UC1-New Employee Entering the system

Section	Purpose
Name	**New Employee Entering the System**
Description	The HR manager adds a new employee to the system
Actors	HR Manager
PreConditions	# The HR manager must be logged into the system.. #The employee being added is new to the system (the id doesn't exist in the system yet)
PostConditions	# The new employee's details are stored in the System
Basic course of action	1. HR manager logs into the system. 2. HR manager selects "Add Employee". 3. HR manager enters employee details. 4. System validates the details. 5. System adds the new employee to the database.
Alternate courses	**Alternative 1: Invalid Employee Details** ● HR Manager enters invalid employee details ● System displays an error message specifying the invalid details. **Alternative 2: Employee Already Exists**

	- HR Manager enters details for an employee who already exists in the system. - System displays an error message indicating that the employee already exists

UC2-Assignment of employees to Shifts

Section	Purpose
Name	**Assignment of employees to Shifts**
Description	This use case allows the HR manager to assign employees to specific shifts based on their availability. The system will ensure that employees are only assigned to shifts they are available for and that all role constraints are met. Each use of it will assign employees for a given week.
Actors	HR Manager
PreConditions	- The HR manager must be logged into the system. - For shifts that have drivers in them, there must also be a storekeeper. - Each employee assignment to a shift must be contained in their availability. - There must not be an existing work schedule for the given week and branch in the system.
PostConditions	The shift assignments (work schedule) are stored in the system

Basic course of action	
	1) HR manager logs into the system
	2) HR manager selects the "Post Work Schedule" option
	3) HR manager enters the Branch ID and Date (YYYYMMDD) for the schedule
	4) HR manager assigns employees to shifts for each day of the week

	5) Systems validates the assignments , ensuring
	
	  • Employees are only assigned to shifts they are available for .
	  • All role constraints are met for each shift .

	6) System saves the work schedule for the given branch and date .
	7) System confirms to HR that the work schedule has been successfully posted

Alternate courses	**Alternative 1 . Invalid Branch ID or Date**
	• HR manager enters an invalid Branch Id or Date . • System displays an error message and prompts the HR manager to re- enter the information **Alternative 2 . Employee is not available for shift** • HR manager tries to assign an employee to a shift they are not available for. • The system displays error message and to reassign shifts. **Alternative 3 . Assignments do not meet role constraints** • HR manager assigns employees to shifts but the assignments do not meet role constraints • System displays an error indication that role constraints are not met **Alternative 4. Assignment has driver but doesn't has storekeeper** • HR manager assigns a shift where there is a driver but not a storekeeper. • System displays an error indication that there is a shift with a driver and without a storekeeper.

add New Employee pseudoCode:

Input: HRManagerId, EmployeeDetails (name, password, id, branchId, termsOfEmployment, startDate, bankDetails, rates, roles)

Preconditions: HR manager must be logged in.

    Validate HRManagerId:

    If not valid:

        Display "Invalid HR Manager ID"

    Check if Employee ID already exists in the system:

    If exists:

        Display "Employee with this ID already exists"

    Validate EmployeeDetails:

    If any detail is invalid:

        Display "Invalid Employee Details: [Detail]"

    Add new employee to the system:

    Create new Employee object with EmployeeDetails

    Add Employee object to employeesDict

    Display "New employee added successfully"

postWorkSchedule pseudoCode:

Input: HRManagerId, BranchId, Date (YYYYMMDD), EmployeeShiftAssignments (7 days, 2 shifts per day)

Preconditions: HR manager must be logged in.

    Validate HRManagerId:

    If not valid:

        Display "Invalid HR Manager ID"

        Return

    Validate BranchId:

    If not valid:

        Display "Invalid Branch ID"

Return

Validate Date:

If not valid:

Display "Invalid Date"

Return

Initialize WorkSchedule object

For each Day in Week:

For each Shift in Day:

Get Employee IDs for shift

For each Employee ID:

Validate Employee Availability:

If not available:

Display "Employee not available for shift"

Validate Role Constraints:

If constraints not met:

Display "Role constraints not met for shift"

Validate Storekeeper presence for drivers:

If driver without storekeeper:

Display "Driver without storekeeper for shift"

Return

Add Employee to WorkSchedule

Save WorkSchedule to system

Display "Work schedule posted successfully"

Contract UC1: New employee entering the system

Operation: addEmployee(managerId: int, employeeToSend: EmployeeToSend, password: String)

Cross References: Use case: New Employee Entering the system

preconditions:

- The HR manager is logged into the system.
- There is no employee that shares ID with the new given employee.

postconditions:

- An employee instance e was created (instance creation).
- e was associated with HRManagerFacade and EmployeeFacade (association formed)
-

Contract UC2: Post work Schedule

Operation: postWorkSchedule(managerId: int, branchId: int, date: int, employeesIdArray: int[][][])

Cross References: Assignment of employees to Shifts

preconditions:

- The HR manager is logged into the system.
- There must be existing employees availability for the given branch and date.
- The given employeesIdArray is valid (includes only employees from said branch, that is available for given shifts).

postconditions:

- A WorkSchedule instance ws was created (instance creation).
- ws was associated with HRManagerFacade and EmployeeFacade (association formed).
-