CODEJAR

User Requirement Specification
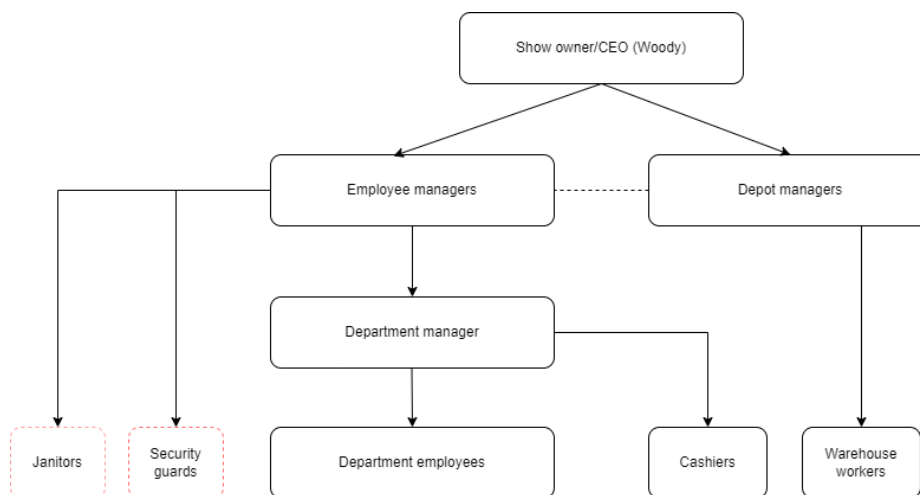
CONTENTS

INTRODUCTION

This document aims to provide insight into the technical aspects of the project for the **first 6 weeks** (waterfall phase).

In order to make the user requirements more easily understandable and imaginable, we have created the following employee hierarchy scheme.

(Fig.1)

Note: Janitors and Security personnel will not have any interaction with the software in its initial versions.

This document uses the MoSCoW user requirement classification system, in which each letter stands for the following:

M – Must have: will be implemented mandatorily
S – Should have: will be implemented but possibly not during the first phase.
C – Could have: potential ideas that are not essential but might be implemented at some point
W – Won't have: features that will not be implemented

EMPLOYEES

1. FR-01 (M): Employees must be able to log in the software (except for janitors and security personnel)
2. FR-02 (M): Employees must be able to log out of the software
3. FR-03 (M): The program will feature different types of employees as in Fig.1
4. FR-04 (M): Employee managers must be able to see all the employees
5. FR-05 (M): Employee managers must be able to add employees.
6. FR-06 (M): Employee managers must be able to remove employees.
7. FR-07 (M): Employee managers must be able to edit the details of employees.
8. FR-08 (S): CEO has no restrictions to any features
9. FR-09 (S): Departments can be added or removed by employee managers

SCHEDULING

10. FR-10 (S): Employee managers should be able to assign shifts to personnel
11. FR-11 (S): Employee managers should be able to delete shifts of personnel
12. FR-12 (S): Employee managers should be able to view the work schedule for all personnel
13. FR-13 (S): Department managers can view the employees and shifts in their department
14. FR-14 (C): Department managers can mark attendance for department employees
15. FR-15 (S): Depot managers can view the details of warehouse workers and their shifts
16. FR-16 (C): Depot managers can mark attendance for warehouse workers

INVENTORY & SALES

17. FR-17 (S): Certain employees should be able to see the inventory
18. FR-18 (S): Depot managers can modify (order/restock) the inventory
19. FR-19 (S): Depot managers can add new products

20. FR-20 (S): Depot managers can remove products
21. FR-21 (S): Cashiers can sell products from the inventory
22. FR-22 (S): Cashiers can send restock requests
23. FR-23 (C): Cashiers can use barcode scanner to easily sell products

USE CASES

UC-01

Use case: Log in the application

Actor: Employee

 Main Success Scenario:

1.   Employee fills out credentials and confirms
2.   System navigates user to app's home page

Extensions:

1a. Credentials are incorrect

1.   System displays wrong credentials message
2.   End of use case

UC-02

Use case: Log out the application

Actor: Employee

 Main Success Scenario:

1.   Employee clicks log out button
2.   System navigates user to app's log in page

Use case: Employee managers see the details of employees.

Actor: Employee manager

Pre-Condition: Logged in as Employee manager

Main Success Scenario

1. User clicks "Manage employees" Button
2. System navigates user to "Manage employees" screen
3. System displays list of employees

Use case: Employee managers adds an employee to the system

Actor: Employee manager

Pre-Condition: Logged in as Employee manager

        On the "Manage employees" screen

Main Success Scenario

1. User clicks "Add employee" button
2. System navigates to "Add employee" screen
3. User fills new employee's details
4. User clicks "Add employee to list" button
5. System adds employee to the database
6. System displays success message

Extension:

4a. Employee details are incorrect

      1. System displays error message

      2. Return to MSS step 3

Use case: Employee managers removes an employee from the system

Actor: Employee manager

Pre-Condition: Logged in as Employee manager

On the "Manage employees" screen

Main Success Scenario

1. User selects employee to be removed from list
2. User clicks "Remove employee button" and confirms
3. System removes the employee
4. System displays success message

Extension:

2a: User clicks "Remove employee" button and rejects confirmation

1. End of use case

Use case: Employee managers edits the details of an employee.

Actor: Employee manager

Pre-Condition: Logged in as Employee manager

On the "Manage employees" screen

Main Success Scenario

1. User selects an employee form the list
2. User clicks "Edit info" button
3. System navigates to "Edit info" Screen
4. User fills in new employee information
5. User clicks "Submit changes" button
6. System displays success message
7. System navigates to "Manage employees" screen

Extension:

5a. Employee details are incorrect

1. System displays error message

2. Return to MSS step 4

UC-07

Use case: Employee manager sees all departments

Actor: Employee manager

Pre-Condition: Logged in as Employee manager

Main Success Scenario

1. User clicks "Manage departments" button
2. System navigates to "Manage departments" screen
3. System displays departments info

UC-08

Use case: Employee managers adds a department to the system

Actor: Employee manager

Pre-Condition: Logged in as Employee manager

       On the "Manage departments" screen

Main Success Scenario

1. User fills new department's details
2. User clicks "Add department" button
3. User clicks "Add department to list" button
4. System adds department
5. System displays success message

Extension:

4a. Department details are incorrect

1. System displays error message

2. Return to MSS step 3

Use case: Employee managers removes a department from the system

Actor: Employee manager

Pre-Condition: Logged in as Employee manager

On the "Manage department" screen

Main Success Scenario

1. User selects department to be removed from list
2. User clicks "Remove department button" and confirms
3. System removes the department
4. System displays success message

Extension:

2a: User clicks "Remove department" button and rejects confirmation

2. End of use case

Use case: Employee managers edits the details of a department.

Actor: Employee manager

Pre-Condition: Logged in as Employee manager

On the "Manage department" screen

Main Success Scenario

1. User selects a department form the list
2. User clicks "Edit info" button
3. System navigates to "Edit info" Screen
4. User fills in new department information
5. User clicks "Submit changes" button
6. System displays success message
7. System navigates to "Manage department" screen

Extension:

5a. department details are incorrect

1. System displays error message

2. Return to MSS step 4

Use case: Employee managers assign shifts to personnel

Actor: Employee manager

Pre-Condition: Logged in as Employee manager

On the "Manage employee" screen

Main Success Scenario

1. User selects an employee
2. User clicks "Manage work shift" button
3. System navigates to "Manage work shift" screen
4. User selects day from calendar and fills in information
5. Users clicks submit button
6. System adds work shift

Extensions:

5a: Employee reached maximum hours for his contract

1. System displays error message
2. Return to MSS step 4

5b: Employee is assigned to morning shift and already has evening shift the previous day

1. System displays error message
2. Return to MSS step 4

Use case: Employee managers deletes work shift to personnel

Actor: Employee manager

Pre-Condition: Logged in as Employee manager

On the "Manage employee" screen

Main Success Scenario

1. User selects an employee
2. User clicks "Manage work shift" button
3. System navigates to "Manage work shift" screen
4. User selects day from calendar
5. Users clicks delete shift button
6. System deletes work shift

Use case: Employee managers sees work shifts of all employees

Actor: Employee manager

Pre-Condition: Logged in as Employee manager

On the "Manage employee" screen

Main Success Scenario

1. User clicks "View shifts" button
2. System navigates to "View shifts" screen
3. User selects day from calendar
4. System displays all work shifts of all employees for selected day.

Use case: Department manager or Depot manager see the details of employees in their department.

Actor: Department manager or Depot manager

Pre-Condition: Logged in as Department manager or Depot managers

Main Success Scenario

1. User clicks "Manage employees" Button
2. System navigates user to "Manage employees" screen
3. System displays list of employees in the manager's department

Use case: Department manager or Depot manager sees work shifts of employees in their department

Actor: Department manager or Depot managers

Pre-Condition: Logged in as Department manager or Depot managers

On the "Manage employee" screen

Main Success Scenario

1. User clicks "View shifts" button
2. System navigates to "View shifts" screen
3. User selects day from calendar
4. System displays all work shifts of employees in manager's department for selected day.

Use case: Department manager or Depot manager marks an employee as missing

Actor: Department manager or Depot manager

Pre-Condition: Logged in as Department manager

On "Attendance" screen

Main Success Scenario

1. User selects a person's work shift
2. User clicks "Missing" button

Use case: Department manager or Depot manager marks an employee as attended

Actor: Department manager or Depot manager

Pre-Condition: Logged in as Department manager or Depot manager

On "Attendance" screen

Employee marked as missing

Main Success Scenario

1. User selects a person's work shift
2. User clicks "Attended" button

Use case: Department employee, Department manager, Warehouse worker, Depot manager, or cashier see the inventory

Actor: Department employee, Department manager, Warehouse worker, Depot manager, or cashier see the inventory

Pre-Condition: Logged in as Department employee, Department manager, Warehouse worker, Depot manager, or cashier see the inventory

Main Success Scenario

1. User clicks "Inventory" button
2. System navigates to "Inventory" screen

Use case: Depot manager adds new item to inventory

Actor: Depot manager

Pre-Condition: Logged in as Depot manager

       On "Inventory" screen

Main Success Scenario

1. User clicks "Add item" button
2. System navigates to "Add item" screen
3. User fills in new item's information
4. User clicks "Submit" button
5. System adds new item to inventory
6. System displays success message

Extensions:

4a: Item information is wrong

1. System displays error message
2. Return to MSS step 3

Use case: Depot manager removes item from inventory

Actor: Depot manager

Pre-Condition: Logged in as Depot manager

On "Inventory" screen

Main Success Scenario

1. User selects item from list
2. User clicks "remove item" button
3. System asks for confirmation
4. User confirms and the item is removed from the inventory

Extentions:

4a: User rejects confirmation

1. Return to MSS step 2

Use case: Depot manager accepts restock request

Actor: Depot manager

Pre-Condition: Logged in as Depot manager

On "Home" screen

Main Success Scenario

1. User clicks "View restock requests" button
2. System navigates to "View restock requests" page
3. User selects a restock request
4. User fills in request details
5. User clicks "Accept button"
6. System displays success message

Extentions:

5a: User clicks "Deny" button

1. Restock request is deleted
2. End of use case

Use case: Cashier sells an item

Actor: Cashier

Pre-Condition: Logged in as Cashier

Main Success Scenario

1. User clicks on "Sell" button
2. System navigates to "Sell" screen
3. User selects an item from the list
4. User inputs an amount
5. User clicks "Add to cart"
6. User clicks on "Sell items" button
7. System removes items from inventory

Extentions:

3a: User uses barcode scanner

1. Users scans barcode of product
2. System adds product to cart
3. Go to MSS step 6

5a: Item doesn't have enough quantity

1. System displays error message

2. Return to MSS step 4

Use case: Cashier sends restock request

Actor: Cashier

Pre-Condition: Logged in as Cashier
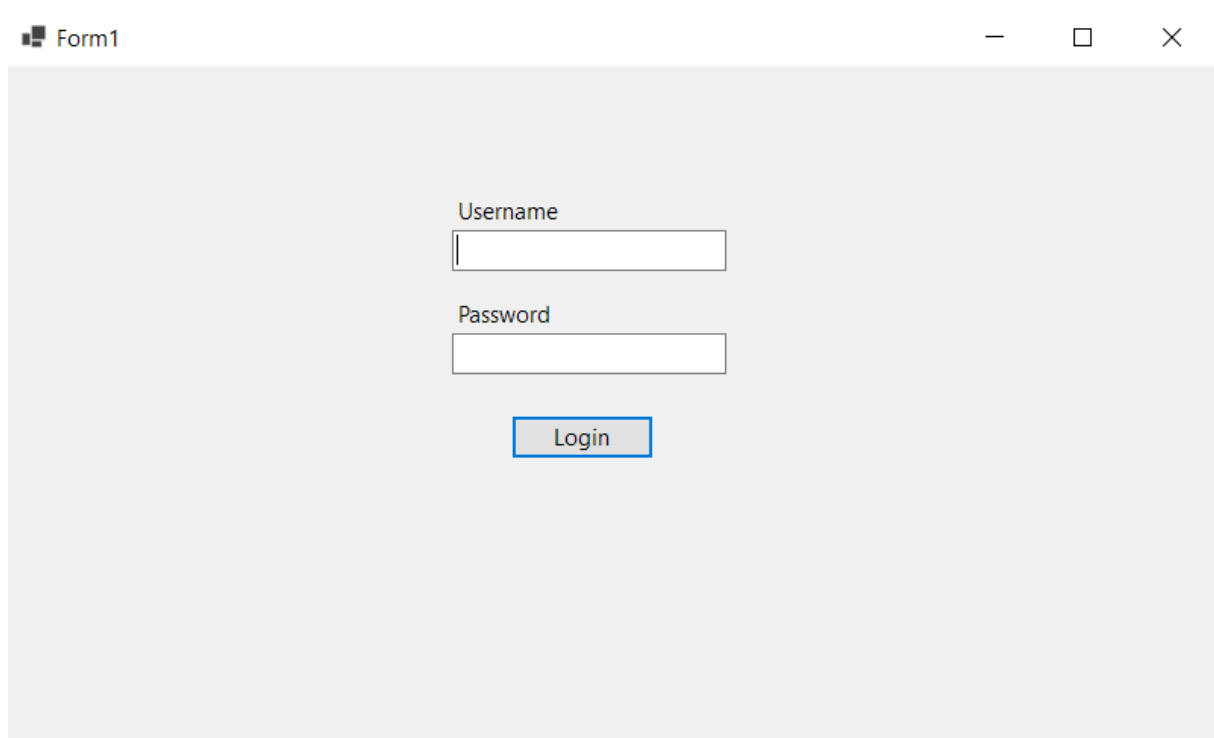
Main Success Scenario

1. User clicks on "Inventory" button
2. System navigates to "Inventory" screen
3. User selects an item from the list
4. User clicks "Send restock request" button
5. System sends restock request
6. System displays success message

SAMPLE GUI

Note that these screenshots are an early draft of the GUI and are not final

LOGIN SCREEN

Related to: UC01

HOME SCREEN
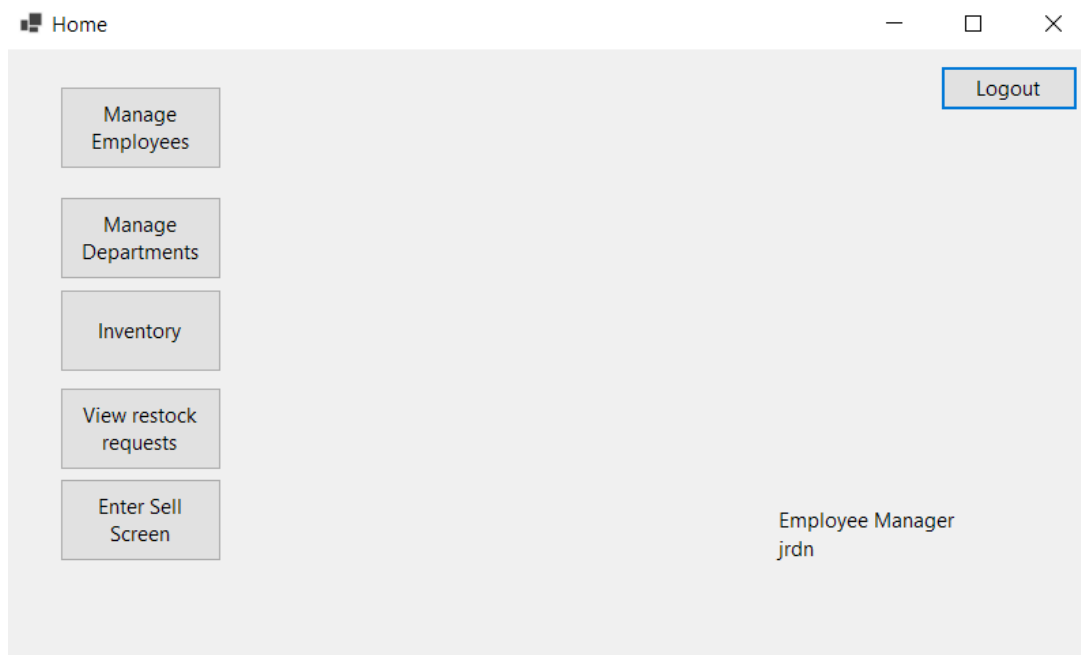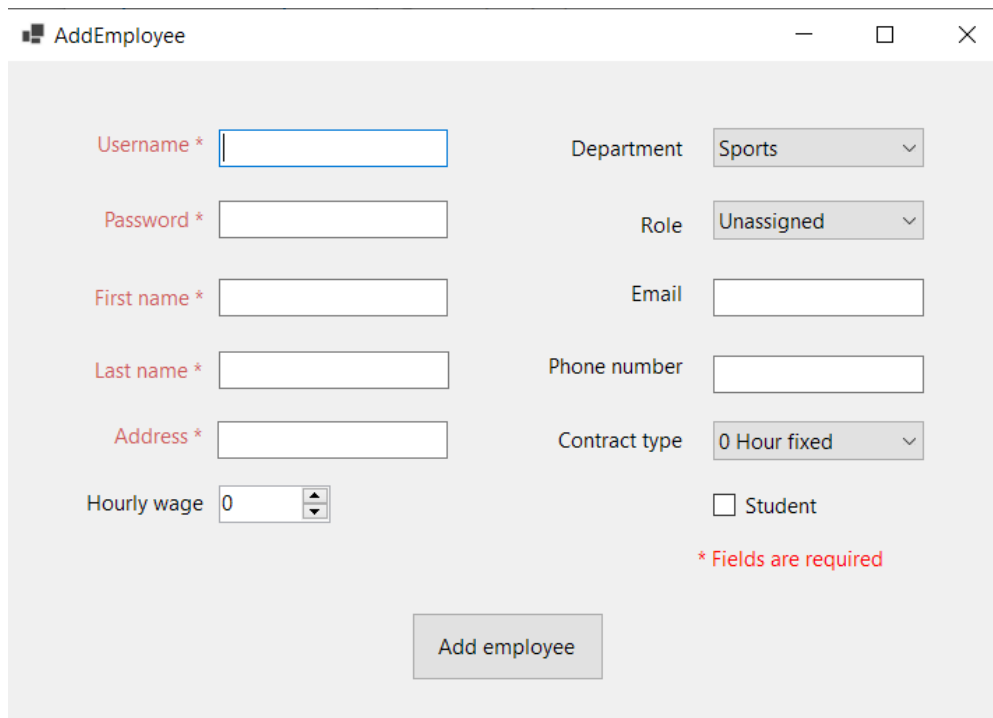
Related to: UC02, UC03, UC07, UC18, UC21, UC22

MANAGE EMPLOYEES SCREEN

Related to: UC04, UC05, UC06, UC14

ADD EMPLOYEE SCREEN

Related to: UC04

EDIT EMPLOYEE DETAILS

Related to: UC06

MANAGE DEPARTMENTS SCREEN
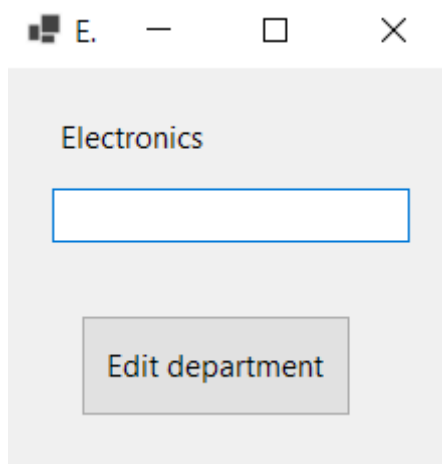
Related to: UC07, UC08, UC09

EDIT DEPARTMENT SCREEN

Related to: UC10

MANAGE EMPLOYEE SHIFTS SCREEN

Related to: UC11, UC12

VIEW WORK SHIFTS SCREEN

Related to: UC13, UC15, UC16, UC17

INVENTORY SCREEN

Inventory	— □ ✕

Search [   ]

ID	Product name	Barcode	Department	In stock	Min. Stock	Price
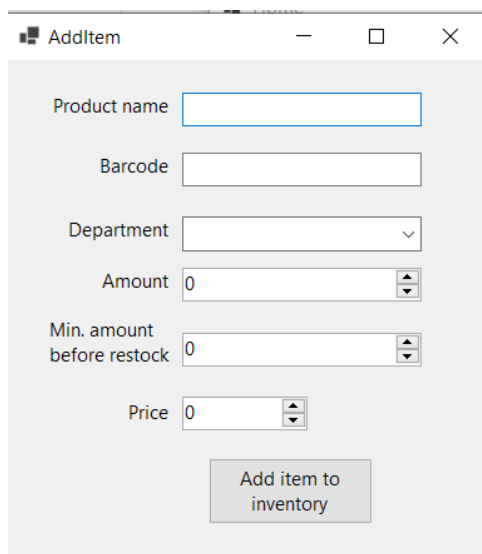
[Add new item] [Remove selected item]   [Send ReStock Request]

Related to: UC18, UC19, UC20, UC23
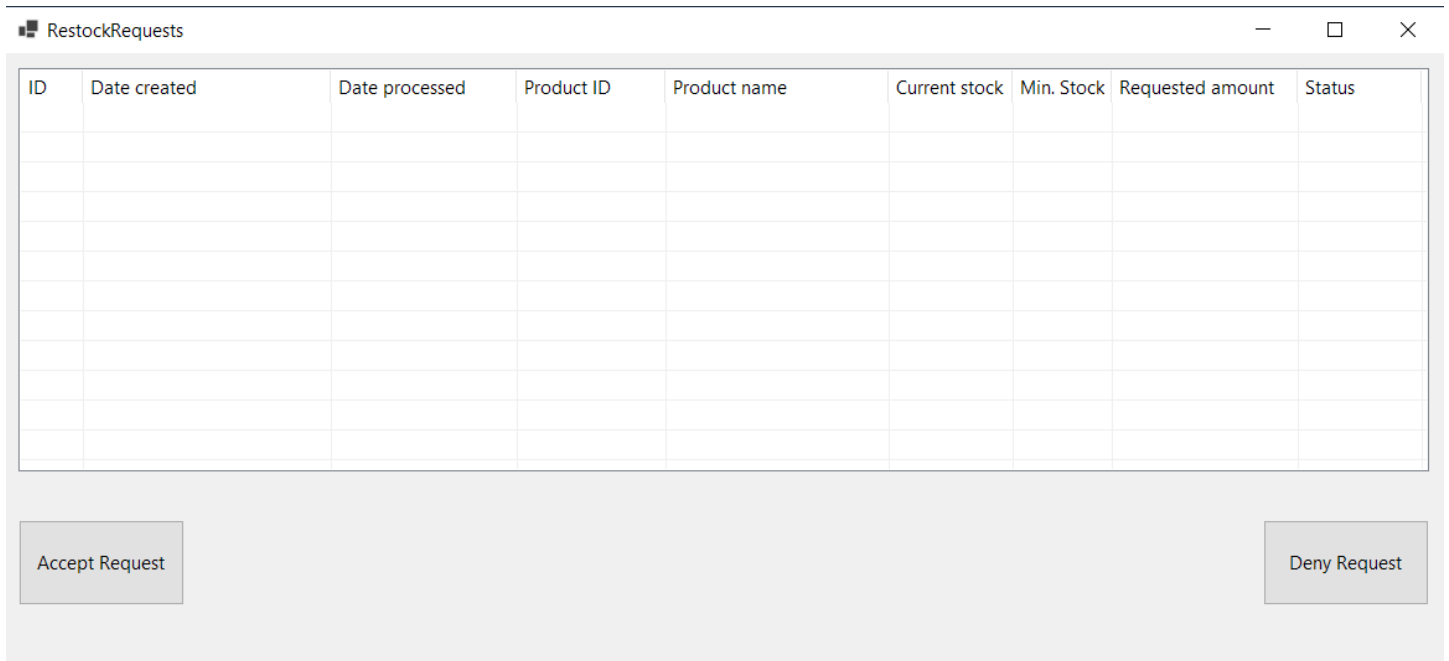
ADD ITEM SCREEN

Related to: UC19

VIEW RESTOCK REQUESTS SCREEN

ID	Date created	Date processed	Product ID	Product name	Current stock	Min. Stock	Requested amount	Status

Related to: UC21

SELL SCREEN

Related to: UC22