Instructions for Using the Shift Management System

System Overview

- In-memory shift management system (no database).
- Command Line Interface (CLI) only
- Supports:
    # Employee and HR roles
    # Weekly shift scheduling and role requirements
    # Availability submissions and shift swaps
- Loads demo data on startup (with sample shifts, employees, availability).

Prerequisites

- Java Runtime Environment (JRE) version 17 or above

Login Details & Sample Data

When starting the System, the user must choose:
+ to start a new system as the HR Manager (no data initialized).
+ to start the system with the demo data initialized on startup.

Demo Data on Startup:

Users:

HR Manager: ID = hr, Password = 123, Role = HR

Dana: ID = 1, Password = 123, Roles = Shift Manager, Cashier

John: ID = 2, Password = 456, Roles = Warehouse, Cashier

Roles:

- Cashier

- Warehouse

- Shift Manager

- Driver

- Cleaner

- HR

Shifts:

- Shift requirements for each shift are determined by the HR Manager.

Employee Availability:

- Employee Availability is sent every Thursday for the following week.

- An empty Availability list allows the HR Manager to assign the employee to all the shifts

Swap Requests:

- No swap requests exist on initialization

* The above data is loaded through a dedicated system initializer class in the domain layer (e.g., `SampleDataInitializer.java`).

Login Data:

User Name	ID	Password	Role(s)
HR Manager	hr	123	HR
Dana	1	123	Shift Manager, Cashier
John	2	456	Warehouse, Cashier

Running the System

1. Ensure Java 17 or higher is installed

2. Navigate to the release folder.

3. Run: java -jar adss2025_v01.jar

4. Demo data will load automatically unless disabled

HR Manager Capabilities

- Add / Update / Remove Employees.
- Add / Remove Roles
- Define required roles and counts for each shift.
- Assign Employees to shifts based on availability and role requirements.
- Approve / Reject Shift Swap Requests.
- View Personal Record.

Employee Capabilities

- Submit Weekly Availability.
- View Assigned Shifts.
- Request Shift Swaps.
- View Personal Record.

Main Menu Options by Role

HR Manager Menu:

1. View My Info
2. Add Employee
3. Remove Employee
4. Update Employee data
5. Add New Role
6. Remove Role
7. Assign Employee to Shifts
8. Process Swap Requests
9. Configure Shift Roles
10. Exit

Employee Menu:

1. View My Info
2. View Assigned Shifts
3. View Current Shift
4. Send Swap Request
5. Send Weekly Availability
6. View Weekly Availability (this week)
7. View Weekly Availability (next week)
8. Add vacation
9. View Holidays
10. Exit

Example Flow - HR Manager

1. Login with:
        - ID: hr
        - Password: 123

2. From the main menu:
        - Select "Define Shift Requirements"
        - Set the required roles and number of employees for each shift

3. Select "Assign Employees to Shifts"
        - View employee availability
        - Assign based on role compatibility and availability

4. Select "Handle Swap Requests"
        - Approve or reject pending swap requests

5. Select "View Unfilled Shifts"
        - See which shifts are still understaffed

6. Logout from the system

Example Flow - Employee

1. Login with either:

        - Dana (ID: 1, Password: 123)

        - John (ID: 2, Password: 456)

2. From the employee menu:

        - Select "Submit Weekly Availability"

        - Input specific days and shift times (Morning/Evening)

3. Select "View Assigned Shifts"

        - See all shifts assigned to this employee

4. If needed, select "Request Shift Swap"

        - Choose a shift and submit a swap request with another employee

5. Logout from the system.