Awaken Development Requirements

*Winston Biggs, Calvin Flippo, Justin Hill, Josh Kuehn, Hasani Mason, Chase Pavlu*

*Awaken LLC*

*02/07/2017*

Introduction:

* Purpose of document
  + The purpose of this document is to define the functional, quality, and use case requirements needed in the development of the Awaken inventory and sales management system for owners, project team members, and project manager.
* Purpose of project
  + The software will allow a searchable database for inventory products, inventory history, current and previous sales, and trends among those sales.

Background:

* Product Sponsor
  + This product is being sponsored by the owners and proprietors of Awaken LLC
* Product Need
  + The need for this product is clear in the day-to-day operations of employees within Awaken. There is currently no digital inventory management system which requires all inventory management to be done physically and by hand. They also have no formal way of analyzing sales patterns or storing and organizing sales data.

Project Overview:

* Overview
  + This product will provide access to all currently unavailable data and data trends including individual product information, inventory history, information on individual product sales, identifying trends in sales, and gathering information on demographics currently purchasing from Awaken. This will be accomplished using a clean, easy to understand GUI and displaying information as the employee searches for it. This system will use the JVM and browser so that it can be ported to any platform that supports both the JVM and some internet browser.

System Functionality:

[1]

Use Case: Search an item

Actors: Design Employee, Retail Employee, Owner, Manager

Goals: To locate an item

Preconditions: Item must be stored in the database currently or previously

Summary: When an employee wants to search items that are or have been in the store

Steps:

1. Open the inventory tab
2. Place cursor over search box and click
3. Search for item by typing style number
   1. Or by typing item description (heels, sweater, jacket)
   2. Or by typing brand label (H&M, Forever 21)
4. Inventory System returns all matching products

[2]

Use Case: View information on an item

Actors: Design Employee, Retail Employee, Owner, Manager

Goals: To locate information on an item

Preconditions: Item must be stored in the database currently or previously

Summary: When an employee wishes to see all available information on an item. This can be at the time of sale, during the design process for a new item, or when reviewing items that have been added to the system.

Steps:

1. Open the inventory tab
2. Place cursor over search box and click
3. Search for item by typing style number
   1. Or by typing item description (heels, sweater, jacket)
   2. Or by typing brand label (H&M, Forever 21)
4. Inventory System returns all matching products
5. Place cursor over the item to view
6. Click on item
7. Inventory will start displaying product information screen

[3]

Use Case: Add an Item

Actors: Design Employee, Owner

Goals: To change the information available on an item

Preconditions: Must have all new information on the item

Summary: When a designer or the owner want to add a product. This could be a new product or a product acquired through acquisition

Steps:

1. Open the inventory tab
2. Place cursor over search box and click
3. Search for item by typing style number
   1. Or by typing item description (heels, sweater, jacket)
   2. Or by typing brand label (H&M, Forever 21)
4. Inventory System returns all matching products
5. Place cursor over the add item button at the bottom of the list
6. Click on add item
7. Inventory will start displaying blank product information screen
8. Click on the style number box to be edited
9. Enter the new value for the product
10. Inventory will auto-populate all style number fields
11. Populate remaining fields
12. Confirm your decision to add new product information
13. Inventory saves new value
14. Inventory generates a new product info screen information
15. Inventory generates a SKU for the product

[4]

Use Case: Edit an Item

Actors: Design Employee, Owner

Goals: To change the information available on an item

Preconditions: Item must be stored in the database currently

Summary: When a designer or the owner want to update information on a product. This can be information pertaining to an items current price, item description, item picture, item long description, or item size.

Steps:

1. Open the inventory tab
2. Place cursor over search box and click
3. Search for item by typing style number
   1. Or by typing item description (heels, sweater, jacket)
   2. Or by typing brand label (H&M, Forever 21)
4. Inventory System returns all matching products
5. Place cursor over the item to view
6. Click on item
7. Inventory will start displaying product information screen
8. Click on the item information to be edited
9. Enter the new value for the product
10. Confirm your decision to change the product information
11. Inventory saves new value
12. Inventory generates a new product info screen with updated information

[5]

Use Case: View Sales Data

Actors: Owner, Manager

Goals: To view relevant sales data from one convenient location

Summary: When opening the sales screen all relevant sales data should be displayed across six dashboards. This centralizes the data and allows for quick analysis by the user. Data should be displayed with all relevant trends highlighted either graphically or numerically assuming the manager has a strong understanding of business finance.

Steps:

1. Open the sales tab
2. Sales system will display all dashboards
3. Move cursor over relevant dashboard
4. Click on the dashboard
5. Sales system will enlarge the selected dashboard

[6]

Use Case: Export Sales Data

Actors: Owner, Manager

Goals: To view relevant sales data from one convenient location

Summary: When opening the sales screen all relevant sales data should be displayed across six dashboards. This centralizes the data and allows for quick analysis by the user. Data should be displayed with all relevant trends highlighted either graphically or numerically assuming the manager has a strong understanding of business finance. Dashboards will export data to clipboard in an excel friendly format.

Steps:

1. Open the sales tab
2. Sales system will display all dashboards
3. Move cursor over relevant dashboard
4. Click on the dashboard
5. Sales system will enlarge the selected dashboard
6. Click the export button on the dashboard
7. Sales system will save dashboard data to clipboard in excel friendly format

Functional Requirements of the system:

Inventory:

* Search bar that allows the search variables item number, item description, and item brand label
* Inventory display area that displays the results for full and partial matches to the search criteria
* Product information screen that displays item number, item description, item long description, original price, current price, item picture, financial class, color, size, month received, and brand label
* Product information screen displays a second container that holds the products history within the inventory. (product sold date, product sold price, product sold location)
* Product information screen allows for the editing of values stored in items current price, item description, item picture, item long description, or item size.
* Sales information screen that displays six dashboards
  + YTD sales vs. previous YTD sales
  + Sales for the specific date vs. that date the previous year
  + Average transaction value and average unit price sold
  + Total units sold and total units sold per transaction
  + Number of tickets opened by customers and number of return initiated by customers
  + Alerts for low sales, pricing errors, and large quantities of tickets or returns
* Sales information is exportable into an excel document for further manipulation by owners or accounts managers.
* Sales system will update dashboard information after every purchase

**USE CASE DIAGRAM:**

Owner

Design Employee

Account Manager

Retail Employee

Appendices:

* Definitions, Acronyms, Abbreviations
  + Owner: co-founders
  + Manager: Accounts, finance, and operations manager
  + Design Employee: Employee both designing and crafting the clothes
  + Retail Employee: Employee managing online shop
  + Style Number
    - The Style number will be generated by each designer rather than the system and will be used for quick and easy auto-population of certain item fields.
    - This number will also be used by companies that would like to make wholesale purchases of items for resale
    - The number will be generated using an internal numbering system consisting of a letter (F or S) and 6 numbers(XXX-XXX)
      * Each letter is representative of the season that the item was designed for Fall or Spring are the two seasons in which clothes are released
  + The following six numbers will represent the gender for which the article of clothing was designed, the type of clothing that was designed, the material used in the making of the item, and the iteration of that item
    - The first digit will represent the gender for which the clothing was designed
      * 1xxxxx - Men 2xxxxx - Women 3xxxxx - Unisex
    - The second digit will represent the type of clothing being created
      * x1xxxx - Pants x2xxxx - Shorts x3xxxx - Dress Shirts
      * x4xxxx - Dresses x4xxxx - Sweaters x5xxxx – Jackets
      * x6xxxx – Accessories
  + Style number cont.
    - The third digit will be representative of the material used in creation
      * xx1xxx - Cotton Woven    xx2xxx - Cotton Knit xx3xxx - Denim
      * xx4xxx - Silk xx5xxx - Blend xx6xxx - Leather
    - The last three digits will make up the iteration of the clothing and each will start at 1
      * xxx001 - First in this set of clothing
    - Putting all of this together we can see that a simple set of digits can explain a lot about a piece
      * 113001 - Is the first iteration of a pair of men’s denim pants
  + Stock keeping units will be used internally as well but will be generated by the computer and will be used for queries. These will also use the industry standard numbering system and will include the style number plus 8 more digits
    - (F000000-XXXXXXXX)
  + The first 6 digits of the added 8 digits will represent the color of the clothing in hexadecimal while the last two digits will represent the size of the clothing
    - The first white, size four dress that is made of cotton and designed for a Spring release would have the SKU: S-241001-FFFFFF04
    - Using this method, we can represent a lot of information in only 15 digits
* References
  + Notes from development meeting with owners
  + Object-Oriented Software engineering, Lethbridge
  + <https://thedomesticdiva.wordpress.com/2008/06/16/issuing-style-numbers-when-you-start-a-new-clothing-line/>
  + Sporadic input from owners during document creation