**Sales & Inventory Management System:**

This application will be capable to maintain user management, adding new item to the inventory & update inventory information, store the details of the inventory, update the inventory based on the sale details, generate sales & inventory reports periodically, inventory trends etc.

Application will contain below functionalities;

1. **Sales person**

Description: Can login to the system through the first page of the application and can do the following tasks.

* Login to the system through the initial screen of the system
* Change the password after logging into the system
* See the status of the inventory, ie, whether a particular item is available or not etc
* Search for a particular item by typing the initial letters or by category-wise OR item code-wise
* Enter the items purchased by a customer and produce a bill for the same (the bill will have a unique sale id, date, time, item/quantity/price details etc)
* Inform the inventory manager about the items that are not available, so that they can be stocked
* Inform the sales manager about any exceptions (such as an item is being purchased, but it is not available in the system)

1. **Inventory manager**

Description: Can login to the system through the first page of the application and can do the following tasks.

* Login to the system/change his password after logging in etc
* Check the status of the inventory
* See the reports from sales people about items that are not available and need to be kept in the inventory
* Validate the inventory against the sales done in the previous day (whether the items that are sold and the change in the inventory for the corresponding items match etc)
* Generate inventory reports (daily/weekly/monthly/quarterly) of the items category-wise, price-wise etc
* Generate inventory-trends

1. **Sales manager**

Description: Can login to the system through the first page of the application and can do the following tasks.

* Login to the system/change his password after logging in etc
* Cancel the produced bill, in case of error in entering the details, and produce a new one
* Take back an already sold item that is not satisfactory to the customer (the shop allows that) and produce a receipt for the same
* Check how many bills have been generated in the day so far
* Check how much money is transacted in the day so far
* Check how many bills have been cancelled so far in the day(due to wrong entry by the sales persons)
* Check how many items have been returned so far in the day
* Check for any exception reports from the sales persons and correct it by contacting the inventory manager
* Generate sales-trend graphs for each of the item (like how is apple selling in the last one month)

**Colors indicates Use case items.**

1. **Administrator**

**Description:** Can login to the system through the first page of the application and Can create new user account for an employee and assign (if existing user) username and password.

* Login to the system and change his password after logging in
* Add new users to the system
* Add new items/categories to the inventory
* Change the price of an item

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| --- | --- | --- | --- | --- |
| **Use Case ID:** | Enter a unique numeric identifier for the Use Case. e.g. UC-1.2.1 | | | |
| **Use Case Name:** | **Search Item** | | | |
| **Created By:** |  | | **Last Updated By:** |  |
| **Date Created:** |  | | **Last Revision Date:** |  |
| **Actors:** | | Sales Person, Inventory Manager, Sales Manager | | |
| **Description:** | | Actor will search the product as per customer requirements like purchase/ return/ cancel product | | |
| **Trigger:** | | Whenever customer is looking for purchase/ return/ cancel product | | |
| **Preconditions:** | | 1. User should be logged in 2. Product should be registered (by category)   [List any activities that must take place, or any conditions that must be true, before the use case can be started. Number each pre-condition. e.g.   1. Customer has active deposit account with ATM privileges 2. Customer has an activated ATM card.] | | |
| **Postconditions:** | | 1. Show the available product details including stock, price 2. Show the product sale/ return/ cancel information 3. If information is not available, I t should show Product is not available or sale/ return/ cancel information is not correct   [Describe the state of the system at the conclusion of the use case execution. Should include both *minimal guarantees* (what must happen even if the actor’s goal is not achieved) and the *success guarantees* (what happens when the actor’s goal is achieved. Number each post-condition. e.g.   1. Customer receives cash 2. Customer account balance is reduced by the amount of the withdrawal and transaction fees] | | |
| **Normal Flow:** | | 1. User logged-in properly 2. Provide Invoice Id or Product Id to get the product information 3. Based on the Invoice Id or Product Id, list down the product 4. By clicking the product list, product information will be visible | | |
| **Exceptions:** | | 1. If information is not available, show message product information is incorrect 2. If Product Id is not correct, show message “ Incorrect Id” | | |

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| --- | --- | --- | --- | --- |
| **Use Case ID:** | Enter a unique numeric identifier for the Use Case. e.g. UC-1.2.1 | | | |
| **Use Case Name:** | **Product Stock and/or price update** | | | |
| **Created By:** |  | | **Last Updated By:** |  |
| **Date Created:** |  | | **Last Revision Date:** |  |
| **Actors:** | | Inventory Manager | | |
| **Description:** | | Actor will view the product status (category wise), update the new product | | |
| **Trigger:** | | 1. Whenever there is a demand for product 2. Whenever new product need to be updated 3. To check the product status | | |
| **Preconditions:** | | 1. User should be logged in 2. Should have product demand or request 3. Request for new product update   [List any activities that must take place, or any conditions that must be true, before the use case can be started. Number each pre-condition. e.g.   1. Customer has active deposit account with ATM privileges 2. Customer has an activated ATM card.] | | |
| **Post-conditions:** | | 1. Need to rollback if any failure during the information update 2. Update the product storage 3. Reflect updated product storage information in other roles 4. Reflect the updated product price   [Describe the state of the system at the conclusion of the use case execution. Should include both *minimal guarantees* (what must happen even if the actor’s goal is not achieved) and the *success guarantees* (what happens when the actor’s goal is achieved. Number each post-condition. e.g.   1. Customer receives cash 2. Customer account balance is reduced by the amount of the withdrawal and transaction fees] | | |
| **Normal Flow:** | | 1. User logged-in properly 2. Search by product id 3. Update the new stock or product price or both 4. Also update the warehouse entry tracking no, entry date. 5. Confirm the update information 6. View the updated information 7. Send confirmation/notification to Sales manager | | |
| **Exceptions:** | | 1. Rollback the transaction in case of any failure 2. Update the information again | | |
| **Use Case ID:** | | Enter a unique numeric identifier for the Use Case. e.g. UC-1.2.1 | | |
| **Use Case Name:** | | Reporting | | |
| **Created By:** |  | | **Last Updated By:** |  |
| **Date Created:** |  | | **Last Revision Date:** |  |
| **Actors:** | | Sales Manager, Inventory Manager | | |
| **Description:** | | Actor will view the product inventory (daily/weekly/monthly/quarterly) status (category/date wise) | | |
| **Trigger:** | | 1. Whenever Product Stock and/or price updated 2. Whenever Sales Manager wants to get the store report 3. Whenever any mismatch occur regarding product storage | | |
| **Preconditions:** | | 1. User should be logged in 2. Search by date and/or product id and/or product category and/or sales person   [List any activities that must take place, or any conditions that must be true, before the use case can be started. Number each pre-condition. e.g.   1. Customer has active deposit account with ATM privileges 2. Customer has an activated ATM card.] | | |
| **Post-conditions:** | | 1. Will show the “error message” if report is not available 2. Will show the total row count on top of the report   [Describe the state of the system at the conclusion of the use case execution. Should include both *minimal guarantees* (what must happen even if the actor’s goal is not achieved) and the *success guarantees* (what happens when the actor’s goal is achieved. Number each post-condition. e.g.   1. Customer receives cash 2. Customer account balance is reduced by the amount of the withdrawal and transaction fees] | | |
| **Normal Flow:** | | 1. User logged-in properly 2. View the list of the reports 3. User will click the report based on the requirement 4. Search by date and/or product id and/or product category and/or sales person 5. Update the new stock or product price or both 6. Also update the warehouse entry tracking no, entry date. 7. Confirm the update information 8. View the updated information 9. Send confirmation/notification to Sales manager | | |
| **Exceptions:** | | 1. Rollback the transaction in case of any failure 2. Update the information again | | |