Personal Library Inventory Application Business Requirements

Revision 0.2

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Paul Chernick

**Approvers**

|  |  |  |
| --- | --- | --- |
| **Name** | **Functional Area** | **Approval Date** |
| Paul Chernick | Primary User |  |

**Change History**

|  |  |  |  |
| --- | --- | --- | --- |
| **Revision** | **Date** | **Description / Comments** | **Approved / Draft** |
| 0.0 | 12/20/2018 | Created Document. Added initial list of high level requirements. Formatted use case section. Use cases are not complete and the details are all wrong. This version is primarily boiler plate. | Draft |
| 0.1 | 12/24/2018 | Added an acknowledgement. Provided definitions of the terms in the glossary. | Draft |
| 0.2 | 12/26/2018 |  | Draft |

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A table of images can be placed here if necessary.

# Introduction

## Abstract

The client requires an inventory management system for their personal library to identify all books in the library, identify books that should be added and identify books that can be removed. This document specifies the high level or business requirements for the Personal Library Inventory Application. Functional and system requirement specifications are in other documents.

## References

|  |  |  |  |
| --- | --- | --- | --- |
| **ID** | **Author** | **Title** | **Location in SharePoint or on Web** |
| 1 | ISBN International Agency | What is an ISBN | https://www.isbn-international.org/content/what-isbn |
| 2 | New Media Rights | Is a copyright date the same as a publication date? | https://www.newmediarights.org/book/copyright\_date\_same\_publication\_date |

## Glossary

|  |  |
| --- | --- |
| **Term** | **Definition** |
| Author | The person or persons that wrote the book. This is a key portion of the identification of the book.  The author will have a first name and last name.  The author can have a middle name.  The author can have a year of birth and a year of death. |
| Book | A book is a representation of a physical book in the library. It will have one or more authors and a title.  The book can have a physical description.  The book can be a volume in a series or collection by the author(s).  The book can have publishing information including the copyright year, which edition of the book it is, which printing of that edition and an ISBN.  The book can have a format such as Hard Cover, Paperback or eBook.  The book can have a price paid for the book and an estimated value.  The book can be bought or sold. |
| Category | See Genre |
| Collection | A set of books by the same author that are related by subject matter. The books in a collection may have different titles and may be numbered as a volume within the collect. In fiction the collection may provide a complete story arc. |
| Condition | The physical condition of the book. The physical condition can include a rating of the condition, a text description of the physical condition, whether it is new or used, whether or not it has been read and whether it has been signed by the author.  The rating system is Not In Library (no physical condition to report), Excellent, Good, Fair and Poor. |
| Copyright | Within the context of the application this is the year the author claims as having written the book.  The author of a work has a copyright to the work as soon as it is created. All s/he has to do is “fix the original work in a tangible medium of expression,” meaning either putting pen to paper or just saving a word document.  An author can either retain their copyright, or assign it to a publishing company. If they assign the copyright, then the publishing company now is the owner of the copyright. The advantage of assigning the copyright is to have someone more experienced fund and manage your book career; the benefit of retaining the copyright yourself means that you can decide how your work is creatively expressed, such as if it’s adapted into a movie. |
| Edition | The bibliographical definition of an edition includes all copies of a book printed “from substantially the same setting of type,” including all minor typographical variants. The numbering of book editions is a special case of the wider field of revision control. Editions are numbered 1,2,3 etc. |
| Estimated Value | The book can have an estimated value. This may be greater or less than the amount paid to purchase the book. The estimated value of the book can depend on the condition of the book, whether it has been signed by the author, whether it is a first edition and whether the book is still in print or not. |
| Format | The format of the book in the library, examples, Hard Cover, Trade Paperback, Mass Market Paperback, PDF, Kindle, Nook. |
| Genre | A category of artistic composition in literature, characterized by similarities in form, style, or subject matter. Examples are fiction, non-fiction, computer, mystery, science fiction and fantasy. |
| ISBN | An ISBN is an International Standard Book Number. ISBNs were 10 digits in length up to the end of December 2006, but since 1 January 2007 they now always consist of 13 digits. ISBNs are calculated using a specific mathematical formula and include a check digit to validate the number.  ***Books published prior to 1966 do not have an ISBN.*** |
| Ownership | Is the book physically in the library in any format? The book may have been borrowed from the public library, read and returned. The book may be desired to be added to the physical library. |
| Printing | The same edition of a book may be printed many times if it is a popular book. The printing is generally a number, but it may include the year as well. |
| Publisher | The company the printed and marketed the book, it may have bought the rights of the book from the author. |
| Series | See Collection. |
| Status | A rating system defined by Not in Library, New and Used. |
| Title | The name of the book, this may be a subject in non-fiction or just a name in fiction. This is one of the key items identifying a book. |
| Wish List | A set of books that are not physically in the Library that the user wishes to acquire. |

## Open Issues

|  |  |  |  |
| --- | --- | --- | --- |
| **ID** | **Description** | **Status** | **Contact** |
| 1 | There is only one developer / contributor. This may lead to an extended development time. | Open | Paul Chernick |
| 2 | Requirements have not been fully specified. | Open | Paul Chernick |
| 3 | This application duplicates some efforts by GoodReads.com and Amazon.com. Are there any legal issues? | Open | Paul Chernick |

## Compatibility

This application should remain compatible with both Windows Store and Apple Store requirements so that it may be sold in the future. There is no previous version of the application so there is no requirement for backwards compatibility.

## Business Drivers

* Track expenses related to the library
* Reduce library expenses
  + Eliminating duplicate purchases of books.
  + Identify technical books that are obsolete so they can be disposed of to free up shelf space
  + Reduce work involved in maintaining the library.
* Enable recommendations of books for others
* Organize books utilizing either the Dewey Decimal System or the Library of Congress Catalog
* Evaluate the current value of the Library and maintain a valuation

## Acknowledgements

Many thanks to James Randy Robertson at Teradyne, Inc. for teaching me how to properly write requirements specifications.

# Overall Description

Put a description of what the company does here.

## Product Context

Explain how the work being done will fit in with the customers processes.

## System Context

Put system context here. This should list all software to be integrated with.

## Assumptions and Dependencies

* A relation database will be used to implement the underlying data implementations.
* The database must be accessible from the web or from mobile devices.
* The amount of required information must be limited.

# Use Cases

## Add Author

Generate Weekly Inventory Report - this use case is to be used as the basis of all use cases.

Actors:

* Purchasing Manager

Goal:

Purchasing and management have a clear view of what products are on hand to fill customer orders.

Preconditions:

PRE1. All necessary data from the StarShip Database has been transferred to the Microsoft Dynamics GP database.

Basic Flow:

B1. The purchasing manager opens web browser.

Post Conditions:

POST1. The weekly inventory report is available to the purchasing manager and upper management.

## Add Author Series

Generate Weekly Inventory Report - this use case is to be used as the basis of all use cases.

Actors:

* Purchasing Manager

Goal:

Purchasing and management have a clear view of what products are on hand to fill customer orders.

Preconditions:

PRE1. All necessary data from the StarShip Database has been transferred to the Microsoft Dynamics GP database.

Basic Flow:

B1. The purchasing manager opens web browser.

Post Conditions:

POST1. The weekly inventory report is available to the purchasing manager and upper management.

## Add Book

Generate Weekly Inventory Report - this use case is to be used as the basis of all use cases.

Actors:

* Purchasing Manager

Goal:

Purchasing and management have a clear view of what products are on hand to fill customer orders.

Preconditions:

PRE1. All necessary data from the StarShip Database has been transferred to the Microsoft Dynamics GP database.

Basic Flow:

B1. The purchasing manager opens web browser.

Post Conditions:

POST1. The weekly inventory report is available to the purchasing manager and upper management.

## Buy Book

Generate Weekly Inventory Report - this use case is to be used as the basis of all use cases.

Actors:

* Purchasing Manager

Goal:

Purchasing and management have a clear view of what products are on hand to fill customer orders.

Preconditions:

PRE1. All necessary data from the StarShip Database has been transferred to the Microsoft Dynamics GP database.

Basic Flow:

B1. The purchasing manager opens web browser.

Post Conditions:

POST1. The weekly inventory report is available to the purchasing manager and upper management.

## Rate Book

Generate Weekly Inventory Report - this use case is to be used as the basis of all use cases.

Actors:

* Purchasing Manager

Goal:

Purchasing and management have a clear view of what products are on hand to fill customer orders.

Preconditions:

PRE1. All necessary data from the StarShip Database has been transferred to the Microsoft Dynamics GP database.

Basic Flow:

B1. The purchasing manager opens web browser.

Post Conditions:

POST1. The weekly inventory report is available to the purchasing manager and upper management.

## Find Book

Generate Weekly Inventory Report - this use case is to be used as the basis of all use cases.

Actors:

* Purchasing Manager

Goal:

Purchasing and management have a clear view of what products are on hand to fill customer orders.

Preconditions:

PRE1. All necessary data from the StarShip Database has been transferred to the Microsoft Dynamics GP database.

Basic Flow:

B1. The purchasing manager opens web browser.

Post Conditions:

POST1. The weekly inventory report is available to the purchasing manager and upper management.

## Find Author

Generate Weekly Inventory Report - this use case is to be used as the basis of all use cases.

Actors:

* Purchasing Manager

Goal:

Purchasing and management have a clear view of what products are on hand to fill customer orders.

Preconditions:

PRE1. All necessary data from the StarShip Database has been transferred to the Microsoft Dynamics GP database.

Basic Flow:

B1. The purchasing manager opens web browser.

Post Conditions:

POST1. The weekly inventory report is available to the purchasing manager and upper management.

## Put Book Up for Sale

Generate Weekly Inventory Report - this use case is to be used as the basis of all use cases.

Actors:

* Purchasing Manager

Goal:

Purchasing and management have a clear view of what products are on hand to fill customer orders.

Preconditions:

PRE1. All necessary data from the StarShip Database has been transferred to the Microsoft Dynamics GP database.

Basic Flow:

B1. The purchasing manager opens web browser.

Post Conditions:

POST1. The weekly inventory report is available to the purchasing manager and upper management.

## Sell Book

Generate Weekly Inventory Report - this use case is to be used as the basis of all use cases.

Actors:

* Purchasing Manager

Goal:

Purchasing and management have a clear view of what products are on hand to fill customer orders.

Preconditions:

PRE1. All necessary data from the StarShip Database has been transferred to the Microsoft Dynamics GP database.

Basic Flow:

B1. The purchasing manager opens web browser.

Post Conditions:

POST1. The weekly inventory report is available to the purchasing manager and upper management.

# Requirements

1 Users Can Track Book Information in the Library

|  |  |
| --- | --- |
| **Priority** | High |
| **Status** | Proposed for Phase 1 |

Detail the first requirement in the proper language to define requirements.

1.1 Users Can Track the Physical Form of Books

|  |  |
| --- | --- |
| **Priority** | High |
| **Status** | Proposed for Phase 1 |

Detail the first sub requirement of the first requirement in the proper language to define requirements.

1.2 Users Can Track the Genres of the Books

|  |  |
| --- | --- |
| **Priority** | High |
| **Status** | Proposed for Phase 1 |

Detail the first sub requirement of the first requirement in the proper language to define requirements.

1.3 Users Can Track the Physical Condition of the Books

|  |  |
| --- | --- |
| **Priority** | High |
| **Status** | Proposed for Phase 1 |

Detail the first sub requirement of the first requirement in the proper language to define requirements.

1.4 Users Can Track the Publishing Information of the Books

|  |  |
| --- | --- |
| **Priority** | High |
| **Status** | Proposed for Phase 1 |

Detail the first sub requirement of the first requirement in the proper language to define requirements.

1.5 Books Shall Be Identified By Author and Title

|  |  |
| --- | --- |
| **Priority** | High |
| **Status** | Proposed for Phase 1 |

Detail the first sub requirement of the first requirement in the proper language to define requirements.

2 Users Can Track Author Information in the Library

|  |  |
| --- | --- |
| **Priority** | High |
| **Status** | Proposed for Phase 1 |

Detail the first requirement in the proper language to define requirements.

2.1 The Authors Last Name is Required

|  |  |
| --- | --- |
| **Priority** | High |
| **Status** | Proposed for Phase 1 |

Detail the first sub requirement of the first requirement in the proper language to define requirements.

2.2 The Authors First Name is Required

|  |  |
| --- | --- |
| **Priority** | High |
| **Status** | Proposed for Phase 1 |

Detail the first sub requirement of the first requirement in the proper language to define requirements.

3 Users Can Track Collections and Series of Books

|  |  |
| --- | --- |
| **Priority** | High |
| **Status** | Proposed for Phase 1 |

Detail the first requirement in the proper language to define requirements.

4 Users Can Track Books Not Physically in the Library

|  |  |
| --- | --- |
| **Priority** | High |
| **Status** | Proposed for Phase 1 |

Detail the first requirement in the proper language to define requirements.

4.1 Users Can Track Borrowed Books

|  |  |
| --- | --- |
| **Priority** | High |
| **Status** | Proposed for Phase 1 |

Detail the first sub requirement of the first requirement in the proper language to define requirements.

4.2 Users Can Track Books to be Acquired

|  |  |
| --- | --- |
| **Priority** | High |
| **Status** | Proposed for Phase 1 |

Detail the first sub requirement of the first requirement in the proper language to define requirements.

5 Users Can Query the Library Inventory Remotely Using Mobile Devices

|  |  |
| --- | --- |
| **Priority** | High |
| **Status** | Proposed for Phase 3 |

Detail the first requirement in the proper language to define requirements.

6 Users Can Share Information With Friends

|  |  |
| --- | --- |
| **Priority** | High |
| **Status** | Proposed for Phase 2 |

Detail the first requirement in the proper language to define requirements.

7 Users Can Determine Whether the Data is Stored Locally or On the Internet

|  |  |
| --- | --- |
| **Priority** | Normal |
| **Status** | Proposed for Phase 2 |

Detail the first requirement in the proper language to define requirements.

8 The Tool Shall be Easy to Use and User Friendly

|  |  |
| --- | --- |
| **Priority** | High |
| **Status** | Proposed for Phase 1 |

Detail the first requirement in the proper language to define requirements.

8.1 Users Can Define Preferences

|  |  |
| --- | --- |
| **Priority** | High |
| **Status** | Proposed for Phase 1 |

Detail the first sub requirement of the first requirement in the proper language to define requirements.

8.1.1 Users Can Select What to Track

|  |  |
| --- | --- |
| **Priority** | High |
| **Status** | Proposed for Phase 1 |

Detail the first sub requirement of the first sub requirement of the first requirement in the proper language to define requirements.

8.1.2 Users Can Hide Information Fields They Aren’t Tracking

|  |  |
| --- | --- |
| **Priority** | High |
| **Status** | Proposed for Phase 1 |

Detail the first sub requirement of the first sub requirement of the first requirement in the proper language to define requirements.

8.1.3 Users Can Select Font, Font Size and Font Weight

|  |  |
| --- | --- |
| **Priority** | Medium |
| **Status** | Proposed for Phase 2 |

Detail the first sub requirement of the first sub requirement of the first requirement in the proper language to define requirements.

8.2 A User Help Function Shall Be Provided

|  |  |
| --- | --- |
| **Priority** | Medium |
| **Status** | Proposed for Phase 1 |

Detail the first sub requirement of the first sub requirement of the first requirement in the proper language to define requirements.

8.3 A User Manual Shall Be Available

|  |  |
| --- | --- |
| **Priority** | Medium |
| **Status** | Proposed for Phase 1 |

Detail the first sub requirement of the first sub requirement of the first requirement in the proper language to define requirements.

8.4 Software Installation Should Not Require Support

|  |  |
| --- | --- |
| **Priority** | Medium |
| **Status** | Proposed for Phase 1 |

Detail the first sub requirement of the first sub requirement of the first requirement in the proper language to define requirements.

8.5 Users Can Add Genres

|  |  |
| --- | --- |
| **Priority** | Medium |
| **Status** | Proposed for Phase 1 |

Detail the first sub requirement of the first sub requirement of the first requirement in the proper language to define requirements.

8.6 Users Can Add Book Formats

|  |  |
| --- | --- |
| **Priority** | Medium |
| **Status** | Proposed for Phase 1 |

Detail the first sub requirement of the first sub requirement of the first requirement in the proper language to define requirements.

9 The Software Must Be Low Cost or Free

|  |  |
| --- | --- |
| **Priority** | High |
| **Status** | Proposed for Phase 1 |

Detail the first requirement in the proper language to define requirements.

9.1 Additional Licenses to Run the Software Must Not Be Required

|  |  |
| --- | --- |
| **Priority** | High |
| **Status** | Proposed for Phase 1 |

Detail the first sub requirement of the first requirement in the proper language to define requirements.

# Traceability

## Complying Requirements

|  |  |
| --- | --- |
| **Defining Requirements** | **Complying Requirements** |
| **No Defining Requirements** | **No Complying Requirements** |
| **No Defining Requirements** | **No Complying Requirements** |

XXXXXXReq1 Level 1 Requirement

|  |  |
| --- | --- |
| **Priority** | High |
| **Status** | Approved for Phase X |

Detail the first requirement in the proper language to define requirements.

XXXXXXReq1.1 Level 2 Requirement

|  |  |
| --- | --- |
| **Priority** | High |
| **Status** | Proposed |

Detail the first sub requirement of the first requirement in the proper language to define requirements.

XXXXXXReq1.1.1 Level 3 Requirement

|  |  |
| --- | --- |
| **Priority** | High |
| **Status** | Proposed for Phase X |

Detail the first sub requirement of the first sub requirement of the first requirement in the proper language to define requirements.

XXXXXXReq1.1.1.1 Level 4 Requirement

|  |  |
| --- | --- |
| **Priority** | High |
| **Status** | Proposed for Phase X |

Detail the first sub requirement of the first sub requirement of the first requirement in the proper language to define requirements.

XXXXXXReq1.1.1.1.1 Level 5 Requirement

|  |  |
| --- | --- |
| **Priority** | High |
| **Status** | Proposed for Phase X |

Detail the first sub requirement of the first sub requirement of the first requirement in the proper language to define requirements.