Software Requirements Specification

for

BeadItUp.Ja

Version 1.0

Prepared by

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Revisions

Version	Primary Author(s)	Description of Version	Date Completed
Version 1.0	Gabriel Scott Callay Jarrett Marlon Lewis Kimani Munn Taye- Vaughn Jones Mercedes Smith	This version shows the initial user and system requirements and specifications for the software. Additionally, the document contains all data gathered from the client to elicit user requirements and non-functional requirements	November 5, 2021

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1 Overall Description

1.1 Product Context and Need

The software being specified is meant for use by BeadItup.Ja. BeadItup.Ja is an internet-based small business that was established in 2020 with the aim of providing good quality beaded bracelets to its customers, with the primary target being young adults and teenagers. The business currently facilitates customer interactions and transactions through social media, more specifically Instagram and Twitter. The owner of the business, Akil Williams, is currently the only employee and performs all administrative, production and delivery tasks on his own. These tasks became overwhelming as the business grew; hence the business owner sought automation to manage the processes involved in the company's inventory and order management processes.

1.2 Product Functionality

The system shall be able to perform the following high-level functions:

1. **Tracking and Updating Inventory**
    - The system shall allow the user to input data regarding the inventory item. The user shall be able to edit and update information about the inventory item. The system shall be able to display and filter inventory item.

2. **Storing and Displaying Product Details**
    - The system shall allow the user to input the product details. The system shall display product details of each inventory item and allow the user to edit and update product details.

3. **Accepting and Tracking Customer Orders**
    - The system shall allow the user to input customer order details. The system shall display the customer order details and track the customer orders.

4. **Estimating Possible Stock**
    - The system shall ensure that there is an accurate numerical representation of the stock of the inventory items to be displayed to the user.

1.3 Stakeholders and Users Characteristics

There are six main stakeholders for the system.

1. **Inventory Manager**
    - The role of the inventory manager is to oversee the inventory levels of a business. They deal with receiving and recording new stock as it is delivered and used. This stakeholder will be interacting with the system daily and thus provided the development team with requirements for the system. Additionally, this stakeholder is of high priority and will be crucial in testing the system to ensure acceptability

    - This individual will interact with three functionalities of the system, the creation of an inventory item, the display of an item, editing an item and filtering inventory items.

2. **Productions Manager**
    - This person oversees the production process which involves making beads into bracelets. He/she decides on and orders the resources required to ensure stock is adequate. This stakeholder outlined and submitted requirements to be included in the system. This stakeholder is extremely important to the system and will be heavily involved in acceptance testing.

    - The Production manager will be interacting with three requirements provided. These include Display Inventory Items, Edit Inventory Items, and the calculation of the number of different bracelets available given the current stock

3. **Operations Manager**
    - This person oversees the high-level duties. They are not involved with the day-to-day operations but would still need to keep up to date with the overall workings of the company, hence they are not as important as the other two managers but will still be involved in testing and will provide requirements for the system

    - This stakeholder will interact with the user requirement of Generating weekly reports

4. **Customers**
    - Purchase or make an order from the business, via Instagram, Twitter or soon via its website for products.

    - They will be providing requirements for the system pertaining to the business' product details. Additionally, this stakeholder will benefit from increased productivity in the business due to the development of the software

5. **Suppliers**
    - Provides material to be purchased by the business to produce the bracelets. They provide some requirements for the system.

6. **Developers**
    - The development team is responsible for the design and implementation of the system.

    - Developers have the opportunity to learn how to design and implement usable software to tackle a real business problem. They help with the testing of the system.

Both the production and inventory managers are the most important users of the software. The system must satisfy all their requirements as they are the ones for whom the software will be written, and they will be interacting with the system daily. The operations manager, though important is not as important as the other managers. However, the operations manager will still be important in the system and will need to see weekly reports of inventory and order levels. Customers would then rank fourth in terms of importance. Though they will not be interacting with the system daily however, they benefit from increased productivity experienced by the managers. The developers of the system are the least important users to satisfy. They will only develop the system and will not have long term interactions as opposed to other stakeholders.

1.4 Operating Environment

The system's Operating Environment is a Windows PC running the 64-bit Windows 10 operating system by Microsoft. The system will be developed in a Java Runtime Environment (JRE) by Oracle and the version being used is version 8. MySQL, a database management system by Oracle, is also utilised by the system. The minimum hardware requirements for the MySQL are 2 CPU Cores, 4 GB RAM and 64bit x86 CPU. The customer has 4 GB of RAM, a quad-core Intel Core I5 processor at 1.7 GHz and at least a 1024×768 Display Resolution.

1.5 Design and Implementation Constraints

The system must be compatible with the 64-bit Windows 10 Operating System because the target system for the deployment of the software system is the System Customer's 64-bit Windows 10 PC.

The system must be able to cache 70 MB of data. This is necessary as Efficiency is an important requirement, so storing heavily utilized data in cache would allow for faster retrieval of that data without straining the system resources.

The system should use no more than 1.5 GB for persistent storage. This allows for offline productivity and functionality. This is also necessary because the system customer is deploying the system on his personal computer with a limited storage capacity. To maximize efficiency, performance and to reduce system failure due to hardware failure, storage space will be limited.

The system should be implemented in a way that is understandable and maintainable as the customer's organization will be responsible for maintaining and evolving the delivered software.

The system should allow for website integration as the customer has expressed interest in developing a web platform for greater staff accessibility and availability to his customers.

1.6 Assumptions and Dependencies

For the system to operate smoothly, there are specific criteria that must be met. As such, these basic <u>assumptions</u> and <u>dependencies</u> are made:

1. Business requires network connectivity to support data backup and recovery functionalities.
2. The system is to be deployed for operation on one machine at a time.
3. This system will be able to operate without internet connectivity.
4. The dedicated local storage capacity and cache is sufficient for long-term operations.
5. The system will be used to maintain records of all orders made to the business.
6. The system will have a suitable workstation on which it can be operated, daily.
7. The backup interval will not significantly interrupt performance.
8. There will be more than one trained user of the system.
9. The system will not require more than an hour to learn and use successfully.
10. If the system crashes it will be fully restorable from backup on contemporary PCs.

2 Specific Requirements

2.1 External Interface Requirements

2.1.1 Hardware Interfaces

Data input into the system will be performed using the PC's keyboard and mouse. The keyboard will be used to enter data while the monitor and video adapter will be used to facilitate data entry and in-app navigation. The mouse will facilitate on-screen navigation and data submission for processing by the system. The System will also make use of the network adapter to facilitate remote backup/restore functionalities. The system will use up to 1.5 GB for persistent storage on the Hard Drive and up to 70 MB of cache memory.

2.1.2 Software Interfaces

This system will interact with the end-user's operating system. Compatible operating systems with Java 8 include with Windows 10 (8u51 and above), Windows 8.x (Desktop), Windows 7 SP1, Windows Vista SP2, Windows Server 2008 R2 SP1 (64-bit) and Windows Server 2012 and 2012 R2 (64-bit). The operating system will specifically aid in the saving of data to text(.txt) and/or DAT(.dat) files to maintain persistent storage of data that will be used and generated by the program. The system will also backup critical business data in a relational MySQL version 8.0 remote database as a recovery option. This data includes inventory as well as order details which are essential to the processes involved in the software. Lastly, the system will be connected to a specific run time environment (Java Runtime Environment) to execute the program on the end user's device.

2.1.3 Communications Interfaces

The system will use the appropriate communications resources available to connect to backup storage and manage local files. This includes HTTP for communication with the web server hosting the backup storage and TCP/IP coupled with the HTTP protocol to facilitate reliable data transfer. The Operating System is responsible for local file management and facilitating network communication between networked applications through the Network Interface Card.

2.2 Functional Requirements

Requirement ID: No. 1 Create Inventory Item
Use Case: Create Inventory Item
Rationale: The user will need to enter the inventory items for the system to manage the inventory.
User Requirement: The System shall allow the authorized user to create an inventory item.
System Requirements:

a) The System shall display the item creation screen.
b) The system shall accept item name, quantity, and optional low-level number as user inputs.
c) The user shall be allowed to validate input and edit inputs before submission.
d) The system shall add the item to the inventory storage if the item does not exist or increase the item's quantity in the inventory if it was already created.
e) The system shall return a confirmation message if the inventory database has been successfully updated.

Acceptance Criteria: The user shall be able to add item 100% of the time after having entered at least the item name and quantity fields.
Relates to/Dependencies: N/A
Priority: High
Team Owner: Marlon Lewis

Requirement ID: No. 2 Display Inventory
Use Case: Display Inventory Item
Rationale: This requirement allows the business owner to get an accurate value for the quantity of bracelets in stock, so they know whether to order more of a specific kind of bracelet or take orders made from a specific type of bracelet.
User Requirement: The system shall display quantity levels for all inventory items
System Requirements:

a) The system shall allow the user to select the specific inventory item for display.
b) The system shall display a screen with details on the inventory item.
c) The system shall display an accurate numerical representation of the quantity of the inventory item selected in stock.

Acceptance Criteria: The number of beads in stock should be displayed and accurate 100% of the time
Relates to/Dependencies: Depends on Requirement 1. (Create Inventory Item)
Priority: High
Team Owner: Callay Jarrett

Requirement ID: No. 3 Edit Inventory Item
Use Case: Edit Inventory Item
Rationale: The client/product manager needs to be able to update his list of inventory items to match his current materials
User Requirement: The user shall be able to edit inventory items
System Requirements:

a) The system will have an edit list feature where the inventory records are shown
b) When chosen the user will then be asked to choose which inventory item he wishes to change
c) The system will then prompt the user to edit the fields of that item and save the changes.
d) The system will then update the inventory records to reflect the changed inventory item and return the user to the inventory.
e) The system will notify the user if update failed and return the user to the inventory.

Acceptance Criteria: The user shall be able to see that the inventory item record has been updated on the system
Relates to/Dependencies: Dependent on Requirement 1 (Create Inventory Item)
Priority: Medium
Team Owner: Gabriel Scott

Requirement ID: No. 4 Filter Inventory Items
Use Case: Filter Stock
Rationale: Allows the inventory manager to sort or organize inventory items
User Requirements: The system shall filter for all stock or low inventory items
System Requirements:

a) The system shall allow the authorized user to select the filter options on the main screen
b) The system shall then allow the user to access the filter for all items or low-stock items
c) The system shall display stock sorted by name and quantity remaining.
d) They systems shall allow the user to filter by all stock, low stock, name of collection or best sellers.

Acceptance Criteria: The user shall be able to view all sorted inventory items
Relates to/Dependencies: Depends on requirement 1 and 2 (Create Inventory Item and Display Inventory Item)
Priority: High
Team Owner: Kimani Munn

Requirement ID: No. 5 Record Bracelet Bead Quantity
Use Case: Calculate number of bracelets.
Rationale: This requirement allows the business owner to make an accurate decision on whether they should take on an order for a specific bracelet based on the current inventory levels.
User Requirement: The system shall record the number of each bead required for various standard sized bracelets.
System Requirements:

a) The system shall accept the name of the bracelet for which the user wants to record the types and numbers of beads.
b) The system shall create the bracelet if the name is not already in the system.
c) The system shall accept and record the standardized size of the bracelet entry.
d) The system shall allow the user to enter the quantity of each bead needed for the bracelet.
e) The system shall create the bead as an inventory item if it is not already in the inventory.

Acceptance Criteria: The acceptance of all valid input and the changes being reflected in the system.
Relates to/Dependencies: Requirement 1 (Create Inventory Item)
Priority: High
Team Owner: Taye-Vaughn Jones

Requirement ID: No. 6 The system shall calculate the number of available bracelets.
Use Case: Calculate number of bracelets
Rationale: The user would be able to track how many products can be made with the remaining stock that is left.
Description: The system will allow users to fill out an online form to send in the order
User Requirement: The system shall show how many of each bracelet can be made based on the inventory stock.
System Requirements:

a) The system shall retrieve the number of beads needed to make each type of bracelet.
b) The system shall calculate the number of bracelets that can be made, including all types.
c) The system shall display the approximate number of bracelets that can be made for each type.

Acceptance Criteria: The calculations are accurate and reflect figures for each type of bracelet 100% of the time
Relates to/Dependencies: Requirement 5 (Record Bracelet Bead Quantity)
Priority: High
Owner: Mercedes Smith and Taye-Vaughn Jones

Requirement ID: No. 7 Create Customer Details
Use Case: Create Customer
Rationale: This business owner will need to keep track of all orders made by each customer and have customer contact details for delivery purposes.
User Requirement: The system shall allow authorized users to create a customer record.
System Requirements:

a) The system shall display a screen that allows the user to enter details for a new customer record.
b) The system shall accept the customer's name, address, telephone number and order ID.
c) The system shall allow the user to confirm customer and order details
d) The system shall allow the user to save the customer information and order details.
e) The system shall display the order details if successful or allow the user to correct and submit the affected fields.

Acceptance Criteria: The user shall be able to store a customer and the associated order details 100% of the time.
Relates to/Dependencies: None
Priority: High
Team Owner: Callay Jarrett and Marlon Lewis

Requirement ID- No. 8 Edit Customer Information
Use Case: Edit Customer Details
Rationale: Customer's contact information and order may change between order placement and delivery, so the user needs to be able to update the system to reflect this change.
User Requirement: The authorised user should be able to edit a customer's details
System Requirements:

a) The user will enter the ID number of the customer whose information is to be edited.
b) The system will then verify the ID.
c) If ID matches a customer record:
    a. The system will display the customer record that matches the ID entered and allow the user to edit the fields.
    b. The system will update the customer's record after the user submits changes.
    c. The system will then display the customer list with the new information.
d) If no matching record found, the system will notify the user and ask for valid customer ID.

Acceptance Criteria: The user should be able to see that the customer's record that has been updated matches the edit done by the Inventory Manager 100% of the time
Relates to/Dependencies: Dependent of Requirement 7 (Enter Customer Details)
Priority: Medium
Team Owner: Gabriel Scott and Kimani Munn

Requirement ID: No. 9 Display desired customer information
Use Case: Display Customer Details
Rationale: Customer details are necessary for the user to deliver customer orders.
User Requirement: The system shall allow the user to display the customer details.
System Requirements:

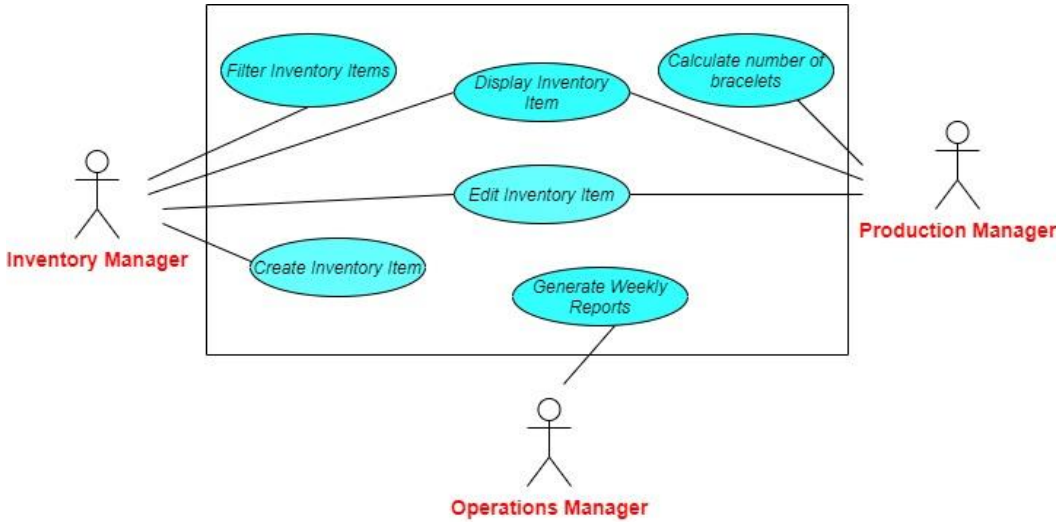
a) The system shall allow the user to enter the Customer ID or phone number
b) The system shall locate the customers matching the user input, if any.
c) The system shall display current customer details to the user.

Acceptance Criteria: The user shall be able to view past and present customer details.
Relates to/Dependences: Requirement 7 (Enter Customer Details)
Priority: High
Team Owner: Mercedes Smith

2.3 Behaviour Requirements

2.3.1 Use Case View

Inventory Management USE CASE diagram



In the diagram above there are three actors and six use cases. These actors (Operations Manager, Production Manager, Inventory Manager) represent the stakeholders and entities that will be in some way interacting with the system while the use cases refer to different functions in the system itself.

Create inventory Item

- **T**his action allows for the creation of a new inventory item along with relevant information including the current quantity level for the item and an optional low-level number.
- This action comes about when the inventory Manager, enters the details of a new item (Name and Quantity). The inventory item is then stored and displayed in the inventory table.

Filter Inventory Item

- Filtering Inventory Items is an action which is used by the inventory manager to see the stock level of a certain item or to see which items are at a certain quantity level so he/she can refill accordingly.

Display Inventory Item

- This feature will be used by both the Inventory and Production Managers to see the name and current stock for a particular item whether it be beads/bracelets/spacers etc.
- The user will be prompted to enter the name of the item they wish to see. The system will then only display that item along with its relevant information.
- After the user is finished with the feature the system will then show the full inventory table and the feature will then be reset.

Edit Inventory Item

- Both the Inventory and Production Managers will make use of the edit inventory feature to make changes to inventory whether it be stock levels or any other change.
- At first this feature will be in the inventory management screen. The user will then be taken to another area where they will be prompted to enter the current item and the changes to be made. The inventory will then be updated, and the feature will then reset

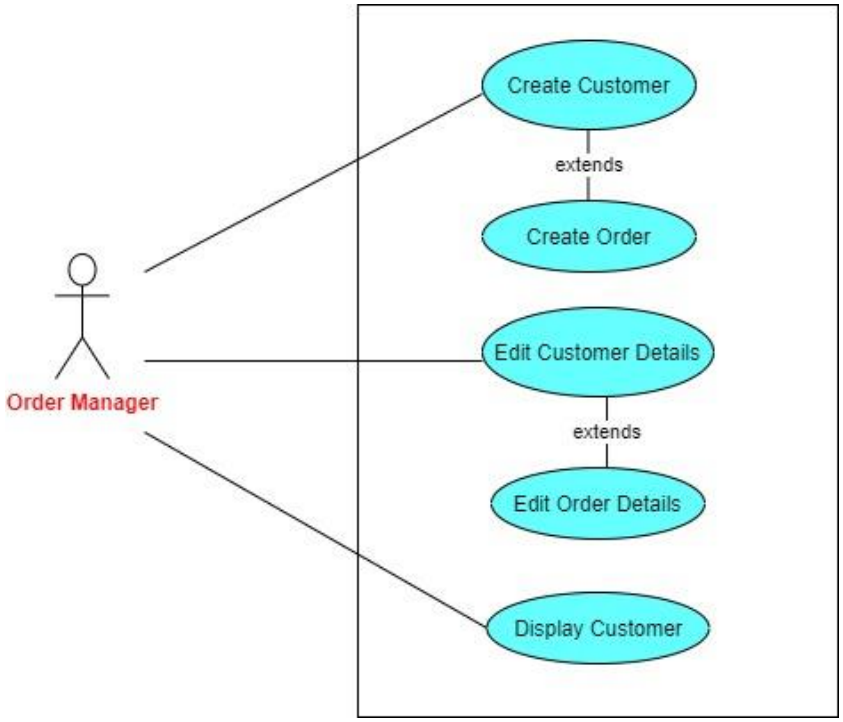
Calculate number of bracelets

- This will be an automated feature performed by the system but used by the production manager to see how many bracelets can be made from the existing stock.
- This feature will be set to zero as relevant information regarding bracelets and their standard sizes must first be entered so that calculations can then be made based on current stock levels.
- Once information is entered the first time it will not have to be entered again.

Generate Weekly Reports

- This is a feature of the inventory management system that will allow the operations manager to see a report of the inventory items and levels for the past week.
- At first this will be a blank file which will then populated with the inventory items and their levels from the past work week.
- At the start of a new week another blank file will be created.

Order Management USE CASE diagram



For the order management use case diagram above there is one actor and five actions. The Order Manager is the stakeholder that will be interacting with the order management system while the actions represent functions of the system.

Create Customer

- This functionality is used by the order manager to enter a new customer into the system when an order is being made. It is to be noted that the create order use case is an extension of the create customer functionality.
- When a new customer is being entered the user will input the customer's name, address, telephone number and order details
- A customer record will then be created for this customer and the function will reset.

Edit Customer Details

- This action is used when a manager wishes to make any changes to a customer's record. This feature extends into editing a customer's order details.
- To use this feature the user will be prompted to enter the ID of the customer who information will be edited. Once the ID is verified the customer's current information will be displayed and the user will be able to make necessary changes.
- After changes have been made this feature will be reset to allow for other changes to be made.

Display Customer

- This is a feature that will be used by the Order Manager to see the information of a particular customer.
- The user will be prompted to enter that name of the customer who he/she wishes to see the record for. Once the customer is in the system their information will be displayed in a read only format.

3 Other Non-functional Requirements

3.1 Performance Requirements

Reliability: Order and Customer Details shall be available 100% of the time.
Rationale: The user will need access to create and view orders and customer details whenever an order comes in, since the business operates online with 24/7 availability.

Reliability: The system shall attempt to backup data at regular intervals to the remote storage once Internet connection is available.
Rationale: To prevent significant data loss which would affect the systems reliability requirements, frequent backup of data is required

Accuracy: Data must always be accurate and up to date, without errors.
Rationale: Accurate information is needed to calculate number of products available for ordering.

Correctness and Precision: Calculations should have a 0% error rate.
Rationale: The business relies on accurate calculations to determine the number of each product available to be ordered

Storage: The system shall delete outdated orders and reports from local storage that exceeds 93 days.
Rationale: the target system has limited storage space and reporting. Is only required over three-month periods.

Storage: The system shall update valid entries and records 100% of the time.
Rationale: To ensure the business maintains accuracy and maximizes efficiency and productivity, it is important that valid entries be successfully added or always updated.

Response Time: the system should not take more than five (5) seconds to process and retrieve or update records.
Rationale: Timing is very important when processing orders and having the correct information immediately available for the system to compute information about available

stock when placing back-to-back orders ensures that the business does not receive more orders than it can produce with relation to the stock.

3.2 Safety and Security Requirements

The system being created will contain vital information for the customers, users, and business, storing the customers' and users' personal information, along with proprietary business data and calculations.

As such the security considerations being implemented are as follows:

- **Authentication:**
  - To enter this system, the user shall enter a username and password.
  - Users must change the initial password immediately after first successful login.
  - Passwords shall never be viewable at point of entry or any other time.
  - Every password shall contain at least one Capital letter and at least one number.

- **Confidentiality:**
  - To minimize data leakage, every employee that wishes to access orders or individual customer information will be assigned a unique user ID and password.
  - There are different tiers of permissions for different users, which allows the user to access certain functions provided by the system. Each user will be given specific privileges to access data and system functions.
  - All data recorded by the system shall be encrypted and stored locally to prevent outside(online) interference.
  - Upon crashing, the system shall restart bringing the user back to the username and password screen where they shall be required to enter their username and password again to use this system.

- **Availability:**
  - A backup copy of critical business data will be stored online for data recovery and prevention of single point of failure.
  - Data will be backed up at regular intervals to prevent data loss and accurate data is available in case of local storage corruption.
  - Each time a new update is made, the system shall record it for the next backup instance.
  - In the event of possible data corruption through malicious attacks or after a crash, a recovery protocol will be implemented, restoring the system, along with backup data and any recent recordings.

3.3 Software Quality Attributes

- The system shall be operational 24/7 as the customer requires.

- At the start of an order, the system shall check the quantity of available products, allow the user to submit orders for products based on the quantity available and update the inventory and orders correctly after the order has been submitted correctly.

- The system must maintain correct customer, order, and inventory details.

- The system shall take no more than 5 minutes to recover from system crashes, less 90 seconds to start up and less than 5 seconds to process user requests.

- The system shall mitigate against system crashes by appropriately managing user inputs, running full system tests to ensure optimal system health after an unexpected crash occurs and recovering from backups.

- The system will be useable to authorized users after completing at least 30 minutes of training.

4 Other Requirements

*<This section is **Optional**. Define any other requirements not covered elsewhere in the SRS. This might include database requirements, internationalization requirements, legal requirements, reuse objectives for the project, and so on. Add any new sections that are pertinent to the project.>*

Appendix

To obtain more information about the company and to elicit requirements for the software a series of interviews was held with the client in addition to a questionnaire being administered at different stages of the project

First Meeting Held with Client to obtain background of company and need for software
Date September 18,2021 @3:30pm – 4:30pm

BeadItup.Ja – Akil Williams

1. **What are some needs the business has that a software can help with?**
    - Ans: Inventory tracking, track the beads used to make each bracelet (especially so that they do not run out)
    - Software that showcases the different bracelets, the ability to purchase products, Shows products and their availability.
2. **When was the business established?**
    - Ans: September 2020
3. **What platforms do you operate on?**
    - Ans: Instagram, Twitter
4. **Do you have a target audience?**
    - Ans: Primarily Young Adults
5. **Are there other persons involved in the business?**
    - No (Specify the roles of each person)
6. **Is delivery supported by your business? / How do customers receive goods?**
    - Ans: Yes, Delivery is available (Only Kingston)
7. **What are your payment options?**
    - Ans: Cash on Delivery, Bank Transfer
8. **Would customers interact with the system?**
    - Ans: No, more of an internal system
9. **What is your vision for the company (Is it small scale or large scale)?**
    - Ans: Aim to be a larger scale business, but now it is a small business.

Second Interview Held with client to gather data for functional and Non-Functional Requirements

Date: October 13,2021 @ 3pm – 5pm

Non-functional questions:

- What device(s) and operating system do you want the software to work on? **Laptop Windows 10, iOS iPad, android phone, Android tablet**
- Is there any other software you would need the system to interact with? **Yes, Excel Database**
- Must the system be available during certain times? **On Demand 24/7**
- Should customer data be stored in the system to manage customer personal data? **Yes**
- Should a local copy of orders and/or inventory be stored on the operating device? **Yes**

1. **The system should allow the user to store product details that will be displayed on the business website.**

- What are the main features of your bracelets? **(For fields) picture, name, collection, pendant, price, rating, colour scheme.**
- Do you want a product description? **Yes- after clicking on the product item**
- Should the inventory/order system have any direct links to website for uploading products? **No**
- Should the system be able store pictures of the products? **Yes**
- What feedback do you usually receive from customers in terms of the appearance of the bracelets that isn't in the mentioned fields? **No**

2. **The system should allow customers to place orders online.**

- What is the process in which orders are currently placed? **Direct Message, share the post, provide contact (name, phone number, email) address.**
- How would the customer benefit from this order system? **Instantaneous access will make it more convenient to customers.**
- What would you normally ask a customer for when they are placing an order? **Name, Phone Number, Hand Size**

- What information would be on an order (e.g., the data input such as quantity, price, location, contact details)? **Name of bracelet, quantity, choice of location, measurement, price**

- Is the order process going to require a verification message? **Yes – for customer and supplier**

- Would you like the customer to be more hands on in the selection to make custom orders (e.g., Selection of specific colours or bead types)? **No, standard designs only**

- Would you like the usage of PayPal to receive and show proof of payment (receipt number)? **No**

3. The system should track orders made online

- What are you looking to gain /benefit from with this order tracking feature? **Centralize tracking and reporting for efficiency and organization and planning**

- What specifically do you keep or want to keep track of? **Beads, pendant, spacers, orders (open and completed), pouches**

- What would constitute an order? **Submitted or delivered**

- What specific tasks/functions should this perform?
  Update order status
  - What statuses? **Submitted, created, out for delivery**
  - Only view open order status? **Yes, but generates reports for all orders.**
  - Allows you to tap to view customer phone number and order details? **Yes**
  - Which fields do you want displayed in tracking orders? **Quantity, Delivery Location, total**

- System generate lists all open orders:
  - Due each daily/**week**/monthly or manually generated for specific feature.
  - View glimpse of orders (by quantity and type) due next day/week/month? **Yes-weekly**
  - Display payment status? **No**
  - Update payment status – (Internal memo: depends on a separate feature to receive payment for an order, provided with a list of up-to-date orders)? **No**
  - Allow to tap to view **full order details** or specific order details:
    - Type of items
    - Amount of items

- Allow filter/groupings by:
  - Delivery date? **Yes**
  - Pickup location? **Yes**

- Other
- Allow user to search
  Search by which fields/options? **No**

4. **The system should allow the user to update inventory levels.**

- Are all the bracelets done to order? **Yes**
- Are all the bracelets the same size or are there standard sizes offered? **No- based on measurement**
- What happened if the stock is stolen or lost? Would a recount be necessary? **Yes**
- What specifically would you want from this functionality? Give Suggestions such as editing, adding, deleting etc.
  Edit name, description, size charts – (beads, spacers, pendants), low level (beads, spacers)
  Add new collection items to inventory
  Delete legacy bracelets

5. **The system should be able to provide an estimate of the number of bracelets available for production and automatically integrate this data on the website**

- Which inventory levels are you looking to store?
  Number of Orders, Raw Material Levels (beads, string pendant, pouches, etc.)

- Is there a file that should be used to get the current/original inventory fields and levels? **No**

- Should all inventory be stored in its own section or both in its own section as well as individual tabs?
  In its own section. So if it was an app there would be a tab for inventory exclusively

- Automation? Would you want the inventory to automatically update based on the sale of an item or would you manually want to enter that information?
  Automatic Update. So, the only thing that would be manually updates is sale, and then everything would automatically update.

- Should there be a log of the changes made to inventory? **No**

- Should the new overall inventory be entered each time or just additions or subtractions?
  Update based on addition/subtraction

- What inventory fields outside of those that involve quantity would you want to store?
  Quantity, name, pendant, pouches, spacers.

- After inventory levels are updated should a verification message be displayed on the system or sent to the user? **No**

Follow-up Questionnaire to give clarity to system specifications and to narrow user requirements

The client was asked to rate the following requirements on a scale of 1-5 with 1 being high priority and 5 being the low priority

Inventory

The System shall allow the authorized user to create an Inventory Item: **1**
The System shall display inventory levels for all items. (beads, spacers, pendants, pouches): **1**
The System shall allow the authorized user to edit an Inventory Item: **1**
The System shall allow the authorized user to delete an inventory item: **2**
The System shall filter for all stock and low stock items: **1**

Stock Calculations

The System shall provide an estimate of the number of available bracelets: **1**
The System shall calculate the number of each bead required for the various standard-sized bracelets: **1**

Pickup Location

The System shall allow the authorized User to create pickup location: **2**
The System shall allow the authorized user to edit pickup location: **2**
The System shall allow the authorized user to delete pickup location: **2**
The System shall display a list of available pickup locations: **2**
The System shall filter pickup locations based on customer parish: **5**

Customer

The System shall allow an authorized user to create a customer record: **1**
The System shall allow an authorized user to edit customer details: **1**
The System shall display customers: **1**

Reporting

The System shall generate a weekly report of all orders and other relevant business data at the end of previous week: **1**
The System shall allow the authorized user to generate reports of orders by date: **1**
The System shall provide notification of Low Stock: **3**

Quality Requirements

The System shall operate on the customer's specified platform: **2**
The System shall provide on-demand accessibility to the authorized user: **1**
The System shall store all app data locally on the device for ensuring complete, accurate and accessible data: **1**

The System shall data protection techniques for data security, reliability, integrity and to prevent data loss: **1**
The System shall Encrypt all databases for privacy and security: **1**
The System should be developed using Java: **1**
The System shall only allow fully authorized users to use the system (SECURITY): **1**
The System should allow the authorized user to edit and reset their login credentials (SECURITY): **1**
The system shall require the user to be authenticated after a session goes idle for a user-specified time period in minutes (SECURITY): **3**