User Manual for the Employee and Inventory Management System with CLI

Overview

This document provides instructions on how to navigate and utilize the console-based user interface for the employee and Inventory management system. This system allows administrative users and regular employees to manage shift schedules, employee roles, and other related tasks, as well as managing products, items, discounts, orders and generate various reports.

Getting Started

Launching the System

To start the system, run the `Main` class. Upon launch, you will be greeted with:

`Welcome to The SuperLi system!`

Logging In

1. **Choose a Branch**: Initially, you will be prompted to log into a branch by entering a branch ID (0-8).
2. **Employee Authentication**: Enter your employee name and ID to authenticate. Depending on your role (HR manager or regular employee), you will have access to different functionalities.

Using the System

Common Actions for All Users

- **Submit Availability for Shift**: Enter the date and time to submit your availability for shifts.
- **Remove Availability for Shift**: Enter the date and time to remove your availability.

Administrative Actions

If you log in as an HR manager (admin), you will have additional options:

- **Add/Remove Shift to/from Schedule**: Manage the scheduling of shifts by adding or removing them.
- **Add/Remove Employee to/from Shift**: Assign or unassign employees to specific shifts.
- **Manage Employee Roles and Details**: Add new employees to the branch, assign roles, set salaries, or terminate employment.
- **Shift Reports**: Generate reports showing employees assigned to shifts, required roles for shifts, and available employees for shifts.
- **System Configuration**: Set the last date for submitting shift availabilities.

Action Manual

1. Submit Availability for Shift

- **Purpose**: Allows an employee to declare their availability to work on a specific shift.
- **Procedure**:
    1. Choose this option from the menu.
    2. Enter the date of the shift (format: yyyy-mm-dd).
    3. Specify the shift time (M for Morning or E for Evening).
- **Feedback**: The system will confirm the successful submission of your availability.

2. Remove Availability for Shift

- **Purpose**: Enables an employee to withdraw previously submitted availability for a specific shift.
- **Procedure**:
    1. Select this action.
    2. Input the date and time of the shift for which you want to remove your availability.
- **Feedback**: Confirmation of the removal of your availability.

3. Change password

- **Purpose**: Let the employee choose his own secure password
- **Procedure**:
    1. Select this action
    2. Input your old-password for verification & new-password
- **Feedback**: Confirmation for the password change

4. View My Shifts

- **Purpose**: Let the employee view his shift history & upcoming shifts
- **Procedure**:
    3. Select this action
    4. View shifts
- **Feedback**: shift history will be displayed

Additional Administrative Actions (For HR Managers)

Administrative users have access to more complex functionalities, including managing shifts, employees, and system settings.

5. Add a Shift to Schedule

- **Purpose**: To schedule a new shift and define the required roles and number of employees needed.
- **Procedure**:
    1. Enter the date and time for the new shift.
    2. For each role, specify the number of employees required.
- **Feedback**: Confirmation that the shift has been added to the schedule.

6. Remove a Shift from Schedule

- **Purpose**: Allows removal of a previously scheduled shift.
- **Procedure**:
    1. Input the date and time of the shift to be removed.
- **Feedback**: Confirmation of shift removal.

7. Add Employee to Shift

- **Purpose**: Assign an employee to a specific shift.
- **Procedure**:
    1. Enter the shift's date and time.
    2. Input the employee's ID and select their role for the shift.
- **Feedback**: Notification of successful assignment.

8. Remove Employee from Shift

- **Purpose**: De-assign an employee from a shift.
- **Procedure**:
    1. Specify the shift's date and time.
    2. Enter the employee's ID.
- **Feedback**: Confirmation of the employee's removal from the shift.

9. Print Employees in Shift

- **Purpose**: Generate a list of all employees scheduled for a specific shift.
- **Procedure**:
    1. Input the shift date and time.
- **Feedback**: Displays the list of assigned employees.

10. Print Required Employees for Shift

- **Purpose**: Show the number and roles of employees required for a particular shift.
- **Procedure**:
    1. Select the shift date and time.
- **Feedback**: Outputs the requirements for the shift.

11. Print Available Employees for Shift

- **Purpose**: List all employees who have submitted their availability for a specific shift.
- **Procedure**:
    1. Choose the shift date and time.
- **Feedback**: Displays the names and roles of available employees.

12. Add/Recruit New Employee to Branch

- **Purpose**: Hire and add a new employee to the system.
- **Procedure**:
    1. Enter the employee's name, ID, employment type, salary, and bank account ID.
- **Feedback**: Confirmation of the employee being added to the system.

13. Remove/Fire Employee from Branch

- **Purpose**: Terminate an employee's position within the branch.
- **Procedure**:
    1. Provide the employee's ID.
- **Feedback**: Notification of employee termination.

14. Assign New Role to Employee

- **Purpose**: Update or change an employee's role within the organization.
- **Procedure**:
    1. Input the employee's ID and select the new role.
- **Feedback**: Confirmation of role assignment.

15. Set Last Date for Submitting Shifts

- **Purpose**: Establish a deadline for all employees to submit their availability.
- **israelite**:
    1. Enter the final date for shift submission.
- **Feedback**: Acknowledgment that the date has been set.

16. Log Out (5 for non Hr Manager)

- **Purpose**: Safely end the user session.
- **Procedure**: Choose this option to log out.
- **Feedback**: Confirmation that you have been logged out.

17. Warehouse Menu (6 for non HR Manager)

- **Purpose**: Go to the warehouse's options.
- **Procedure**: Select this to open the Warehouse menu.
- **Feedback**: Presenting the Warehouse options.

18. Exit System (7 for non Hr Manager)

- **Purpose**: Completely shut down the system.
- **Procedure**: Select this to close the application.
- **Feedback**: "Exiting System, Goodbye!"

If option 17 was chosen, the following options are presented to the user based on his qualifications.

To an employee with the role "Warehouse" the following options will show up, except the ones marked by "*".
To an employee with the role "Warehouse Manager"the following options will show up, including the ones marked by "*".
If the logged in employee does not qualify to any of those, an error message will be presented and the user will be sent back to the main menu.

1. Add Product *

   • Add a new product. You will be prompted for the product name, buying cost, selling cost, categories, manufacturer, minimum amount allowed, warehouse location, and store location**.**

2. Add Item

   • Add a new item. You will be prompted for the product name, item ID, expiration date, and whether the item is in the warehouse or on the store's shelves.

3. Add Discount *

   • Add a new discount. You will be prompted for the start date, end date, categories, discount parameter, and whether the discount is for customers (in-store) or from suppliers.

4. Get Item Product Name

   • Get the product name of an item. You will be prompted for the item ID.

5. Get Report By Category

   • Generate a report of products by category. You will be prompted to enter **categories.**

6. Get Report Almost Missing

   • Generate a report of products that have amounts lower than the minimal amount allowed in the inventory.

7. Get Report Bad Products

   • Generate a report of how many defective and expired items each product has.

8. Change Product Buying Cost *

• Change the buying cost of a product from the suppliers. You will be prompted for the product name and new buying cost.

9. Change Product Selling Cost *

• Change the selling cost of a product. You will be prompted for the product name and new selling cost.

10. Change Product Categories *

• Change the categories of a product. You will be prompted for the product name and new categories.

11. Get Product Cost

• Get the cost of a product (after discount). You will be prompted for the product name.

12. Notify Item Bought

• Notify the system that an item has been bought. You will be prompted for the item ID.

13. Get Product Supplier Cost

• Get the supplier cost of a product (after discount). You will be prompted for the product name.

14. Remove Discount *

• Remove a discount. You will be prompted to specify if the discount is for customers or from suppliers, and then to choose the discount to remove.

15. Show Discounts *

• Show all discounts. You will be prompted to specify if you want to see discounts for customers or from suppliers.

16. Remove Product

• Remove a product. You will be prompted for the product name.

17. Notify Damaged Item

• Notify the system of a damaged item. You will be prompted for the item ID.

18. Move Item From Warehouse

• Move an item from the warehouse to the store. You will be prompted for the item ID.

19. Move Item To Warehouse

• Move an item from store to warehouse. You will be prompted for the item ID.

20. Get Product Location

• Get the location of a product. You will be prompted for the product name and whether you want the warehouse location or the store's location.

21. Add an Occasional Order *

• Add a new occasional order. You will be prompted for the order details.

22. Show Orders

• Show all orders in the system.

23. Remove Order *

• Remove an order. You will be prompted for the order ID.

24. Update Order *

• Update an existing order. You will be prompted for the order ID and new amount.

24. DeleteAllData *

• delete all the existing data in the DataBase.

25. Exit

• Exit the system.

Navigation

- **Action Selection**: After logging in, the system will display a list of available actions based on your role. Input the number corresponding to your desired action.
- **Logging Out and Exiting**: You can log out or exit the system by selecting the appropriate action from the menu.

Error Handling

The system provides feedback when actions fail, such as during login or when invalid inputs are entered. Follow the prompts to correct any issues.

e.g `Failed to log in. Invalid employee ID.`

Initialization

We Initialize the system with 9 Branches (0-8) & 9 corresponding HR managers.

For the **i**'th branch, The Managers username is "**name{i}**" , Id is **i** & default password is **i**.

E.g   for branch 5, the HR manager's username is 'branch5' , Id is '5' , & default password is 5.

Bellow is the initial HR DataBase state:

EMPLOYEES Table:

id	name	password	employment_type	salary	bank_account_id	branch_id	startDate
0	name 0	0	0	2 5 0 0 0	0	0	2 0 2 4 - 0 6 - 2 3
1	name 1	1	0	2 5 0 0 0	1	1	2 0 2 4 - 0 6 - 2 3
1 1 1 1 1 1 1 1 1	Ori Eines	1 2 3 4	1	2 0 0 0 0	1 1 1 1 1 1	2	2 0 2 4 - 0 6 - 2 4
2	name 2	2	0	2 5 0 0 0	2	2	2 0 2 4 - 0 6 - 2 3
2 1 4 5 0 9 9 5 2	Erez Shiri	1 2 3 4	0	1 0 0 0 0 0	3 2 4 5 6 6	2	2 0 2 4 - 0 6 - 2 4
3	name 3	3	0	2 5 0 0 0	3	3	2 0 2 4 - 0 6 - 2 3
3 2 6 5 2 9 2 2 9	Guy Yehoshua	1 2 3 4	0	1 3 7 0 0 0	7 7 7 7 7 7	1	2 0 2 4 - 0 6 - 2 4
4	name 4	4	0	2 5 0 0 0	4	4	2 0 2 4 - 0 6 - 2 3
5	name 5	5	0	2 5 0 0 0	5	5	2 0 2 4 - 0 6 - 2 3
6	name 6	6	0	2 5 0 0 0	6	6	2 0 2 4 - 0 6 - 2 3
7	name 7	7	0	2 5 0 0 0	7	7	2 0 2 4 - 0 6 - 2 3
8	name 8	8	0	2 5 0 0 0	8	8	2 0 2 4 - 0 6 - 2 3

BRANCHES Table:

id	hr_manager_id	last_date_for_submitting_availability
0	0	2 0 2 5 - 0 1 - 0 1
1	1	2 0 2 4 - 0 7 - 2 5
2	2	2 0 2 4 - 0 6 - 2 3
3	3	2 0 2 4 - 0 6 - 2 3
4	4	2 0 2 4 - 0 6 - 2 3
5	5	2 0 2 4 - 0 6 - 2 3
6	6	2 0 2 4 - 0 6 - 2 3
7	7	2 0 2 4 - 0 6 - 2 3
8	8	2 0 2 4 - 0 6 - 2 3

EMPLOYEE_TO_ROLE Table:

employee_id	role
0	1
1	1
2	1
3	1
4	1
5	1
6	1
7	1
8	1
3 2 6 5 2 9 2 2 9	0
3 2 6 5 2 9 2 2 9	4
3 2 6 5 2 9 2 2 9	6
2 1 4 5 0 9 9 5 2	7
1 1 1 1 1 1 1 1 1	7
2 1 4 5 0 9 9 5 2	6

SHIFTS Table:

shift_date ▼[1]	shift_time	branch_id	has_delivery
Filter	Filter	Filter	Filter
2024-07-24	0	2	1
2025-01-29	1	1	0
2025-05-12	0	1	1

SHIFT_AVAILABILITY Table:

employee_id ▼[1]	shift_date	shift_time	branch_id
Filter	Filter	Filter	Filter
214509952	2024-07-24	0	2
326529229	2025-01-29	0	1
326529229	2025-05-12	0	1

SHIFT_ROLE_TO_REQUIRED Table:

shift_date	shift_time	branch_id	role	required
2025-05-12	0	1	0	1
2025-05-12	0	1	1	1
2025-05-12	0	1	2	1
2025-05-12	0	1	3	1
2025-05-12	0	1	4	1
2025-05-12	0	1	5	1
2025-05-12	0	1	6	2
2025-05-12	0	1	7	1
2025-01-29	1	1	0	1
2025-01-29	1	1	1	1
2025-01-29	1	1	2	1
2025-01-29	1	1	3	1
2025-01-29	1	1	4	1
2025-01-29	1	1	5	1
2025-01-29	1	1	6	1
2025-01-29	1	1	7	0
2024-07-24	0	2	0	1
2024-07-24	0	2	1	1
2024-07-24	0	2	2	1
2024-07-24	0	2	3	1
2024-07-24	0	2	4	1
2024-07-24	0	2	5	1
2024-07-24	0	2	6	1
2024-07-24	0	2	7	1

SHIFT_TO_EMPLOYEE Table:

employee_id	shift_date	shift_time	branch_id	role
Filter	Filter	Filter	Filter	Filter

The Inventory's DataBase:

The database Inventory.db already contains data for you. You can see this data in the file "sampleSuper.txt. This data consists of product items and discounts, including product details, item information, and discount periods with applicable categories and products.

***Note**: in our system product is for example: "humus Ahla 500g", and item is for example a specific box of:" humus Ahla 500g" with a specific ID 123 and expired date "6/9/2024".

Additional Help

For further assistance, please contact:

058-4185185, 054-3929202, 054-4998586, 053-3345483.