**System Design Specifications**

Gamma Rocket Stars

CIS273 Spring 2023

Zachary Spangler, Jeffrey Towerton

Dianne Hill

**Program Description**

The objective of this document is to explain the functionality of the Gamma Rocket Stars Inventory Management System, detailing the functionality and appearance of the design. The system will give the users the ability to check inventory of an item, view the inventory of the store, bill out items to customers, receive items into the store, view previous invoices from customers, add customer information, run reports on the inventory on hand, negative inventory, and inventory summaries. Vendor information can also be entered, and orders from vendors can also be generated.

**Window layout and Description**

**Main Screen**

The main screen of the Inventory Management System (IMS) will consist of a switch board, so that the user can easily choose the function that they wish to utilize.

Graphical user interface, application

Description automatically generated

Users will be able to quickly access the common functions of the IMS, will the less used functions will be featured in the lower portion of the main screen to maximize efficiency and reduce mis-clicks.

**View Inventory**

The View Inventory button will take users to a new switchboard, allowing users to select from two choices, View All Inventory, and Inventory By Item.

Graphical user interface, text, application, email

Description automatically generated

**Clicking on either will take the user to the following screens.**

*View All Inventory*

**Text, table

Description automatically generated**

*Inventory By Item*

Graphical user interface, text

Description automatically generated

***Receive Inventory***

**Graphical user interface

Description automatically generated**

The receive inventory screen is used to add items into inventory when a shipment is received from a vendor. Each item can be added by filling in the item number and the quantity being received into the inventory. The rest of the data for the item will be pulled from the master file and used to populate the data in the master inventory list.

*Add Inventory Item Screen*

Graphical user interface, text

Description automatically generated

The Add Inventory Item screen can be used to add an item to the master list of items in the inventory. This can be used whenever a new item is purchased from a vendor and is not already in the inventory master list. The item number will automatically be generated, so item number addition is necessary. A description of the Item should be entered in the description box, as well as the desired quantity on hand, which is the point at which the system will generate a restock order to order more. The Restock Quantity field is used to specify how many to order when the Quantity on Hand count is reached. Purchase Price is the cost from the vendor, and Sell Price is the list cost of the item.

*The Generate Restock Reports screen.*

Text

Description automatically generated

The Generate Restock Reports screen is an automatically populated list of items where the current count on hand is less than the Desired Quantity on Hand field of an Item, which is added during the item’s creation. The report can be printed for easy communication to the vendor or to a manager.

*The Negative Inventory Report Screen.*

*Graphical user interface

Description automatically generated with medium confidence*

The Negative Inventory Report screen is a quick way to verify inventory, and to catch any times where the actual number of items on hand disagrees with the number that the inventory says has been sold. This can take place when an incorrect number of items was billed or received into inventory. This screen creates a simple but efficient report of all items that have a negative quantity on hand.

*The Inventory Summary Report Screen.*

*Graphical user interface

Description automatically generated*

The Inventory Summary Report Screen is simply a way of checking the total number of items and their value in inventory, both the cost of receiving the items in and their current list price. Reports can be printed for ease of use.

This concludes all currently functional elements of the website. This will be the deliverable for Stage 1 of the development of the Gamma Rocket Stars inventory Management System.

In Stage 2, the rest of the system will be completed, allowing the system to create orders and invoices, create vendor information for quick and easy retrieval, and the ability to create orders from each of the vendors.

Customer Information will also be able to be saved into a database for quick retrieval and for communication of any upcoming sales, or promotions that the managers would wish to make the customers aware of, as well as addressing information for the sending of invoices.

The *About Us, Contact Us, Employees,* and *Careers* links will lead to pages where information about the company itself can be added, and pages for the employees to access employment information, can be added in the *Employees* link. The *Contact Us* link will be further developed to bring up a page where an email to the store can be written and sent, and the *Careers* link can be used to apply for a job at the store.