**1. Introduction**

**1.1 Purpose:**

The purpose of this vision document is to outline the key objectives and goals for the development of an inventory management system. It will provide a clear understanding of the projects objectives and desired outcome, and will be used as a guide for the development of this inventory management system.

**1.2 Scope:**

This software is an inventory management system that will be made using WPF & C#. It will provide users with a simple way to track their inventory and make use of some basic analytics. The storage of data will be file based.

**2. Positioning:**

**2.1 Business opportunity:**

This application is targeted towards small businesses and start-ups that carry a limited number of unique items. It provides a cheap and user-friendly solution to inventory management that will keep track of inventory value, allow multiple ways to sort and view inventory and sales information, basic analytics. and inventory related accounting information.

**2.2 Problem statement:**

|  |  |
| --- | --- |
| The problem of | the difficulties that small businesses face with managing inventory and accounting sales |
| affects | This affects stakeholders, and those who do not have a current way of effectively managing inventory of their business. |
| The impact of the problem | an unreliable way to effectively account for items and transactions within a small business. |
| A successful solution would include | with the implementation of an inventory management system, it would allow users to keep better track and manage inventory within a store/business environment and keep track of all asset gains and losses and allow small businesses to see what they have little of and what they have abundance of for ordering purposes. |

**3. Stakeholder and User Descriptions**

**3.2 Stakeholder Summary**

|  |  |  |
| --- | --- | --- |
| Name | Description | Responsibilities |
| Sam Fletcher | Software development, | Main developers |
| Tyler Nelson | Software development, accounting knowledge | Main developers |

**3.3 User Summary**

|  |  |  |
| --- | --- | --- |
| **Name** | **Description** | **Stakeholder** |
| Small business owners | End-Users of this software | self |
| Inventory managers and employees | End-Users of this software | self |

**4. Product Overview:**

This product is an inventory management system which keeps track of the stock of items in a smaller store and allows users to keep track of the current stock of items they have available with all information about the items as well. Some product features of this software are adding items/categories, removing items, the ability to see total value, cost of goods sold, and gross profit.

**4.1 Product Perspective**

The inventory management System will use a file-based storage system in which you can add items to that file system and sort it into categories for easy access later. Some tasks that the user could use this system for are accessing items sold that day to retrieve the grand total of sales, track lost or damaged items, and view their best selling products. They can also add categories to help them sort and visualize their inventory.

**4.2 Summary of Capabilities**

|  |  |
| --- | --- |
| **Customer Benefit** | **Supporting Features** |
| Easily visualize inventory | Products can be separated and sorted easily by category or lot number. |
| Customizable reporting | The release of items can be based on either LIFO or FIFO |
| Analyze sales | Products and Customers can be sorted by best selling/most profitable |

**4.3 Assumptions and Dependencies**

* Assumes user is running a compatible OS (Mac OS X, Windows, Linux).
* Assumes the user has a limited number of unique items (Will not be efficient for large quantities of unique items).
* Assumes the user is selling physical products

5. Product Features:

* Add item(s): you will be able to add items to the inventory management system either that be receiving new items to add to the store stock list or if the company receives a refresh of items. This is needed because it is essential for any file management system.
* Remove via sale or write-off: you will be able to remove items from the file management system either that be because of sales that day that need to be logged or if items were stolen or damaged.
* Cost of goods sold and Gross Profit: Will keep track of Cost of Goods Sold (COGS) and gross profit for accounting purposes.
* Total value: Keeps track of the total value of all items for maintenance and accounting purposes.
* Search by Lot: Ability to organize inventory items/shipments by their lot number. This is important in the event of any recalls or defects from manufacturers.
* Search by category (phone, computer, X-ray, manual, electronic, etc...): being able to sort your search by category helps the user reliably find what they need from their inventory management system in an easy way.
* Add a category: being able to add new categories for items in case of new arrival items being added into the file management system.
* LIFO or FIFO for selling items: Items sold can be on either a first in first out or last in first out basis.
* Search/Sort by customer: a set up for finding purchases made by customers or access info about customer for documentation purposes.
* Sort by best-selling or most profitable product.

**6. Constraints**

* The user’s system would need access to the .NET Framework to run the application
* Scalability since this is targeted towards those without large numbers of unique items.
* Project is bigger than all previous ones for both team members.

**9. Other Product Requirements**