**Abacus**

**Software Requirements Specification**

**For CSE 201 A**

**Version 1.1**

**Revision History**

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| **Date** | **Version** | **Description** | **Author** |
| 25/02/2018 | 1.0 | Initial Baseline | Josh Overbeck, Nicole Matthews |
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**Software Requirements Specification**

**1.**                  **Introduction**

This is the requirements document for the the software *Abacus*. Abacus is a desktop application designed to help keep inventory of products for a retail store. It will cover the purpose of this document. It will also cover the scope of the document. Furthermore, it will also translate any acronyms and abbreviations found within. Finally, all of the references will be covered, and an overview will be provided.

**1.1**               **Purpose**

The purpose of this document is to describe all of the requirements to build the software Abacus. It will cover the scope of all the features that Abacus will offer. The scope of the software can be found in section [1.2](#kix.60dqxu24v6ka). It will also translate any and all of the acronyms and abbreviations. This document will describe the the internal and external behavior of the Abacus. Any and all definitions and acronyms/abbreviations used within this document will be explained in section [1.3](#kix.dlgxbgn8myav).

**1.2**               **Scope**

Abacus will include many features that will lead to a working inventory for a retail store. We will need to use [CRUD](#f3ht9df186fs) for these four basic functions. First, we will be focusing on making sure that the user can successfully login with a username that is not already taken and a password that fits the necessary length and character requirements. Next, the user will be able to add an item to the inventory. From here the user will be able to set many customizations according to the product such as the price, quantity, size, color, and category the item belongs to. Once completed the user can save the inventory and later update changes that need to be made. Finally the customer can delete the inventory.

**1.3**               **Definitions, Acronyms and Abbreviations**

CRUD: It stands for Create, Read, Update, and Delete. “The CRUD paradigm is common in constructing web applications, because it provides a memorable framework for reminding developers of how to construct full, usable models” (Codecademy).

Use-case: “A use case is a methodology used in system analysis to identify, clarify, and organize system requirements. The use case is made up of a set of possible sequences of interactions between systems and users in a particular environment and related to a particular goal. It consists of a group of elements (for example, classes and interfaces) that can be used together in a way that will have an effect larger than the sum of the separate elements combined. The use case should contain all system activities that have significance to the users. A use case can be thought of as a collection of possible scenarios related to a particular goal, indeed, the use case and goal are sometimes considered to be synonymous” (Rouse).

**1.4**               **References**

“What Is CRUD?” *Codecademy*, [www.codecademy.com/articles/what-is-crud](http://www.codecademy.com/articles/what-is-crud)

Rouse, Margaret. “What Is Use Case? .” SearchSoftwareQuality, TechTarget, 2016, [searchsoftwarequality.techtarget.com/definition/use-case](http://searchsoftwarequality.techtarget.com/definition/use-case).

**1.5**               **Overview**

There are several factors that contributed to the need for the requirements. Within this portion, those factors will be described

**2.**                  **Overall Description**

There are several factors that contributed to the need for the requirements. Within this portion, those factors will be described in greater detail.

The user will be receiving new shipments of products on a regular basis. The user will need to be able to add the new products to the inventory. They might even get new types of inventory. Having the option to specify the type of product will make that a lot easier. This action falls under the “create” and “update” portion of [CRUD](#f3ht9df186fs).

The users main goal is to sell product. They would like to be able to know which items they have in stock and which items they do not. Each time they sell an item, the user will need to be able to remove the item from their inventory. This will fall under the “update” portion of [CRUD](#f3ht9df186fs).

Every time the user logs into the Abacus, the software will need to see if the inventory list already exists. If one does exist, it will need to retrieve the information and display it to the user. The software will also adds the filter function, so that the list can be sorted out by recent changes to the list in a week or month, another option will be sort in alphabetical order. If one does not exist yet, then it will need to generate a new inventory. This falls under the “create” and “read” portion of [CRUD](#f3ht9df186fs).

Every time the user logs out, they will need to be able to save the changes that they have made to the inventory. This would fall under the “update” portion of [CRUD](#f3ht9df186fs).

The user should be divided into three levels, the manager (admin) account should be able to promote or remove another account from the user account. User account can add or remove inventory and the amount. The guest account for who are not logged in, this account should only been able to see what’s in the inventory and the amount of stocks but cannot do any changes to it.This would fall under the “update” portion of [CRUD](#f3ht9df186fs).

**2.1**               **Use-Case Model Survey**

Use-case modeling will be done through a third-party software known as SurveyMonkey.com. With it, surveyors will be asked to take the role of the user. They will be given different features from Abacus, and will be asked a few questions about their experience using those features.

**3.**            **Use-Case Reports**

Use-case reports will be done through a third party software known as SurveyMonkey.com. Each user story will be presented as a use-case. Every person who takes the survey will be asked to rate different aspects about each feature. One aspect would be, did the feature perform as expected? How difficult was it to use the feature? How confusing was using the feature? And, the surveyor will be asked to provide any suggestions that they might have about each feature.