contract AssEmp1 - addShiftsRequierments
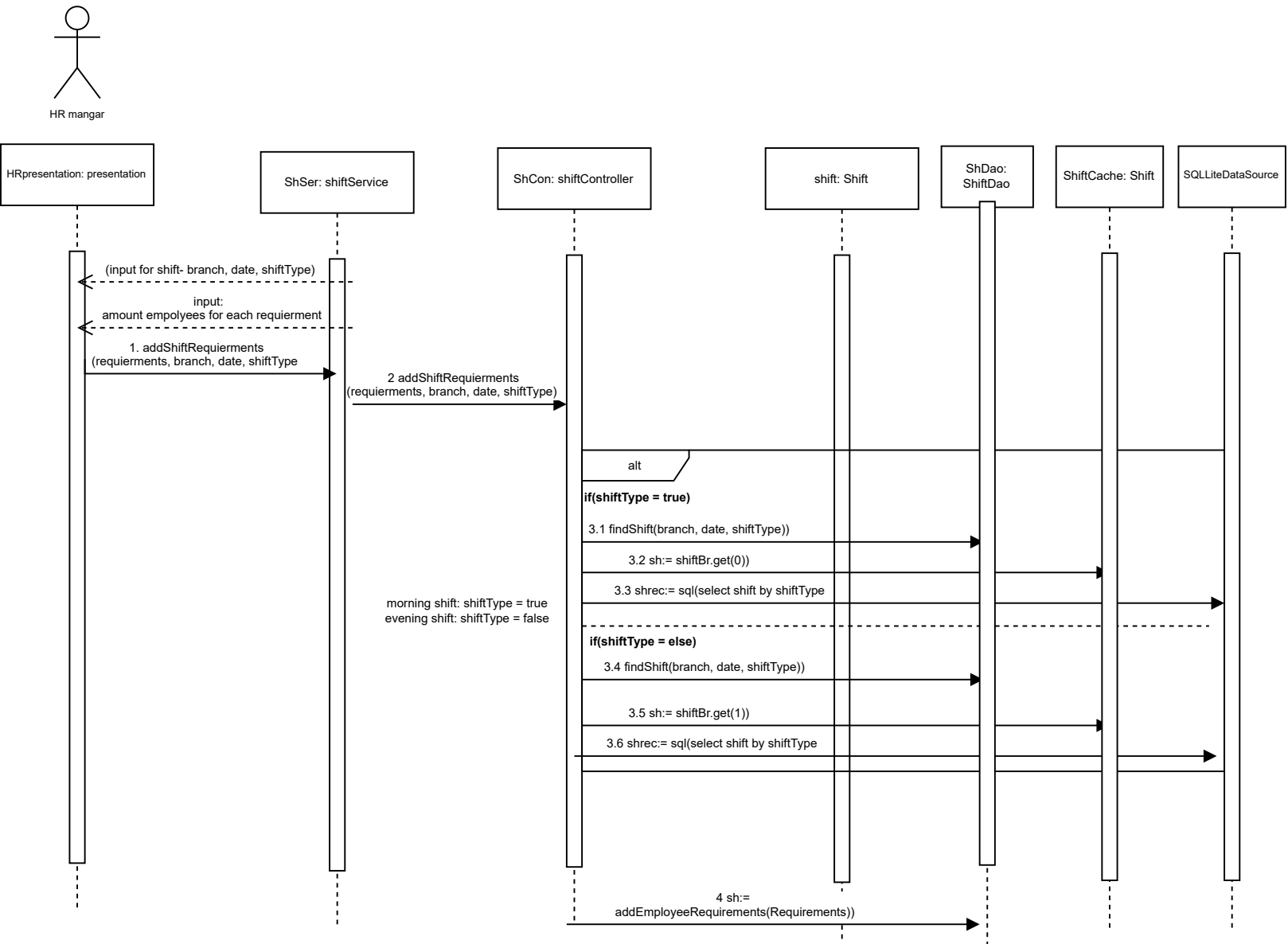**References: Use Cases:** Assign employee to a shift
pre-condition:
1. There is exist shift in this date and shiftType (shift != null)
2. The number of employees needed for each position is >= 0.
post-condition:
1. If the number of employees for a such position before the the addition was x and y employees were added,
 then now there should be a total demand for x+y employees for the position

HR mangar

| HRpresentation: presentation | ShSer: shiftService | ShCon: shiftController | shift: Shift | ShDao: ShiftDao | ShiftCache: Shift | SQLLiteDataSource |

(input for shift- branch, date, shiftType)

input:
amount empoloyees for each requierment

1. addShiftRequierments
(requierments, branch, date, shiftType

2 addShiftRequierments
(requierments, branch, date, shiftType)

alt

if(shiftType = true)

3.1 findShift(branch, date, shiftType))

3.2 sh:= shiftBr.get(0))

3.3 shrec:= sql(select shift by shiftType

morning shift: shiftType = true
evening shift: shiftType = false

if(shiftType = else)

3.4 findShift(branch, date, shiftType))

3.5 sh:= shiftBr.get(1))

3.6 shrec:= sql(select shift by shiftType

4 sh:=
addEmployeeRequirements(Requirements))

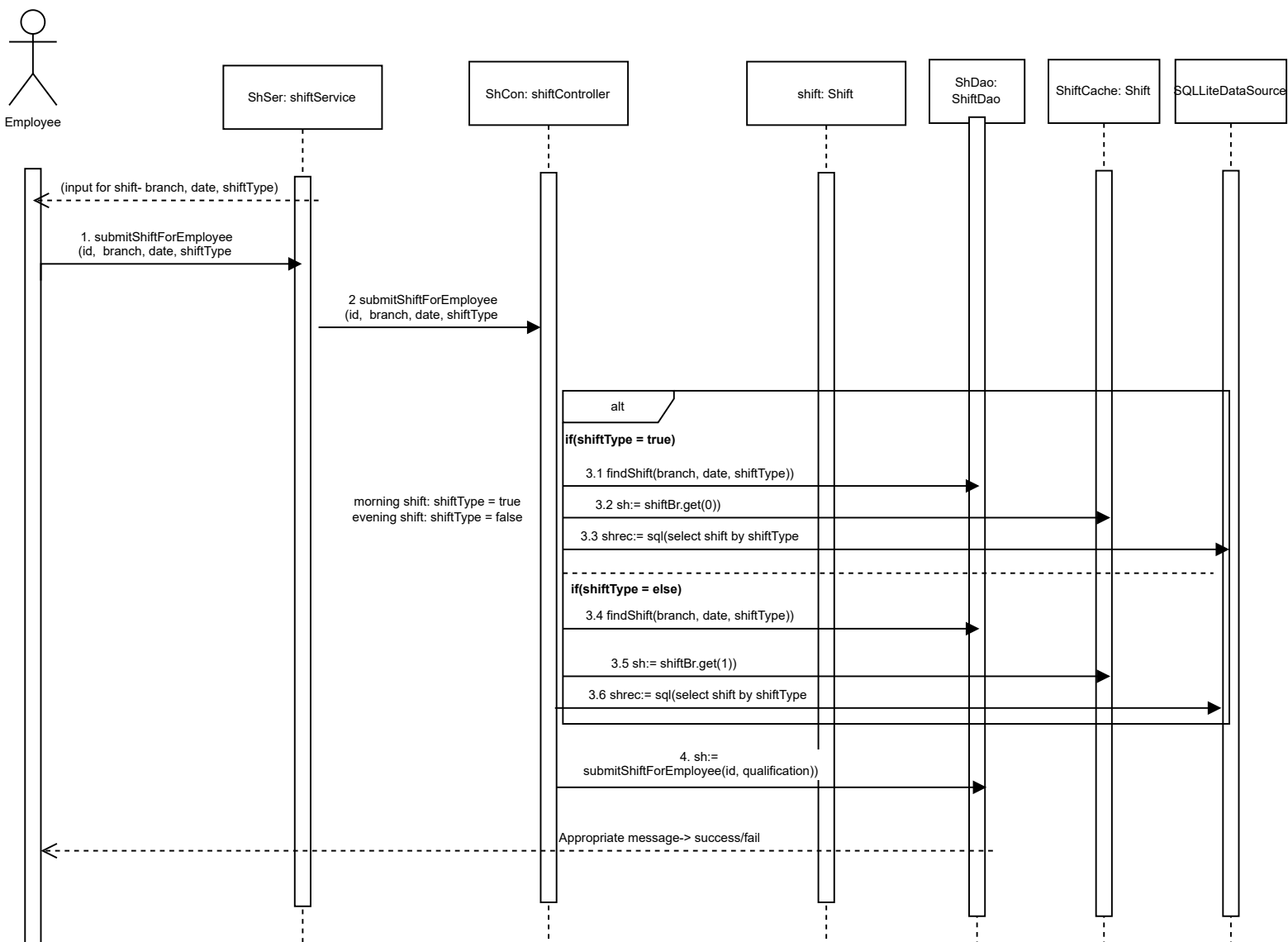**contract AssEmp2 - addSubmittion(date, shifyType)**
References: Use Cases: Assign employee to a shift
pre-condition:
1. The employee that add the submition is exist in the system- other
2. There is exist shift in this date and shiftType (shift != null)
3. There is at least one position that the employee is qualified to work in.
3. The employee has not yet submitted constraints for the shift - otherwise nothing will change
post-condition:
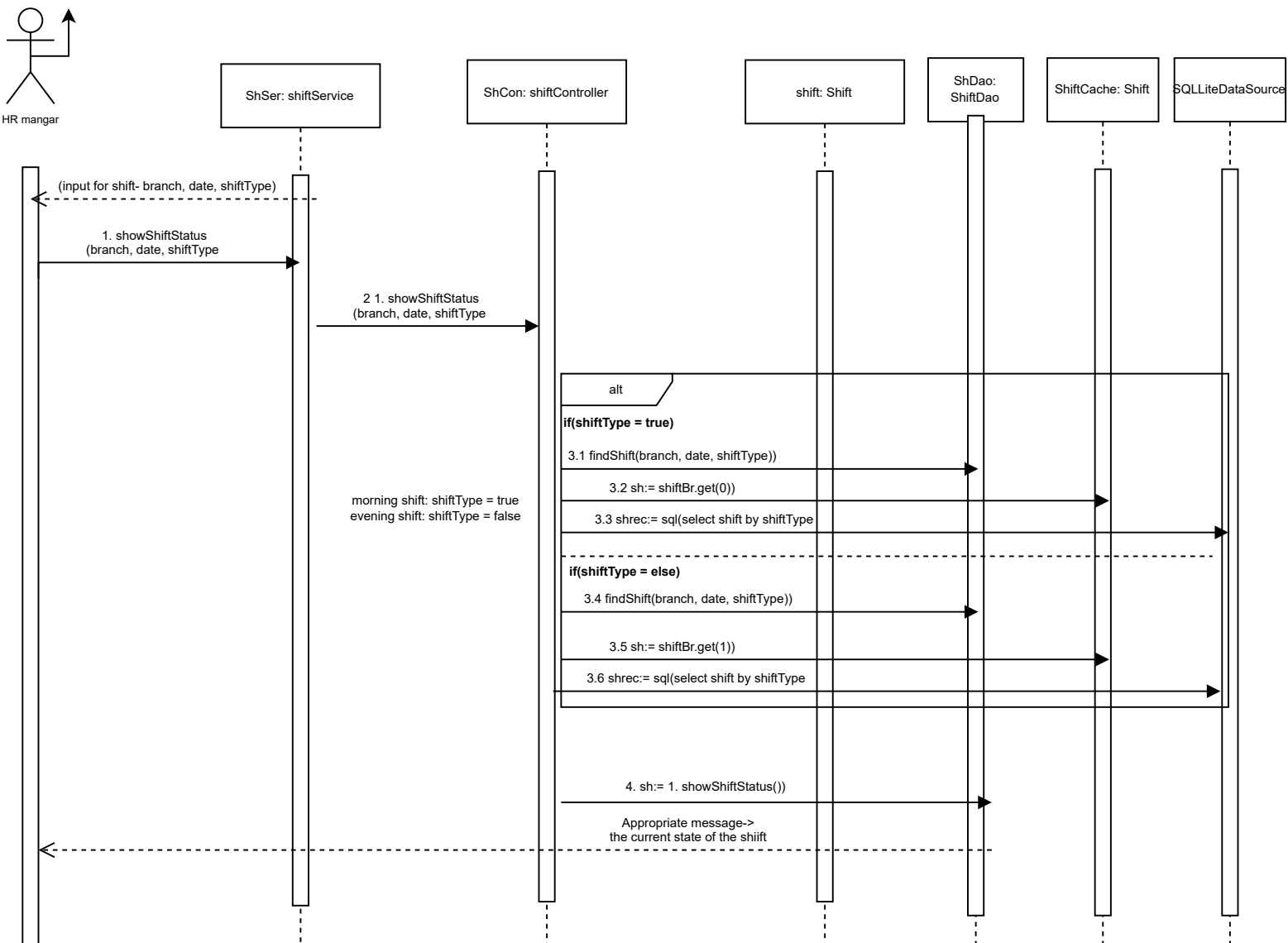1. The system will submit a shift constraint for each position which the employee is qualified

Employee

ShSer: shiftService

ShCon: shiftController

shift: Shift

ShDao: ShiftDao

ShiftCache: Shift

SQLLiteDataSource

(input for shift- branch, date, shiftType)

1. submitShiftForEmployee
(id, branch, date, shiftType

2 submitShiftForEmployee
(id, branch, date, shiftType

alt

if(shiftType = true)

3.1 findShift(branch, date, shiftType))

morning shift: shiftType = true
evening shift: shiftType = false

3.2 sh:= shiftBr.get(0))

3.3 shrec:= sql(select shift by shiftType

if(shiftType = else)

3.4 findShift(branch, date, shiftType))

3.5 sh:= shiftBr.get(1))

3.6 shrec:= sql(select shift by shiftType

4. sh:=
submitShiftForEmployee(id, qualification))

Appropriate message-> success/fail

contract AssEmp3- showShiftStaus
References: Use Cases: Assign employee to a shift
pre-condition:
1. There is exist shift in this date and shiftType (shift != null)
post-condition: null
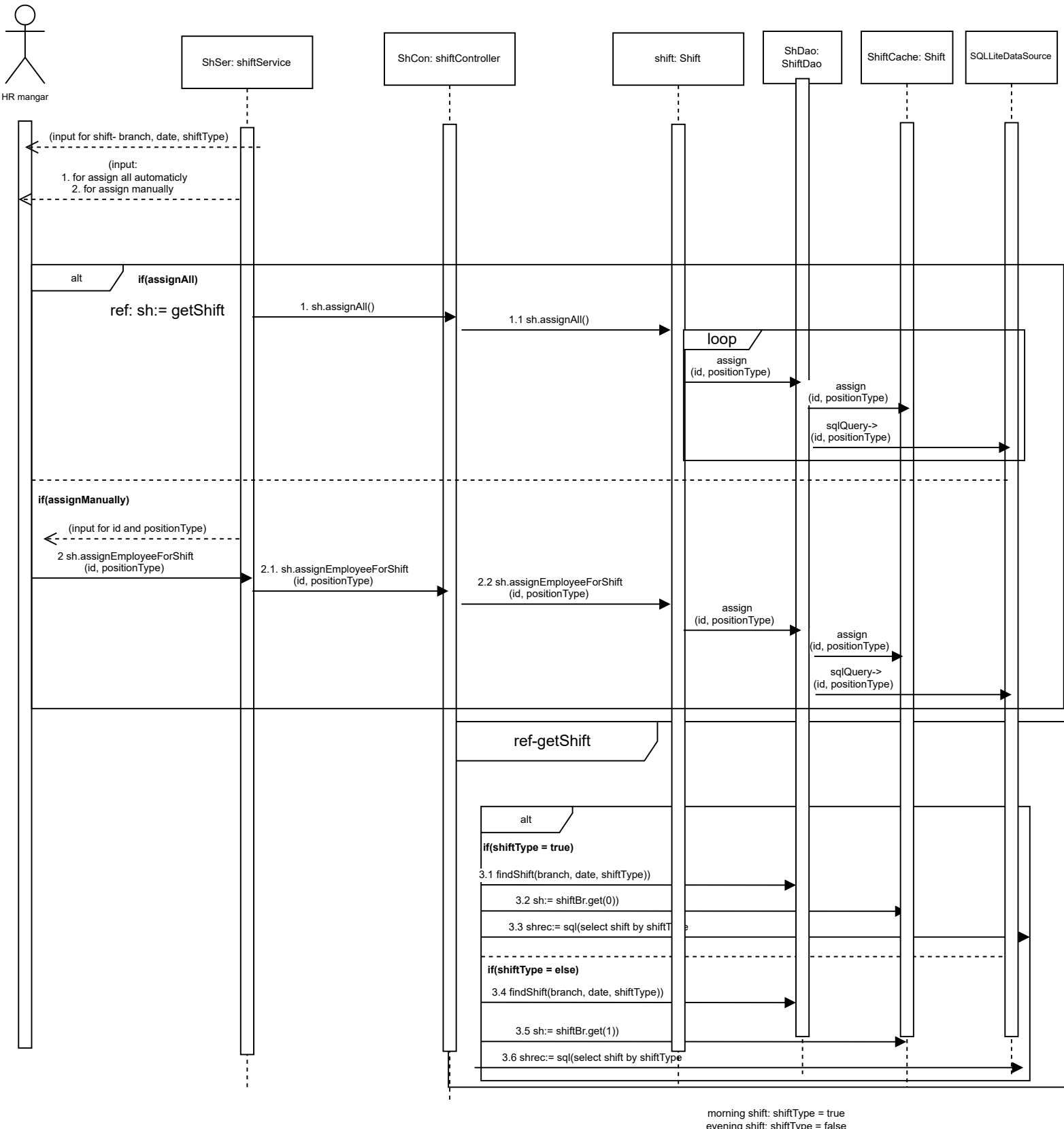
contract AssEmp4 - assignAll/assignManually
References: Use Cases: Assign employee to a shift
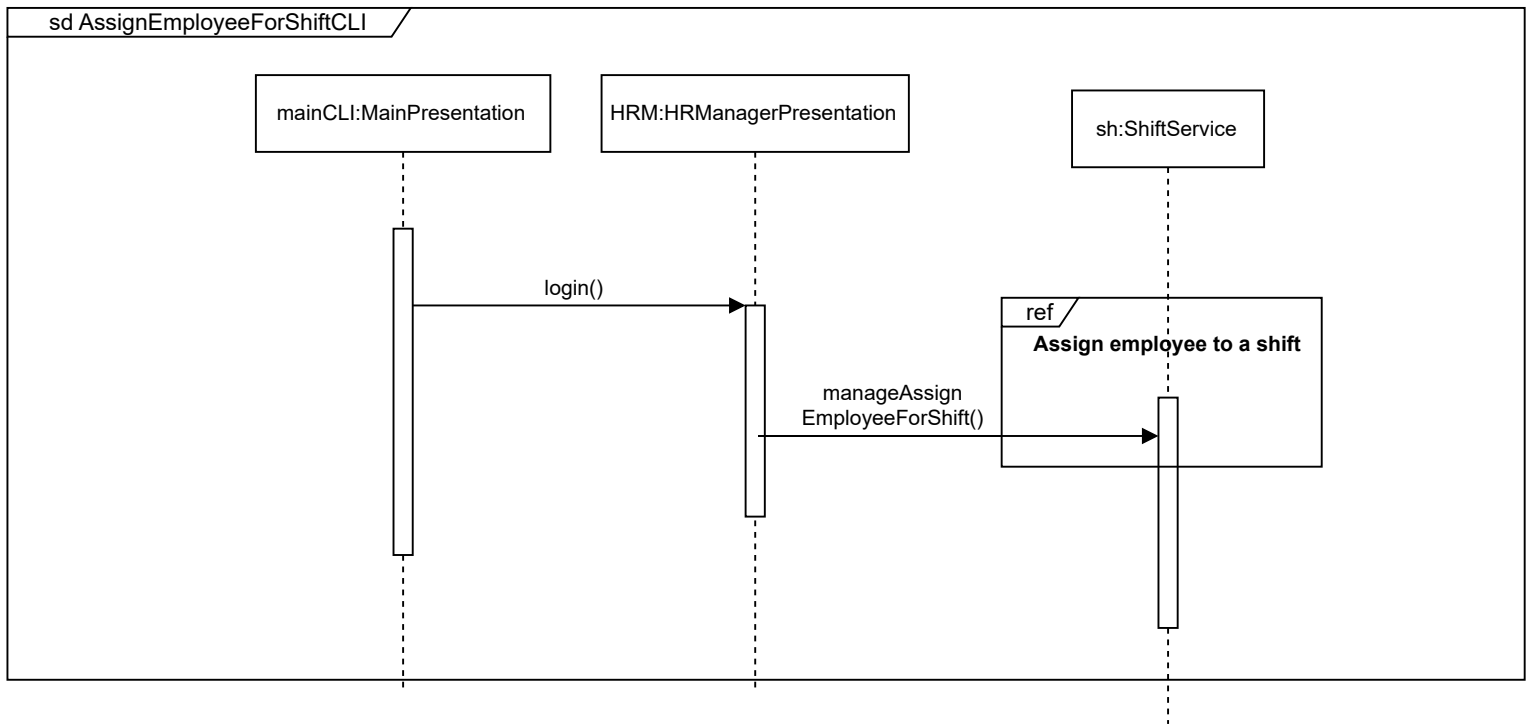**pre-condition:**
1. There is exist shift in this date and shiftType (shift != null)
2. There are employees in the system who submitted a constraint for the shift
3. The employees who submitted a constraint for any role are qualified to perform that role
post-condition:
1. Each employee is assigned to a maximum of one shift for that date.
2. Each employee is assigned a maximum of 6 shifts that week.

morning shift: shiftType = true
evening shift: shiftType = false

CLI

sd AssignEmployeeForShiftCLI

mainCLI:MainPresentation	HRM:HRManagerPresentation	sh:ShiftService

login()

manageAssign
EmployeeForShift()

ref
Assign employee to a shift

GUI

sd AssignEmployeeForShiftGUI

mainGUI:MainFrame	lg:LoginFrame	HRM:HRManagerFrame	sh:ShiftService

stratProgram

login()

manageAssign
EmployeeForShift()

ref
Assign employee to a shift