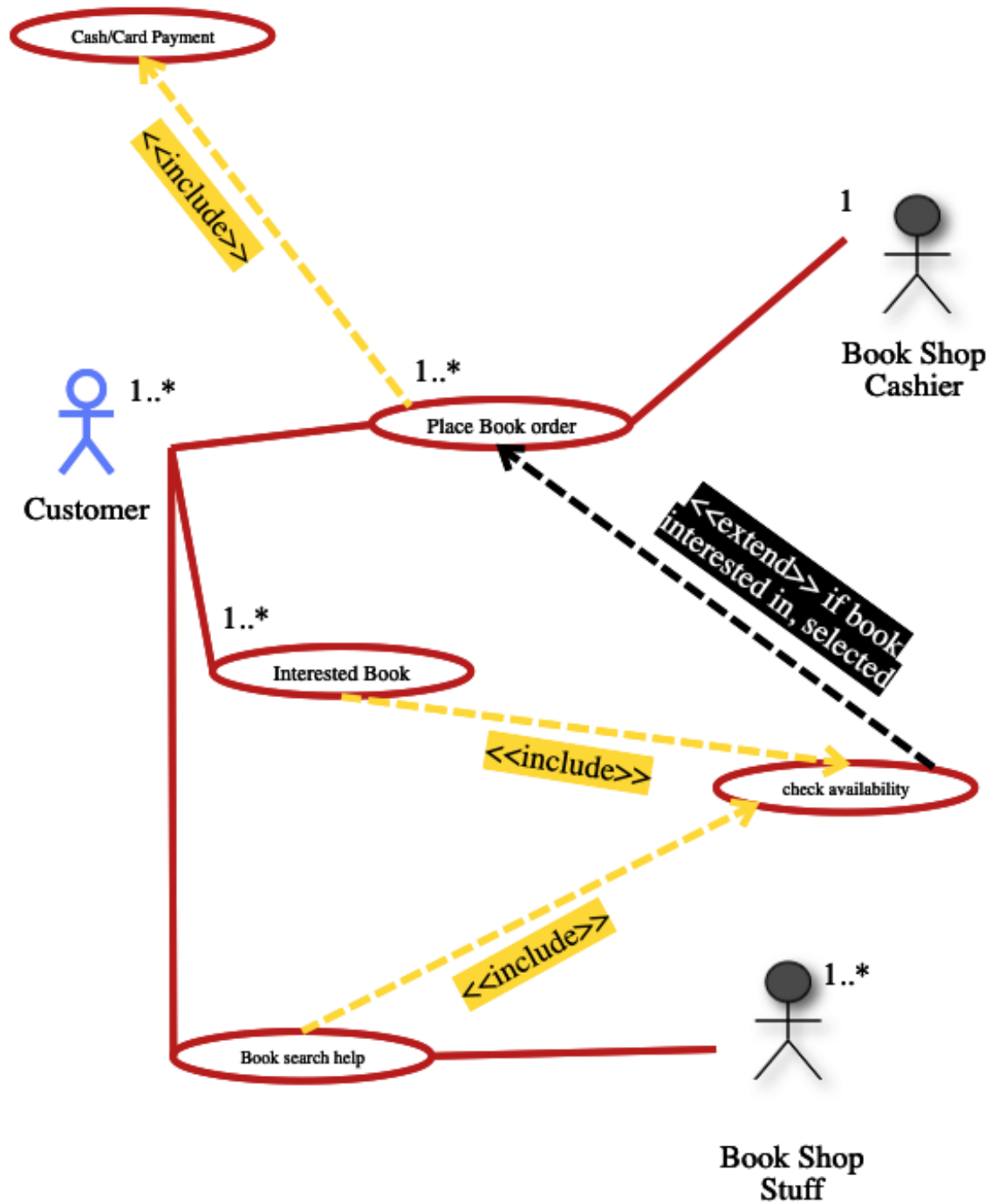
- **REFUND OF A PURCHASE**

4.4.1 Scenario description

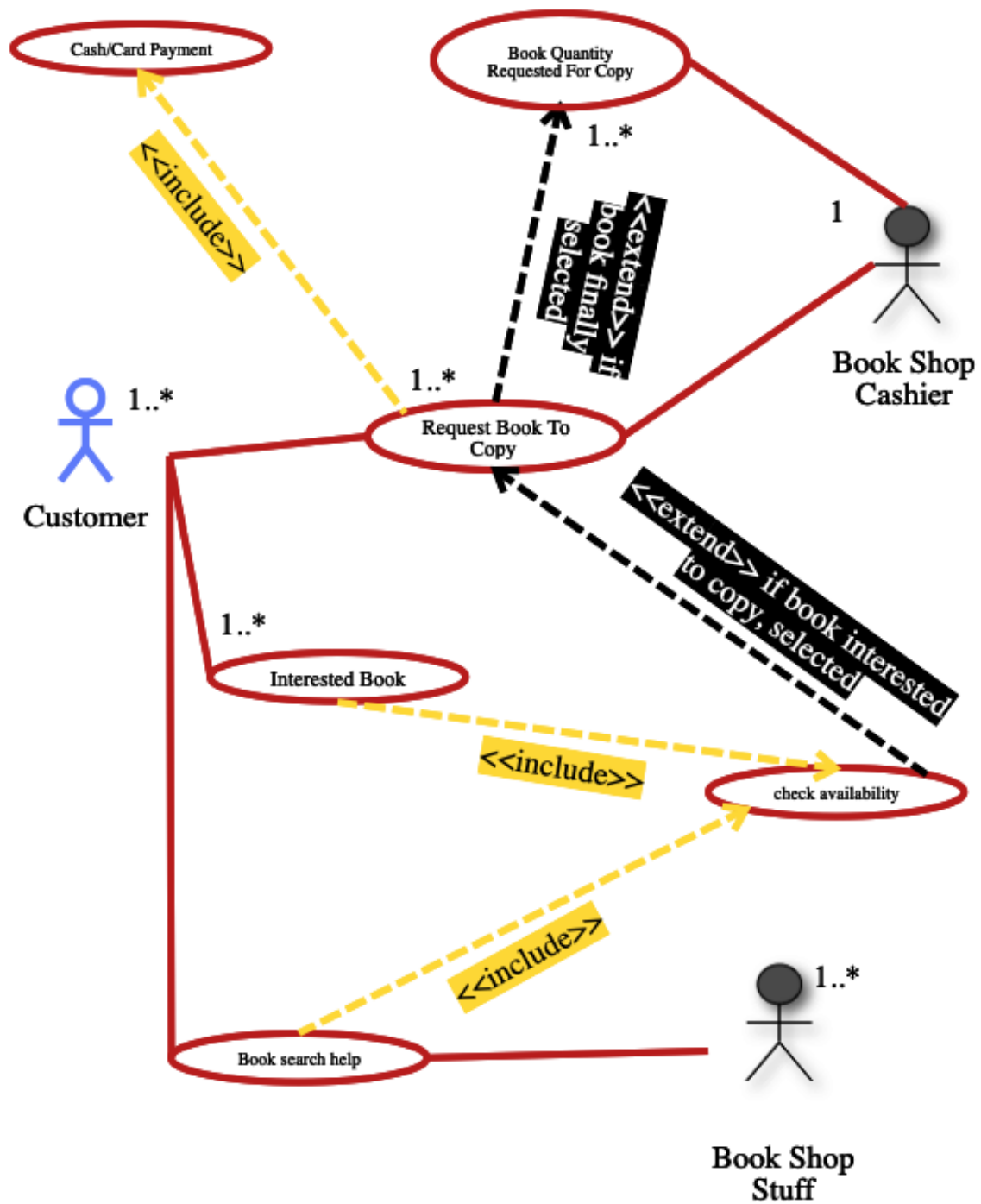
The above scenario regards the case of a customer returning a book that has been recently purchased, with the criteria that it is sealed, undamaged and returned within 2 days time.

4.5 < Diagrams of *Scenarios*>

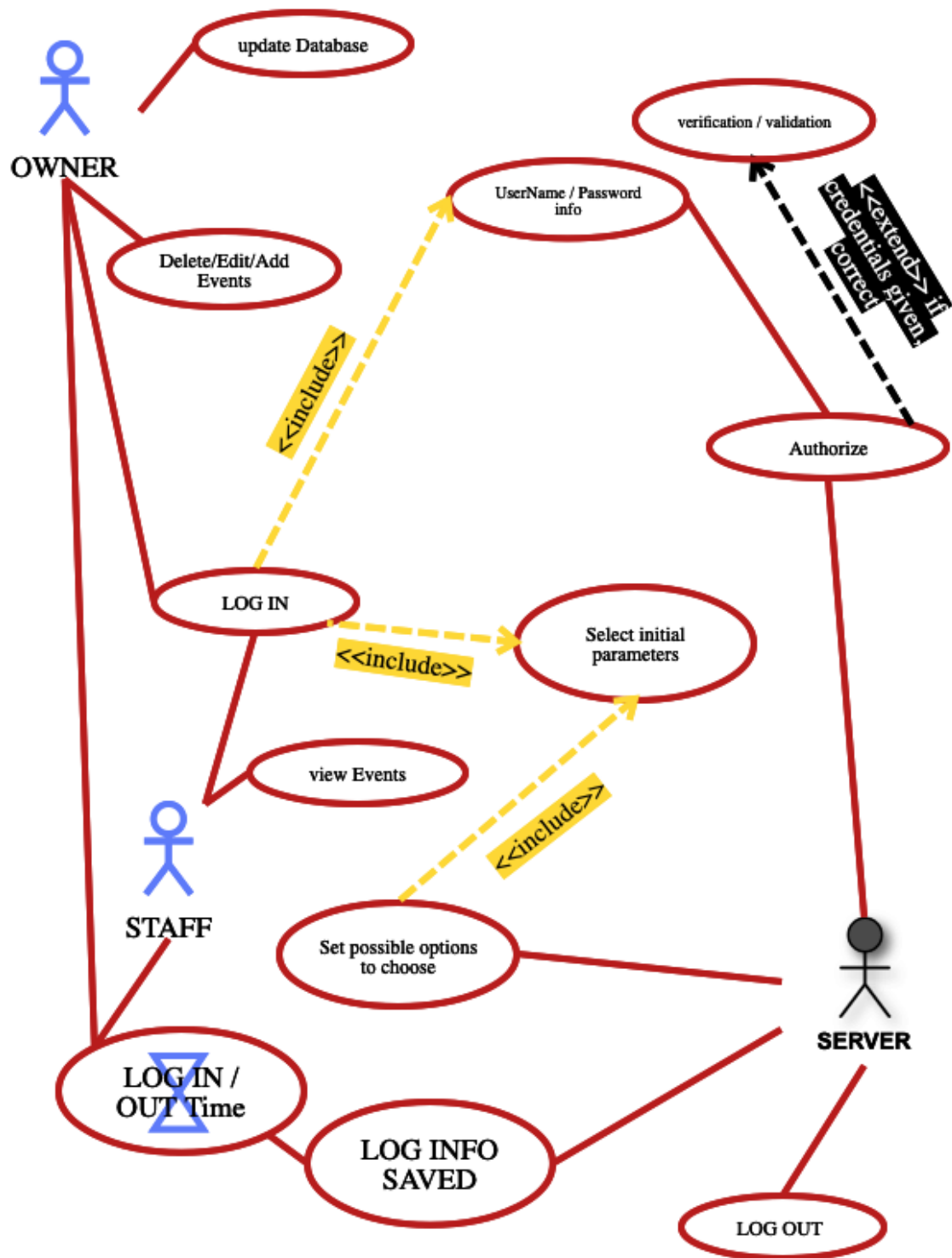
4.5.1 Use Case diagram (Scenario 1)



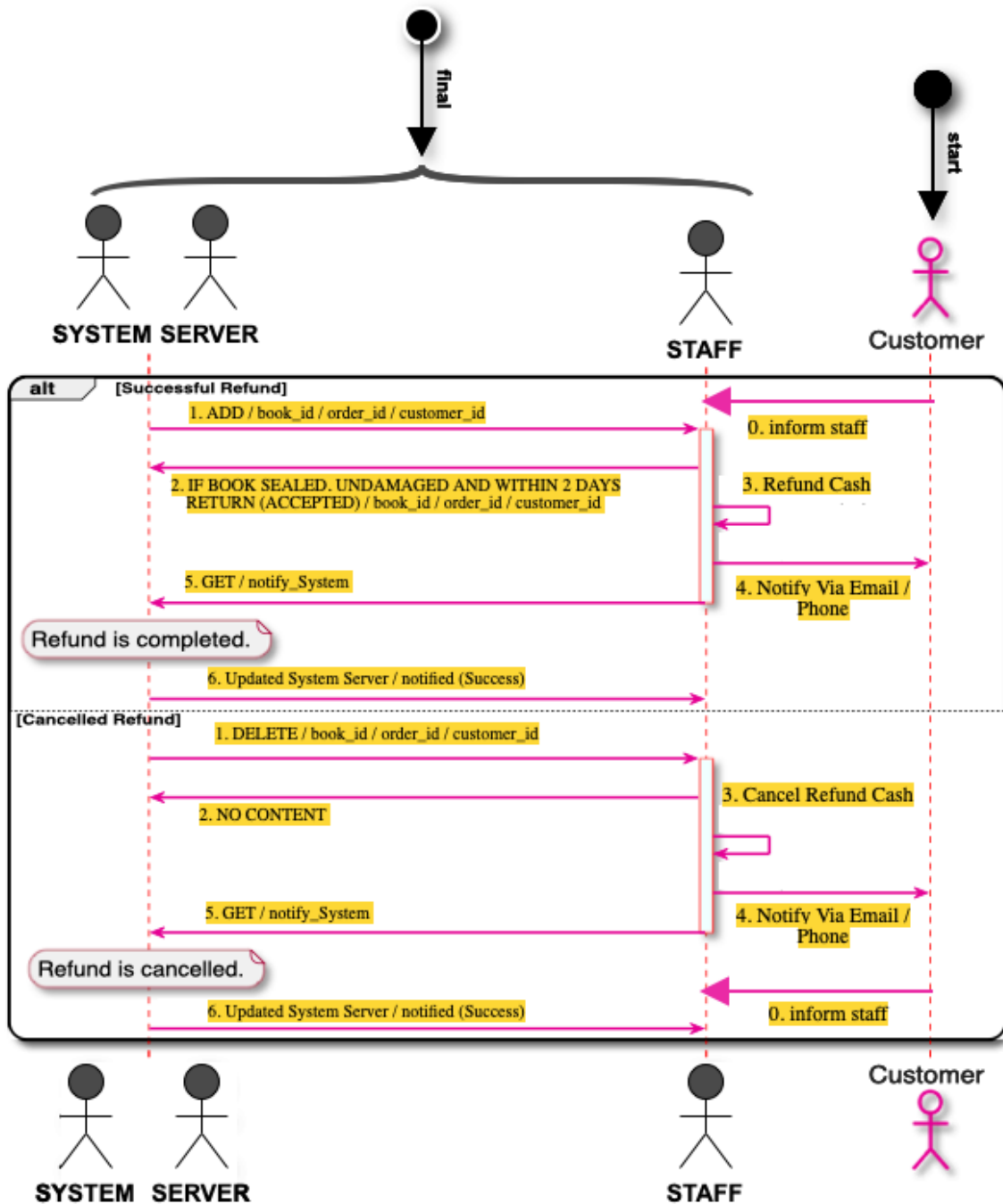
4.5.2 Use Case diagram (Scenario 2)



4.5.3 Use Case diagram (Scenario 3)



4.5.4 Sequence (State) diagram (Scenario 4)



5. Appendices

Appendices could include the feedback coming from our client and also his customers. If customers are satisfied it means that the software came to be an ease for both sides. Supporting details (MIGHT BE DONE IN THE NEAR FUTURE OR WHILE WE PROGRESS WITH THE PROJECT), is to make a questionnaire and see whether the employees as well as the owner is satisfied or need any new features that we can still include...