

Software Requirements Specifications
for
Project “BookExpress”

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Document History

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Chapter 1

Product Purpose

To handle the addition of new books and the distribution in a better way, "BookExpress" asked us to develop an IT solution to optimize the idle time and labour usage by getting rid of the current, deprecated system. Furthermore one important goal of the software solution is to be very user friendly and easy to use; also there should be remote access implemented, so several customers can access the software at once and distribution partners can access and keep their book stock up to date.

1.1 Obligatory Requirements (“must have”)

1.1.1 Book Store

BLABLABLABLA Personal Identification Number (PIN) BLUB! light-emitting diode (LED)

1.2 Optional Requirements (“nice to have”)

1.3 Non-Requirements (“need to have”)

Chapter 2

Product Environment

The Product takes the orders from the book stores and files them into the system, so that they can be prepared for shipping. For different sized book stores there should be several account types with separate functionality and different options for packaging and ordering. The targeting groups of the software solution are the book store owners, our consumers, the assistants of "BookExpress" and the distribution partners.

2.1 Application Area

2.2 User Groups

2.3 Operating Conditions

Chapter 3

Product Overview

The products environmental diagram.

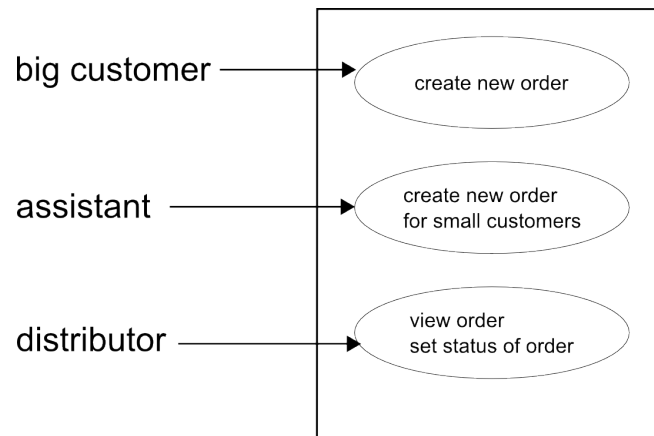


Figure 3.1: The environmental view of the product

Chapter 4

Product Functions

/PF10/	Process	Search for a book
	Actor	Customer
	Description	If a customer wants to order a book, he first has to search for it. A book can be searched by ISBN, title, author, year of publishing and genre.
/PF20/	Process	Modify Order Card
	Actor	Customer
	Description	It should be possible to have all items on an order card. A person WHAT can add or delete books to that card.

4.1 Internal

4.1.1 Employees of “BookExpress”

/PF/	Register Publisher or Book Shop (client)
Category:	
Actor(s):	BookExpress employee
Description:	A Book Express employee creates an account for a book shop or publisher after both business partners have signed a contract handling the business relations.
Goal:	The contract partner should have an account to log into the Software. After registration through the Book Express employee, the contract partner will b a verification and its account information via email.
Preconditions:	Contract signed
Postcondition success:	Successfully created account
Postcondition failure:	Unsuccessful in creating an account
Trigger:	Menu option "register new client" (Software)
Sequence: Input	relevant data and contractor details into the managements system
	Save the signed contract on the server
	Register a new client by creating a new ClientID in the database

Expansion: Send verification and account information to the contractor
-
Alternatives: -

/PF/ Edit client information
Category:
Actor(s): BookExpress employee
Description: The clients data is outdated and needs to be updated
Goal: Client data is updated
Preconditions: Client exists in database
Postcondition success: Client data is updated and a notification mail is sent to the client.
Postcondition failure: Client data is not updated but rolled back to the previous state
Notification with problem report is shown to the employee.
Trigger: Menu option "edit client data" (Software)
Sequence: Menu option "edit client data"
Edit specific data
Submit edited data to the server
Expansion: -
Alternatives: -

/PF/ Delete client
Category:
Actor(s): BookExpress Employee
Description: Client gets deleted due to resignation of the contract
Goal: Delete client from the system
Preconditions: Client exists in database
Contract is being resigned by one of the contractors
Postcondition success: Client is deleted from the system
Postcondition failure: Client could not be deleted because of existing orders
Trigger: Menu option "delete client" (Software)
Sequence: Choose client
Check if client is deletable (i.e. no existing orders)
Send notification mail to client
Delete client
Expansion: -
Alternatives: -

/PF/ Client places order (via telephone)
Category:
Actor(s): BookExpress employee, client
Description: A client orders book via telephone
Goal: Order is placed in an order queue
Preconditions: Client exists in database
Client is authorized

Postcondition success: Order is placed in an order queue
Postcondition failure:

Trigger: Client initiates order process by calling an BookExpress employee
BookExpress employee triggers manual order process

Sequence: BookExpress employee selects client in Software
BookExpress employee enters ordered book into the system
Order is placed in order queue
Order notification containing detailed report is sent to client

Expansion: -
Alternatives: -

/PF/ Validate order

Category:

Actor(s): System

Description: Order is checked for validation

Goal: The software checks every order for validation and confirms it to the client. BookExpress knows about every orders validation status.

Preconditions: Order is in order queue

Postcondition success: Client receives a confirmation email

Postcondition failure: Client receives a problem report about invalid order

Trigger: Order was placed and exists in order queue

Sequence: System gathers details and checks whether order is valid or not
System sends mail to client

Expansion: -
Alternatives: -

/PF/ Check stock

Category:

Actor(s): System/BookExpress employee

Description: The system checks whether the amount of books, which the client orders, is available or nearly out of stock.

Goal: Check succeeds

Preconditions: Order is placed or BookExpress employee initiates check

Postcondition success: Books which are nearly out of stock get displayed as a list

Postcondition failure:

Trigger: Stock check is initiated

Sequence: Check

Expansion: -
Alternatives: -

/PF/ Forward order to Logistics

Category:

Actor(s): System

Description: A validated order gets forwarded to Logistics

Goal: Logistics proceeds processing the order
Preconditions: Order is valid
Postcondition success: Logistics processes delivery
Postcondition failure: Order could not be forwarded to Logistics
Trigger: Order is validated
Sequence: Send order information/details to Logistics
Expansion: -
Alternatives: -

/PF/

Category:
Actor(s):
Description:
Goal:
Preconditions:
Postcondition success:
Postcondition failure:
Trigger:
Sequence:
Expansion: -
Alternatives: -

4.2 External

4.2.1 Book Stores ("Clients")

/PF/	Client places order (via web interface)
Category:	
Actor(s):	Client
Description:	Client places an over via the web interface of BookExpress
Goal:	Order is placed
Preconditions:	Client is successfully logged into the web interface Connection to BookExpress server is established
Postcondition success:	Order is delivered to BookExpress and added to the order queue
Postcondition failure:	Order is saved as draft and client gets a notification
Trigger:	Menu Option "create new order" (Web interface)
Sequence:	Client adds books to order (via book search or ISBN) Client specifies amount for every book Client submits order to server Order is in the order queue
Expansion:	-
Alternatives:	-
/PF/	Search for a book
Category:	
Actor(s):	Client
Description:	Client searches for a book to add it to his order
Goal:	Searching for a book succeeded
Preconditions:	Client is logged into the system
Postcondition success:	Book is being found Display items and options
Postcondition failure:	Book could not be found Display notification
Trigger:	Menu option "find books" (Software)
Sequence:	Enter ISBN/title/author/genre in search bar Hit the "Search"-Button Choose book from list to add it to the order
Expansion:	-
Alternatives:	-

4.2.2 Publishers

Chapter 5

Product Data

5.1 Customer Data

5.1.1 Book Stores

5.1.2 Publishers

5.2 Order Data

5.3 Internal Data

Chapter 6

Product Performance

Chapter 7

Quality Requirements

Quality	very good	good	normal	irrelevant
Functionality	X			
Reliability	X			
Usability			X	
Efficiency		X		
Modifiability			X	
Portability				X

Chapter 8

User Interface

8.1 Client Application (for clerks)

8.2 Web Interface (for customers)

Chapter 9

Non-Functional Requirements

Chapter 10

Technical Product Environment

10.1 Software

10.2 Hardware

10.3 Orgware

10.4 Interfaces (product)

Chapter 11

Special Requirements for the Development Environment

11.1 Software

11.2 Hardware

11.3 Orgware

11.4 Interfaces (development)

Chapter 12

Subproducts and Subsystems

12.1 Server

12.2 Web Interface / Web Service

12.3 Client Application

Chapter 13

Additional Specifications and Stipulations

Chapter 14

Appendices