**JMM**

**Technology**

**SOFTWARE REQUIREMENTS SPECIFICATION**

**(SRS DOCUMENT) for**

**<Swift Stock -WAREHOUSE MANAGEMENT SYSTEM>**

Version 1.0

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| --- | --- | --- |
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|  |  |  |

* New requirements are written in orange
* requirements that may come in future and are not confirm in this version are written in purple

# Introduction

## Purpose of the document

The purpose of this document is to provide specifications about the WHMS application. The document shall contain use cases, descriptive use cases, and functional requirements. The reader of the document shall have a crystal clear image of what the end system shall look like. Following roles can take benefits from the document.

* Project Manager
* Software Developer
* UI/UX Designer
* Software Tester
* Product Owner

## Scope

This application is mainly target for warehouse owner who want to manage all departments of warehouse using an application.

The admin side will manage the contents of the website with the following major modules:

* Manage staff
* Manage Inventory
* Manage order
* Manage Storage Zones
* Manage Damage inventory
* Manage Return inventory
* Manage Delivery

The staff portal will have the following major modules:

* 1. Picking Department
  2. Packing Department
  3. Dispatching Department
  4. Courier Service

## Overview

The following functionalities will be included in this version of the system

**Admin**

* Login
* Manage staff
* Manage Inventory
* Manage order
* Manage Storage Zones
* Manage Damage inventory
* Manage Return inventory
* Manage Delivery

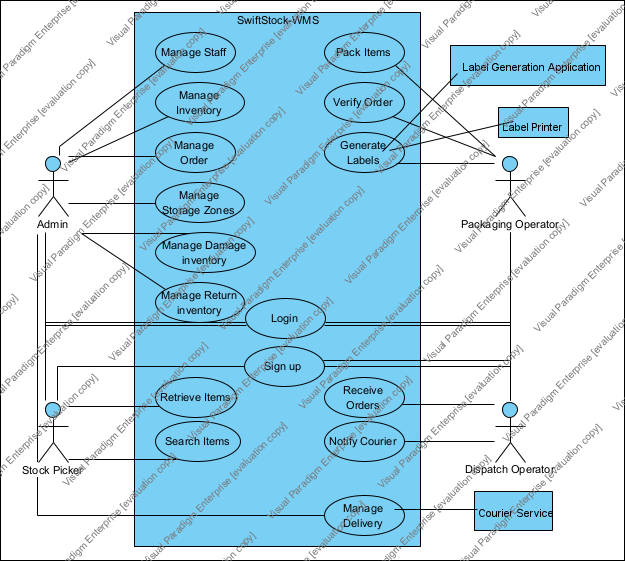
**Staff**

* 1. Picking Department
* Retrieve item
* Update item
* Search item
* Notify Packers
  1. Packing Department
* Pack item
* Verify Item
* Generate labels
  1. Dispatching Department
* Receive order
* Verify order
* Notify Dispatcher
  1. Courier Service
* View delivered order list
* Track order

## Definitions and acronyms

|  |  |
| --- | --- |
| **Acronym** | **Definition** |
| **WMS** | **Warehouse Management System** |

# Use case diagram



# Overall description

## UC-1: Login (admin side)

|  |  |
| --- | --- |
| **Use Case ID** | UC-1 |
| **Use Case Name** | Login |
| **Actors** | **Primary Actor:** admin |
| **Description** | As the user navigates to the system, will be directed to the login screen. User will have to provide his credentials to login to the system |
| **Trigger** | User wants to use the system |
| **Preconditions** | PRE-01: User must be a registered user |
| **Post conditions** | **POST-1** If the use case is successful, user will be able to login to the system |
| **Normal Flow** | 1. User accessed the system.  2. System displays the login screen.  3. User enters the required credentials.  4. System validates the credentials and allows the user to the system. |
| **Alternate flow** |  |
| **Exceptions** | system show error message when   * username and password do not match |
| **Business Rules** | - |

**Functional Requirements:**

|  |  |  |
| --- | --- | --- |
| **ID** | **Description** | **Group** |
| 1 | System should display the following fields:   1. username\* 2. Password\*   **BR-01:** If the user name/email and password match, the system should log in the user and will show the Application interface.  **BR-02:** If the user name and password does not match, the system should display an error message and will not let user login to the system | login |

## UC-2: Manage Staff

|  |  |
| --- | --- |
| **Use Case ID** | UC-2 |
| **Use Case Name** | Manage staff |
| **Actors** | **Primary Actor:** Admin |
| **Description** | Admin of the system manage all the staff of WMS including:   * Warehouse Manager * Warehouse Supervisors * Warehouse Workers * Inventory Managers * Data Entry Operators * Order Management Team * Quality Control Team   Admin add, delete or edit the details of the staff |
| **Trigger** | Admin want to add the new staff member  Admin want to remove the staff member  Admin want to edit the details of the staff member  Admin wants to add department  Admin wants to delete department  Admin want to assign tasks to staff member |
| **Preconditions** | PRE-01: User must be login to the system |
| **Post conditions** | **POST-1** user perform any of the triggered operation |
| **Normal Flow** | 1. Admin of the Swift Stock application have a staff for his warehouse 2. He want to manage his staff online 3. Admin access the system and navigate to the login screen 4. System display login screen 5. Admin enter the credentials 6. System verify the credentials and login the user 7. Admin navigate to the add staff screen 8. System display the add staff form 9. Admin enter the required fields and save 10. System display this new staff member to the staff Database |
| **Alternate flow** | - |
| **Exceptions** | system show error message when   * Any of the field’s format is incorrect |
| **Business Rules** | - |

**Functional Requirements:**

|  |  |  |
| --- | --- | --- |
| **ID** | **Description** | **Group** |
| 1 | Admin shall be able to view list of all the staff members  **BR-01:** Admin shall be able to view list of all the staff members with the following details   * id * Name * Position/Role * Department   Admin shall be able to view specific staff member  **BR-02:** Admin shall be able to view specific staff member with the following details   * Name * Id * Image * Education * Date of birth * Gender * Position * Date of joining | View staff |
| 2 | Admin shall be able to add the new staff member  **BR-01:** Admin shall be able to add the new staff member with the following details   * Name * Id * Image * Education * Date of birth * Gender * Position * Date of joining | Add staff |
| 3 | Admin shall be able to edit the staff member  **BR-01:** Admin shall be able to edit the staff member with the following details   * Name * Id * Image * Education * Date of birth * Gender * Position * Date of joining | Edit staff |
| 4 | Admin shall be able to delete the staff member | Remove staff |
| 5 | Admin shall be able to add new department  **BR-01:** Admin shall be able to add new department with the following details   * Name * description | Add department |
| 6 | Admin shall be able to delete department | Delete department |
| 7 | Admin shall be able to edit department  **BR-01:** Admin shall be able to add new department with the following details   * Name * description | Edit department |
| 8 | Admin shall be able to assign task to staff  **BR-01:** Admin shall be able to assign tasks to different department with the following details   * Picking * Packing * Dispatching | Assign tasks |

## UC-3: manage inventory

|  |  |
| --- | --- |
| **Use Case ID** | UC-3 |
| **Use Case Name** | Manage inventory |
| **Actors** | **Primary Actor:** Admin |
| **Description** | Admin can manage inventory in warehouse. |
| **Trigger** | * Admin wants to view all the new stock arrivals. * admin want to enter inventory details * admin want to remove inventory * admin want to update inventory |
| **Preconditions** | PRE-01: User must be login to the system |
| **Post conditions** | **POST-1** user perform the triggered operation |
| **Normal Flow** | 1. Admin visits the Swift Stock application 2. Admin have a lot of inventory and he wants to manage his inventory using an application 3. Admin login to the system and navigate to the inventory management section 4. System display the interface having lot of operations:  * View Inventory * Add Inventory * Remove Inventory * Update Inventory  1. Admin selects operation what he want to do with inventory 2. Selected operation interface is appearing to the admin. |
| **Alternate flow** | - |
| **Exceptions** |  |
| **Business Rules** |  |

**Functional Requirements**

|  |  |  |
| --- | --- | --- |
| **ID** | **Description** | **Group** |
| 1 | Admin shall be able to view 3 types of inventory   1. Electronics 2. Groceries 3. Stationary   **BR-01:** Admin shall be able to view all the inventory with the following details   * Inventory Name * Category * status (new, in-progress, complete) * Action(View, delete) | View inventory |
| 2 | Admin shall be able to enter inventory    **BR-01:** admin shall be able to enter the new inventory with the following details   * Category\* * Name * Image * Price | Enter Inventory |
| 3 | Admin shall be able to remove inventory | Remove inventory |
| 4 | Admin shall be able to update inventory    **BR-01:** admin shall be able to update the inventory with the following details   * Category\* * Name * Image * Price | Update inventory |

## UC-4: Manage Order

|  |  |
| --- | --- |
| **Use Case ID** | UC-4 |
| **Use Case Name** | Manage Order |
| **Actors** | **Primary Actor:** Admin |
| **Description** | Admin can manage all the order from customers |
| **Trigger** | * Admin wants to track order in warehouse. * admin want to split order * admin want to combine order * admin want to modify order |
| **Preconditions** | PRE-01: User must be login to the system |
| **Post conditions** | **POST-1** user perform the triggered operation |
| **Normal Flow** | 1. Admin go to Swift Stock application 2. Admin wants to track the order 3. Admin login to the system and navigate to Order management 4. Admin click on track order 5. Order is tracked and Admin will know the status of order and detect its department |
| **Alternate flow** | - |
| **Exceptions** |  |
| **Business Rules** |  |

**Functional Requirements**

|  |  |  |
| --- | --- | --- |
| **ID** | **Description** | **Group** |
| 1 |  |  |

## UC-5: Manage storage zones

|  |  |
| --- | --- |
| **Use Case ID** | UC-5 |
| **Use Case Name** | Manage storage zones |
| **Actors** | **Primary Actor:** Admin |
| **Description** | Admin of the application manage storage zones like:   * Create storage zones * Modify storage zones * Assign items to storage zones |
| **Trigger** | * Admin wants to Create storage zones in WMS * admin want to modify storage zone * admin want to assign items in storage zones |
| **Preconditions** | PRE-01: User must be login to the system |
| **Post conditions** | **POST-1** user perform any if the triggered operations |
| **Normal Flow** | 1. Admin go to Swift Stock application 2. Admin wants to manage the storage zone 3. Admin login to the system and navigate to Storage zone management 4. Admin click on create storage zone 5. Storage zone is created in WMS and Admin will now manage zones with different operations |
| **Alternate flow** | - |
| **Exceptions** | - |
| **Business Rules** | - |

**Functional Requirements**

|  |  |  |
| --- | --- | --- |
| **ID** | **Description** | **Group** |
| 1 | Admin shall be able to create storage zone in WMS including:   * Name * Location * Capacity | Create Storage Zone |
| 2 | Admin shall be able to modify storage zone in WMS including:   * Name * Location * Capacity | Modify Storage zone |
| 3 | Admin shall be able to assign items to storage zone in WMS including:   * Name * Location * Category | Assign Items |

## UC-6: Manage Damage inventory

|  |  |
| --- | --- |
| Use Case ID | UC-6 |
| Use Case Name | Manage Damage inventory |
| Actors | **Primary Actor:** Admin |
| Description | In this use case, the admin wants to manage damage inventory in his warehouse |
| Trigger | * The Admin wants to check for a damage inventory in WMS * The admin wants to view damage inventory list * The admin wants to record damage inventory |
| Preconditions | 1. User must have logged into the system |
| Post conditions | **POST-1** User performs any of the triggered operations |
| Normal Flow | 1. Admin go to Swift Stock application 2. Admin wants to manage the damage inventory 3. Admin login to the system and navigate to Damage inventory management 4. Admin click on view damage items 5. List of damage items is displayed in WMS and Admin will now manage damage items with different operations |
| Exceptions | - |
| Business Rules | - |

**Functional Requirements**

|  |  |  |
| --- | --- | --- |
| **ID** | **Description** | **group** |
| 1 | Admin shall be able to view damage inventory list including:   * Item description * Quantity * Name * Category * Cause of damage | view damage inventory |
| 2 | Admin shall be able to record damage inventory list including:   * Item description * Quantity * Name * Category * Cause of damage | Record damage inventory |

## UC-7: Manage Return Inventory

|  |  |
| --- | --- |
| Use Case ID | UC-7 |
| Use Case Name | Manage Return Inventory |
| Actors | **Primary Actor:** Admin |
| Description | In this use case, the admin shall be able to manage the return inventory in WMS |
| Trigger | * The admin want to approve return * the admin want to update inventory * the admin want to reject return |
| Preconditions | 1. User must have logged into the system |
| Post conditions | **POST-1** User performs any of the triggered operations |
| Normal Flow | 1. Admin go to Swift Stock application 2. Admin wants to manage the return inventory 3. Admin login to the system and navigate to Return inventory management 4. Admin click on view return items 5. List of return items is displayed in WMS and Admin will now manage return items with different operations |
| Exceptions | - |
| Business Rules | - |

**Functional Requirements**

|  |  |  |
| --- | --- | --- |
| **ID** | **Description** | **group** |
| 1 | Admin shall be able to view return inventory list including:   * Return date * Quantity * Name * Category * Cause of return | view return inventory |
| 2 | Admin shall be able to approve return inventory including:   * Return date * Quantity * Name * Category * Cause of return | Authorize return approval |
| 3 | admin shall be able to reject the return request | Reject Return |
| 4 | admin shall be able to update the inventory | Update inventory |

# **WMS Staff side**

## UC-8: sign up

|  |  |
| --- | --- |
| Use Case ID | UC-7 |
| Use Case Name | Sign up |
| Actors | **Primary Actor:** Stock picker, Packaging operator, Dispatch operator. |
| Description | The WMS staff can create user accounts in the application to login to the application |
| Trigger | * WMS staff want to Operate with inventory |
| Preconditions | * The WMS staff must have internet connection |
| Post conditions | **POST-1** WMS staff can log in to the application |
| Normal Flow | * WMS staff visit WMS application * WMS staff finds his desired department and want to operate with inventory. * WMS staff don’t have account in order to purchase the template * Customer don’t want to use his phone number or social media accounts in order to sign in * **Swift Stock** give its users the sign up option * Customer go to the sign up page * Enter the credentials * System send verification link to the entered email * Customer verify the email by clicking the link * System confirms verification * Customer can now buy the templates |
| Exceptions |  |
| Business Rules |  |

**Functional Requirements**

|  |  |  |
| --- | --- | --- |
| **ID** | **Description** | **Group** |
| 1 | User shall be able to sign up with following details   * Full name\* * Phone number\* * Email\* * Password\*   **BR-01:** email verification link shall send at the entered email  **BR-02:** password must be 8 characters long containing one upper case letter, one special character and digits | Sign up |

## UC-9: Login

|  |  |
| --- | --- |
| **Use Case ID** | UC-8 |
| **Use Case Name** | Login |
| **Actors** | **Primary Actor:** Stock picker, Packaging operator, Dispatch operator. |
| **Description** | As the user navigates to the system, and want to perform the operations in WMS then system will show the login screen and user have to login in order to perform operations |
| **Trigger** | User wants to perform operations on inventory |
| **Preconditions** | PRE-01: User must have email or phone number |
| **Post conditions** | **POST-1** If the use case is successful, user will be able to login to the system |
| **Normal Flow** | 1. Staff need to perform operations on inventory 2. Staff install and open Swift Stock application 3. System ask the staff to login 4. Staff navigate to login screen 5. System displays the login screen. 6. User enters the sign in method and enter the required credentials 7. System validates the credentials and staff can now proceed to operations |
| **Alternate flow** |  |
| **Exceptions** | system show error message when   * email and password do not match |
| **Business Rules** | - |

**Functional Requirements:**

|  |  |  |
| --- | --- | --- |
| **ID** | **Description** | **Group** |
| 1 | System should display the following fields when login with email   * Email\* * Password\*   System should display the following fields when login with mobile number   * Mobile number * Verification code   **BR-01:** If the user name/email and password match, the system should log in the user and will load the interface of application  **BR-02:** If the user name, verification code of SMS and password does not match, the system should display an error message and will not let user login to the system  **BR-03:** the system shall send verification code on mobile number of the staff if he login with mobile number | login |
| 2 | System shall provide an option “forgot password?” by clicking on which system shall provide a field:   * Email   **BR - 01:** The system shall be sending a recover password link to the user's email  **BR - 02:** The system shall be checking if the email exists for the user or not  **BR - 03:** On the recovery link, the system shall provide the following fields:   * New password\* * Confirm password\* | Forget password |

## UC-10 Retrieve items

|  |  |
| --- | --- |
| **Use Case ID** | UC-9 |
| **Use Case Name** | Retrieve items |
| **Actors** | Primary Actor: Stock picker |
| **Description** | This use case outlines the process of retrieving items from a warehouse using a mobile application equipped with barcode scanning capabilities. |
| **Trigger** | 1. User wants to retrieve items in WMS 2. user wants to update inventory 3. User wants to give a notification to packing department that items is ready to pack |
| **Preconditions** | -User must be logged in  - The mobile application is installed and functional on the staff's mobile device.  - The warehouse contains items with unique barcode labels. |
| **Post conditions** | POST-1 - The warehouse inventory is updated to reflect the retrieved items.  POST-2 - The staff has successfully retrieved the requested items. |
| **Normal Flow** | 1. Warehouse staff logs into the mobile application using their credentials.  2. The staff selects the "Retrieve Items" option from the application's main menu.  3. The application activates the mobile device's camera for barcode scanning.  4. The staff positions the mobile device's camera in front of the barcode label on the item they want to retrieve.  5. The application scans the barcode and identifies the item based on the barcode data.  6. The application retrieves the item details, such as its name, location, and quantity in stock, from the database.  7. The application displays the item details on the mobile device screen.  8. If there are multiple items of the same type in different locations, the application provides a list of available locations to choose from.  9. The staff selects the appropriate location from the list (if applicable).  10. The application generates a retrieval confirmation, including the item name, quantity, and location (if applicable).  11. The staff verifies the retrieval information on the mobile device.  12. If everything is correct, the staff clicks the "Confirm" button to initiate the retrieval process.  13. The application updates the warehouse inventory in real-time, marking the item as "being retrieved."  14. The staff proceeds to the specified location and picks up the item.  15. Once the item is retrieved, the staff returns to the application and clicks the "Complete" button to finalize the retrieval process.  16. The application updates the warehouse inventory again, marking the item as "retrieved" and adjusting the stock quantity accordingly.  17. The staff can repeat the process to retrieve more items or choose to log out of the application when finished. |
| **Alternate flow** |  |
| **Exceptions** |  |
| **Business Rules** |  |

**Functional Requirements:**

|  |  |  |
| --- | --- | --- |
| **ID** | **Description** | **Group** |
| 1 | Stock picker shall be able to retrieve items.   * **BR-01:** The application retrieves the item details, such as: * Name * Location * quantity in stock | Retrieve items |
| 2. | Stock picker shall be able update inventory.   * **BR-01:** The application updates the warehouse inventory including: * Name * Location * quantity in stock | Update inventory |
| 3. | Stock picker shall be able to notify the packaging department that inventory is ready to be packed. | Notify packer |

## UC-11: Search items

|  |  |
| --- | --- |
| **Use Case ID** | UC-9 |
| **Use Case Name** | Search items |
| **Actors** | Primary Actor: Stock picker |
| **Description** | This use case outlines the process of searching for and retrieving specific items from a warehouse using an application with search functionality. |
| **Trigger** | User wants to search inventory |
| **Preconditions** | -User must be connected to the internet  - The application is accessible and functional on the staff's computer or mobile device.  - The warehouse contains items with identifiable attributes stored in the application's database. |
| **Post conditions** | POST-1 - The warehouse inventory is updated to reflect the retrieved items.  POST-2- The staff has successfully retrieved the requested items. |
| **Normal Flow** | 1. Warehouse staff accesses the application through a web browser on their computer or mobile device.  2. The staff logs into the application using their credentials.  3. The application presents a search bar where the staff can enter relevant item details, such as item name, category.  4. The staff enters the item details they wish to retrieve into the search bar and clicks the "Search" button.  5. The application queries the database based on the search criteria and retrieves matching items.  6. The application displays a list of items that match the search criteria, along with their corresponding details (e.g., name, quantity, location).  7. The staff reviews the list and selects the desired item they want to retrieve by clicking on it.  8. The application provides additional details about the selected item, such as its current stock level and location in the warehouse.  9. The staff confirms that the selected item is the one they intend to retrieve.  10. If there are multiple items of the same type in different locations, the application provides a list of available locations to choose from.  11. The staff selects the appropriate location from the list (if applicable).  12. The application generates a retrieval confirmation, including the item name, quantity, and location (if applicable).  13. The staff verifies the retrieval information on the application interface.  14. If everything is correct, the staff clicks the "Confirm" button to initiate the retrieval process.  15. The application updates the warehouse inventory in real-time, marking the item as "being retrieved."  16. The staff proceeds to the specified location and picks up the item.  17. Once the item is retrieved, the staff returns to the application and clicks the "Complete" button to finalize the retrieval process.  18. The application updates the warehouse inventory again, marking the item as "retrieved" and adjusting the stock quantity accordingly.  19. The staff can repeat the process to retrieve more items or choose to log out of the application when finished. |
| **Alternate flow** |  |
| **Exceptions** |  |
| **Business Rules** |  |

**Functional Requirements:**

|  |  |  |
| --- | --- | --- |
| **ID** | **Description** | **Group** |
|  |  |  |

## UC-12: Pack items

|  |  |
| --- | --- |
| **Use Case ID** | UC-10 |
| **Use Case Name** | Pack items |
| **Actors** | **Primary Actor**: Packaging operator |
| **Description** | This use case outlines the process of packing items in the packing department of a warehouse using a mobile application equipped with packing functionalities. |
| **Trigger** | Packaging operator wants to pack the items |
| **Preconditions** | -Packaging operator must be login to the application  - The mobile application is installed and operational on the packer's mobile device.  - The picking process has been completed, and the items to be packed are ready for packaging |
| **Post conditions** | POST-1 - The items are successfully packed and ready for further processing.  POST-2- The warehouse inventory is updated to reflect the packed items. |
| **Normal Flow** | 1. The warehouse packer logs into the mobile application using their credentials.  2. The packer selects the "Pack Items" option from the application's main menu to initiate the packing process.  3. The application displays a list of items that need to be packed, along with their details, such as item name, quantity, and order number.  4. The packer selects the first item from the packing list and begins the packing process.  5. The application prompts the packer to select the appropriate packaging materials (e.g., box, envelope).  6. The packer carefully places the item into the selected packaging material, ensuring it is securely packed to prevent any damage during transit.  7. The application allows the packer to take a photo of the packed item (optional) to document the packaging process and provide evidence of the item's condition before shipping.  8. The packer repeats steps 5 to 8 for each item in the packing list, following the same packaging procedures for each item. |
| **Alternate flow** |  |
| **Exceptions** | The system show error message if the items are not packed |
| **Business Rules** |  |

**Functional Requirements:**

|  |  |  |
| --- | --- | --- |
| **ID** | **Description** | **Group** |
| 1 | The application displays a list of items that need to be packed, along with their details,   * item name * quantity * order number | Pack items |
|  |  |  |

## UC-13: Verify Order

|  |  |
| --- | --- |
| **Use Case ID** | UC-11 |
| **Use Case Name** | Verify Order |
| **Actors** | **Primary Actor**: Packaging operator |
| **Description** | This use case outlines the process of verify packing items in the packing department of a warehouse using a mobile application equipped with verification functionalities |
| **Trigger** | Packaging operator wants to verify the packed items |
| **Preconditions** | -User must be login to the application  - The mobile application is installed and operational on the packer's mobile device.  - The picking process has been completed, and the items to be packed are ready for packaging. |
| **Post conditions** | POST-1 - The items are successfully packed and ready for further processing.  POST 2- The warehouse inventory is updated to reflect the packed items. |
| **Normal Flow** | 1. The warehouse packer logs into the mobile application using their credentials.  2. The packer selects the "Pack Items" option from the application's main menu to initiate the packing process.  3. The application displays a list of items that need to be packed, along with their details, such as item name, quantity, and order number.  4. The packer verifies that the items displayed on the mobile device match the items they have in front of them for packing.  5. The packer selects the first item from the packing list and begins the packing process.  6. The application prompts the packer to select the appropriate packaging materials (e.g., box, envelope).  7. The packer carefully places the item into the selected packaging material, ensuring it is securely packed to prevent any damage during transit.  8. The application allows the packer to take a photo of the packed item (optional) to document the packaging process and provide evidence of the item's condition before shipping.  9. The packer repeats steps 5 to 8 for each item in the packing list, following the same packaging procedures for each item.  10. Once all items have been packed, the application prompts the packer to verify the contents of each package against the packing list to ensure accuracy.  11. The packer reviews the list and checks the packed items against the order details displayed on the mobile device.  12. If there are any discrepancies or missing items, the packer can adjust the packing list accordingly and update the application with the correct information.  13. Once the packing list is verified and accurate, the packer clicks the "Complete" button to finalize the packing process.  14. The application updates the order status and the warehouse inventory in real-time, marking the items as "packed" and adjusting the stock quantity accordingly.  15. After the packing process is complete, the packer can either proceed to the shipping department for further processing or log out of the application. |
| **Alternate flow** |  |
| **Exceptions** | System shows an error message if items are not properly verify |
| **Business Rules** |  |

**Functional Requirements:**

|  |  |  |
| --- | --- | --- |
| **ID** | **Description** | **Group** |
| 1 | Packaging operator shall be able to notify the Dispatching department that items are ready to dispatched | Notify Dispatching Department |
|  |  |  |

## UC-14: Generate Labels

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| **Use Case ID** | UC-12 |
| **Use Case Name** | Generate labels |
| **Actors** | **Primary Actor**: Packaging operator  **Secondary Actor**: Label Generation Application, Label printer |
| **Description** | This use case outlines the process of generating and printing labels for packed items in the packing department of a warehouse using a dedicated label generation application. |
| **Trigger** | Packaging operator wants to generate labels for packed items |
| **Preconditions** | - The label generation application is installed and operational on the packer's computer or mobile device.  - The packing process has been completed, and items are ready for labeling. |
| **Post conditions** | POST-1 - - The packed items are labeled with accurate and properly formatted labels...  POST 2- - The packages are ready for shipping or handling with the generated labels. |
| **Normal Flow** | 1. The warehouse packer logs into the label generation application using their credentials.  2. The packer selects the "Generate Labels" option from the application's main menu to initiate the label generation process.  3. The application displays a list of packed items  4. The packer selects the first item from the list to generate a label.  5. The application prompts the packer to choose the label format and template based on the packaging requirements and shipping standards.  6. The packer enters any necessary information  7. The packer reviews the label preview on the application to ensure all information is accurate and correctly formatted.  8. Once satisfied, the packer clicks the "Generate Label" button to create the label.  9. The label generation application communicates with the label printer to send the label data for printing.  10. The label printer prints the generated label according to the chosen format and template.  11. The packer attaches the printed label securely to the corresponding package, ensuring it is prominently displayed and visible for shipping or handling.  12. The packer repeats steps 4 to 11 for each item that requires labeling.  13. After all labels have been generated and attached to the packages; the packer reviews the packing list and labels to verify accuracy and completeness.  14. If any discrepancies or errors are identified, the packer can make corrections in the label generation application and reprint the labels as needed.  15. Once the labeling process is complete and accurate, the packer can proceed to the shipping department for further processing or log out of the application. |
| **Alternate flow** |  |
| **Exceptions** | System shows an error message if there is no paper for printing |
| **Business Rules** |  |

**Functional Requirements:**

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| **ID** | **Description** | **Group** |
| 1 | The application displays a list of packed items that require labels, along with their respective details,   * item name * quantity * Order number. | Generate labels |
| 2 | The packer enters any necessary information   * shipping address * tracking number | Enter information |
| 3 | The packer will notify dispatching staff/module that items are ready to be dispatched | Notify Dispatching Department |

## UC-15: Receive Order

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| **Use Case ID** | UC-13 |
| **Use Case Name** | Receive order |
| **Actors** | **Primary Actor**: Dispatch operator |
| **Description** | This use case outlines the process of receiving an incoming order in the dispatching department of a warehouse using a mobile application. |
| **Trigger** | Dispatch operator wants to receive items  Dispatch operator wants to verify items  Dispatch operator wants to notify delivery staff |
| **Preconditions** | - The mobile application is installed and operational on the dispatcher's mobile device.  - The order has been packed, labeled, and is ready for dispatch. |
| **Post conditions** | POST-1 - - The pending orders are received, verified, and ready for final processing and dispatch.  POST 2- -- The order status is updated to reflect the successful receipt. |
| **Normal Flow** | 1. The warehouse dispatcher logs into the mobile application using their credentials.  2. The dispatcher selects the "Receive Order" option from the application's main menu to initiate the order receiving process.  3. The application displays a list of pending orders that are ready for dispatch, along with their order numbers and relevant details.  4. The dispatcher selects the first order from the list to receive and verify.  5. The application presents the details of the selected order  6. The dispatcher compares the displayed information with the physical order and checks for any discrepancies or irregularities.  7. If the order details are accurate, the dispatcher confirms the receipt by clicking the "Receive" button.  8. The application updates the order status to "Received" and marks it as ready for final processing.  9. The dispatcher repeats steps 4 to 8 for each pending order in the list.  10. If any discrepancies or issues are identified, the dispatcher can make necessary adjustments in the application or contact relevant personnel to address the concerns.  11. Once all pending orders have been received and verified, the dispatcher can review the complete list of received orders on the mobile device screen.  12. The dispatcher can generate and print a receipt or confirmation document for each received order, if required.  13. After completing the necessary post-receipt tasks, the dispatcher can choose to proceed with further order processing or log out of the application. |
| **Alternate flow** |  |
| **Exceptions** |  |
| **Business Rules** |  |

**Functional Requirements:**

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| **ID** | **Description** | **Group** |
| 1 | The application presents the details of the selected order, including   * Customer's information * shipping address * items in the order * Quantities. | Receive order |

## UC-16: Notify Courier

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| **Use Case ID** | UC-14 |
| **Use Case Name** | Notify Courier |
| **Actors** | **Primary Actor**: Dispatch operator |
| **Description** | This use case outlines the process of notify the courier service that items are ready to be delivered in the dispatching department of a warehouse using a mobile application. |

## UC-17: Manage Delivery

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| **Use Case ID** | UC-15 |
| **Use Case Name** | Manage Delivery |
| **Actors** | **Primary Actor:** Admin  **Secondary Actor**: Courier service |
| **Description** | This use case outlines the process of managing delivery order using a mobile application. |
| **Trigger** | Admin wants to view delivered items list  Admin wants to track items |
| **Preconditions** | - The mobile application is installed and operational on the admin mobile device.  - The order has been dispatched, labeled, and is delivered. |
| **Post conditions** | POST-1 - The Delivered order list are viewed.  POST 2- -The order is tracked. |
| **Normal Flow** | 1. The warehouse Admin logs into the mobile application using their credentials.  2. The admin selects the "View delivered order" option from the application's main menu to initiate the order tracking process.  3. The application displays a list of pending orders that are ready for delivered, along with their order numbers and relevant details.  4. The admin see the order list.  5. The application presents the details of the selected order  4. After completing the necessary tasks, the admin can proceed with log out of the application. |
| **Alternate flow** |  |
| **Exceptions** |  |
| **Business Rules** |  |

**Functional Requirements:**

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| **ID** | **Description** | **Group** |
| 1 | The application presents the details of the selected order, including   * Customer's information * shipping address * items in the order * Status | View delivered Items |
| 2 | The application presents the details of the selected order, including   * Customer's information * shipping address * items in the order * Status | Track order |