**Supplementary Specification**

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| **Version** | **Date** | **Description** | **Author** |
| Inception Draft | July 20, 2018 | First draft. To be refined primarily during elaboration phase. | Katy Atchison |
| Elaboration 1 Draft | July 29, 2018 | Second draft. Greater detail and additional noteworthy points are to be added here. | Cody Dowell |
| Elaboration 2 Draft | August 1, 2018 | Third draft. Adds some minor details that were recently discovered. | Cody Dowell |

**Introduction**

This document is the repository of all BookKeeper requirements not captured in the use cases.

**Functionality**

***Logging and Error Handling***

Log all errors to persistent storage

***Pluggable Rules***

At various scenario points of several use cases users are given a large amount of freedom to customize their categories and books in a number of ways.

***Security***

All usage requires user authentication

**Usability**

***Human Factors***

The customer will view the application on a monitor, tablet, or phone screen.

The text and all images displayed on the application will be able to be viewed easily on any device by a number of people with differing levels of eyesight.

* Text will easily be visible from 1 meter.
* Avoid colors associated with common forms of color blindness.

Speed, ease, user-friendliness, and intuitiveness are all important to keep users interested in continuing to use the application.

**Reliability**

***Recoverability***

If the application encounters a problem and has to shut down unexpectedly, any transactions in progress should not be completed, and the state of all user data should return to its former state before the user attempted to complete a transaction. The application, after restoring a former state, will then be reopened for a user to reattempt a transaction or perform any other action the application offers.

**Performance**

The application should be simple, easy to navigate, and intuitive. It should complete operations quickly to maintain user interest.

One goal of the application is to ensure that users are able to access and utilize a number of features in a minimal number of clicks.

**Supportability**

***Adaptability***

Several different users of the software will want to access the application on a number of platforms. The software will be flexible enough that it will be functional and available on different platforms.

***Configurability***

This is an area that needs to be explored more thoroughly, but as of right now the plan is to present the user with a general user interface whose basic components will be able to be rearranged, as well as other unexplored features. The categories are crucial to letting users configure the software so that their experience is as positive as possible.

**Implementation Constraints**

We insist on a Java technologies solution, predicting this will improve long-term porting and supportability, in addition to ease of development.

**Purchased Components**

In general, there are no components of the system that we will need to purchase in order to properly implement the software.

**Free Open Source Components**

The vast majority, if not all, of the software used in our application will be generated by our Java developers. All of the code our developers create will use the Java Development Kit, and will be runnable on the Standard Edition of Java for anyone to use.

**Interfaces**

All user interaction will occur on either a touchscreen mobile phone, tablet, or monitor, or through mouse clicks on a screen.

***Noteworthy Hardware and Interfaces***

* Touch screen use for mobile devices (this is perceived by the operating system of the mobile device in the same way it processes other touch screen events)
* Keyboard and mouse for desktop computers and laptops (this is perceived by the operating system of the computer in the same way it processes other mouse and keyboard events. Laptops will touchpads will interpret mouse events.

**Legal Issues**

We recommend using primarily open source software, as acquiring any software that needs a license to purchase will most likely put our project’s net profit at negative almost immediately.

Another issue we must be aware of is making sure that allowing users to enter a book’s information onto the application, and by extension using an author’s book to be on our website, does not create any legal disputes with a book’s author or publisher.

**Information in Domains of Interest**

***Pricing***

Our application will be free to any and all users. If we wish to generate profits on our application, the most likely course of action would be to have advertisements displayed on various pages while a user navigates through the application.

***Information Handling***

All users will sign up with a username and a password, and will use these credentials to sign into the application every time they wish to use it. Our database will take steps to ensure that every user's personal information is encrypted so that no attacks on our system will be able to gain access to our user's private data.