

1 General View

Below is a list of the organization's background, objectives, list of basic processes, key objects, events, actors and information needs. Drawings are made using the UML standard.

1.1 BACKGROUND

The area of the organization being analyzed is a web service, which enables people to exchange real books they possess for other books, alternatively buy or sell them using internal currency.

The target group is not limited to any, the website can be used by anyone. However, the original idea came from the student's demands. The scientific literature does cost a lot and this was the original premise for the creation of this service to enable for example students to exchange the book they bought and read for another one.

The organization is not part of a larger company.

For the project the service will be limited to Estonia.

1.2 ORGANIZATION OBJECTIVES

The aim of Book Exchange is to provide users with a marketplace for books. The books can be exchanged for other ones or bought and sold. Book Exchange enables users to exchange a book they do not need any more for the book which is offered on the Book Exchange platform by another user. Alternatively, the desired book can be bought with an internal currency.

The mission of Book Exchange is to help people find the book they need, connect them and make the transaction transparent and safe. The usage of the Book Exchange website is free of charge.

1.3 LIST OF PROCESSES

- Seller and End Users are signing up on Book Exchange website
- Seller is choosing the book to sell or exchange
- Seller specifies the title, description, condition (optionally ISBN) for the book
- Seller specifies the location of the book and contact data (telephone number or email)
- Uploader uploads the photo of the book
- Book Exchange saves the data and places the sell offer

- Book Exchange website finds matches for possible exchange possibilities and shows the result to seller
 - Seller A views the exchange offers and if the desired book is offered start an exchange offer to Seller B.
 - Seller B receives a notification about possible exchange
 - Seller B can accept or reject this offer
 - If Seller B rejects the exchange, Seller A will be informed and the sell order will stay active
 - If Seller B accepts the exchange, Seller A will be informed and the sell order will be closed and converted to exchange order and marked as “Exchange”

- End user browses all book offers
- End user uses search service to find the books
- End user uses map to visually get an idea where offered books are located
- End user uses filter possibilities to filter the search results
- End user can “follow” a book, in other words save the book to a watchlist
- End user can top-up the internal balance with money
- End user can buy a book using internal currency
- End user can view a seller’s feedback
- End user can see the contact data of the seller after successful buying operation
- End user contacts the seller and arrange the pick-up
- End user can leave a feedback for the seller
- End user can flag an inappropriate book offering
- End user has his personal account information, for example Profile, Bought Item, Sold Items, Watchlist

- Book Exchange’s staff reviews flagged by end users book offering
- Book Exchange’s staff reacts on flagged by end users book offering, for example delists them from the website
- Book Exchange’s staff can view all transactions
- Book Exchange’s staff can moderate offers

- Book Exchange proves a feedback service
- Book Exchange proves a search service

1.4 LIST OF BUSINESS OBJECTS

The business objects of Book Exchange are the following:

- Book
- User
- Book Exchange offer / order
- Book Buy order
- Book Sell offer
- Feedback
- Internal Balance
- Book Offerings
- History
- Watchlist

1.5 LIST OF ACTORS

Business related actors are as follows:

- End user
- Seller

The in-house actors are as follows:

- Book Exchange staff (eg. moderator)

The information exchanged with the company's communicators is expressed by the context diagram, which is shown in the figure below:

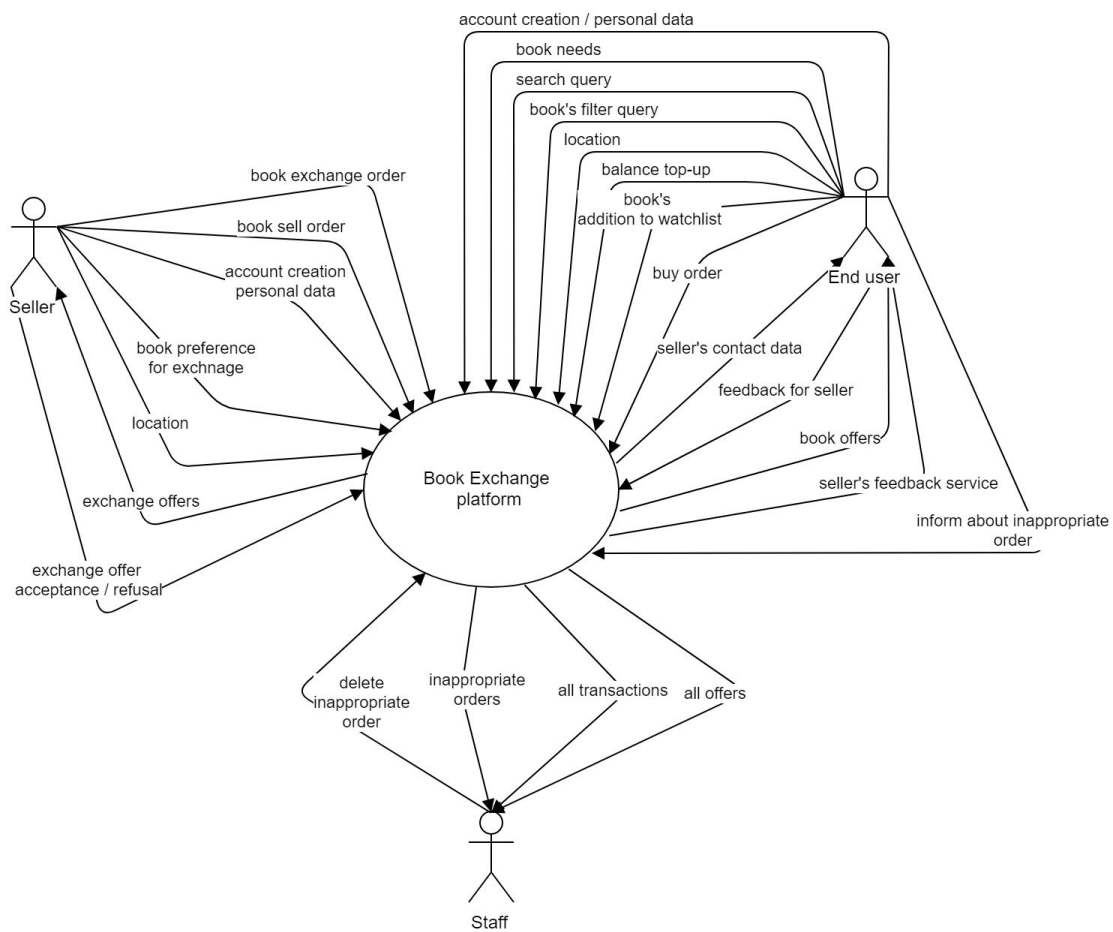


Figure 1. Context diagram

The processes associated with the company communicators and the exchangeable information are presented in the figure below:

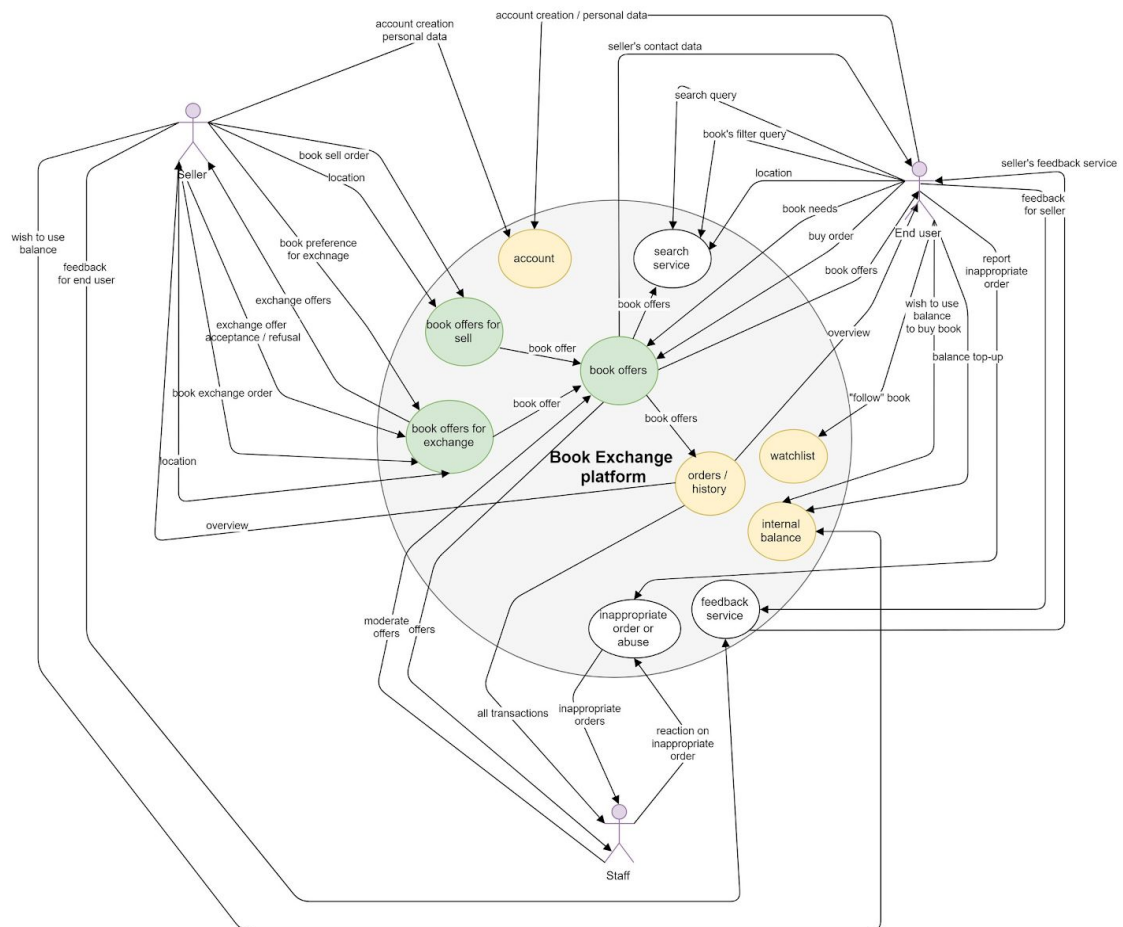


Figure 2. Process diagram