BookExpress - Specification Sheet

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1 Purpose/Aims of the Product

The goal of the project is to create a software that will drastically reduce the amount of work the employees of "BookExpress" spend on logistics and administration, thus speeding up the processes and making sure that every customer gets his or her orders as soon as possible, within the specified timeframe (24 hours). The current IT system is not as flexible or comfortable as it should be - as a result the business processes, such as maintaining a stock database that is consistent as well as up-to-date, are overly complex and time-consuming. The user interface has to be intuitive and performant, relieving the employees of a lot of administrative work and quite possibly reducing the time that new employees need to become familiar with it. By establishing a direct connection to the customers and publishers, all processes can be handled faster - furthermore, as almost all processes are handled by the software, automatic tracking of orders and deliveries is possible, giving estimates of delivery dates/hours. This new IT system will also need a renewal of the existent hardware as it is severely outdated.

2 Usage of the Product

The new IT system will be used by employees of BookExpress as well as the customers and publishers themselves. With the new system, customers will be able to submit orders automatically, depending on their demands, e.g. if their stock is below a certain threshold or they need to get a book for a final customer. The publisher on the other hand can push updates in their stock in realtime - as soon as a new book is available, it can be ordered from BookExpress. Furthermore, the new user experience will be much more modern and streamlined - instead of the old text-based system, all users will be able to use a modern, web-based interface which can even be accessed on mobile devices such as smartphones and tablets, thus increasing the flexibility of employees and customers even more.

3 Product Overview

OVERVIEW - what else?

4 Product Functions

/SF10/	Inventory maintenance (Publisher)
Actor(s):	Publishers
Description:	Publishers can update their inventory list
	(i.e. the list of available books) either via mail or using the
	direct connection over the web-based interface.

/SF20/	BookExpress Order
Actor(s):	Employee
Description:	The Employee orders a number of Books from the publisher.

/SF30/	Book Store Order
Actor(s):	Book Store Employee
Description:	The Book Store orders a book from BookExpress.
	This can either happen through a constant connection where
	every order is individually processed or the store can choose
	to collect orders internally and send them
	as one big order every day.

/SF40/	Stock Update (BookExpress)
Actor(s):	Stock Employee
Description:	The employee in charge of the stock checks the availability
	of all books and updates the stock accordingly.

/SF50/	Cancel Order
Actor(s):	Book Store Employee
Description:	The employee at the book store can cancel the order
	if it hasn't been shipped yet.

/SF60/	Tracking System
Actor(s):	Book Store Employee
Description:	The employee at the book store can look up at which stage
	his order is right now, e.g. processing or shipping
	to BookExpress/the book store.

5 Product Data

/SD10/	Book Data - ISBN, UPC/EAN, Title/Author, Publisher, Availability...
Maximum:	1,500,000
/SD20/	Book Store Data - PIN/Password, Name / Address, Order Type (Continuous / Summary), Contact Data
Maximum:	10,000
/SD30/	Publisher Data - Account Name/Password, Name/Address, Stock-keeping Type (Direct/Written Notes), Contact Data
Maximum:	15,000
/SD40/	Order Data - ISBN, Amount, Price, Current State
Maximum:	500,000
/SD50/	Truck Fleet Data - Driver, Registration Number
Maximum:	1000

6 Product Performance

/SP10/	The Web Interface has to be comfortably reachable from computers and tablets/smartphones, it has to be intuitive and interactive.
/SP20/	The amount of transferred data should be minimal.
/SP20/	If either a book store or an employee submits an order, there has to be an immediate notification if said order was successful.
/SP30/	We need a highly reliable infrastructure, for an uptime of 99% or preferably more.
/SP40/	The system has to be able to process up to 2000 orders submitted at once.
/SP50/	If a book is running low on stock, the system shall automatically try to order a certain amount of that book from the publisher. If that fails for whatever reason, the employees shall be notified.

7   Quality Requirements

As stated before, the system has to be extremely reliable as it is very important for every customer. The interface has to be highly performant and intuitive to provide a comfortable ordering experience for the customers as well as the employees. The complete software has to be engineered according to the guidelines defined in ISO/IEC 25000. As BookExpress cannot afford a downtime of any kind, the transition from the old system to the new one has to be very smooth. If a restart is required, it is to be executed during the night of a holiday, if possible. Additionally, we need a dedicated support team for hardware and software to ensure a flawless performance if anything goes wrong.

8   Amendments

To enhance the customer experience and speed up processes even more, every (bigger) customer will be asked to upgrade to a direct line instead of summary order. Moreover, The tracking system shall be implemented by getting direct GPS data from the truck that is transporting the shipment, thus providing truly accurate estimates of the time of delivery. The web interface has to be thoroughly tested in the currently important browsers(Chrome, FireFox, Opera, Safari, IE8+, mobile Browsers (Opera mobile, iOS (Safari), Chrome, Android(Dolphin))).

9   Glossary

Customer   Book Store with an account

PIN   Personal Identification Number, used to identify the customer