Software Requirements Specification
For Residential Security Aid ShiftStreamline Application
Prepared by Group 6 Syracuse University CSE 687
April 8, 2024

Software Requirements Specification 2 Residential Security Aid ShiftStreamline Application Version 2 April 08, 2024

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Figure 1

System Block Diagram 6

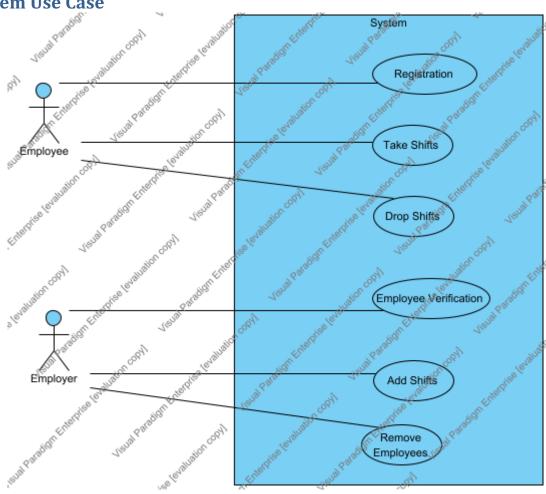
Figure 2

Use Case Diagram 8

Figure 1

Enter Available Ingredients Activity Diagram 11

1. System Use Case



## ₹ 2. Employee

ID: AC01

An individual who engages with the shift management system to manage their work schedule. The Employee has the ability to self-register, choose available shifts to work, and relinquish shifts if they can no longer fulfill them.

### 2.1. Properties

Abstract	false
Leaf	false
Root	false

### 2.2. Relationships

Relationship	From	То
— unnamed	Employee	Registration
— unnamed	Employee	Take Shifts
— unnamed	Employee	<u>Drop Shifts</u>

## ₹ 3. Employer

ID: AC03

A supervisory entity responsible for the oversight of shift allocation and personnel management within the system. The Employer can introduce new shifts into the system and has the authority to remove employees from the system database.

### 3.1. Properties

Abstract	false
Leaf	false
Root	false

### 3.2. Relationships

Relationship	From	То
— unnamed	£ Employer	Employee Verification
— unnamed	₹ <u>Employer</u>	Add Shifts
— unnamed	₹ <u>Employer</u>	Remove Employees

## **4. System**

### 4.1. Properties

Abstract	false
Leaf	false
Root	false

### 4.2. Children Summary

Name	Description
Add Shifts	Allows the employer to add new shifts to the schedule.
Drop Shifts	Permits an employee to drop a shift they can no longer attend.
<ul><li>Employee</li><li>Verification</li></ul>	The system confirms the identity and eligibility of the employee to take or drop shifts.
Registration	Allows an employee to register in the system to gain access to functionalities such as taking or dropping shifts.
Remove Employees	Enables the employer to remove employees from the system.
Take Shifts	Allows an employee to pick up available shifts.

### 5. Add Shifts

ID: UC05

Allows the employer to add new shifts to the schedule.

## **5.1. Primary Actors**

£ Employer

### 5.2. Details

Level	N/A
Complexity	N/A
Use Case Status	N/A
Implementation Status	N/A
Preconditions	Employer has access to the scheduling system.
Post-conditions	New shifts are available for employees to take.
Author	N/A
Assumptions	N/A

#### 5.3. Scenarios

### **5.3.1. Scenario**

1. Employer inputs the details of the new shifts into the system.

### **5.4. Requirements**



ID: UC05.REQ001

Employers can add time and place according to specific requirenments.



ID: UC05.REQ002

When you are adding a new shift, it will confirm with employee and employers

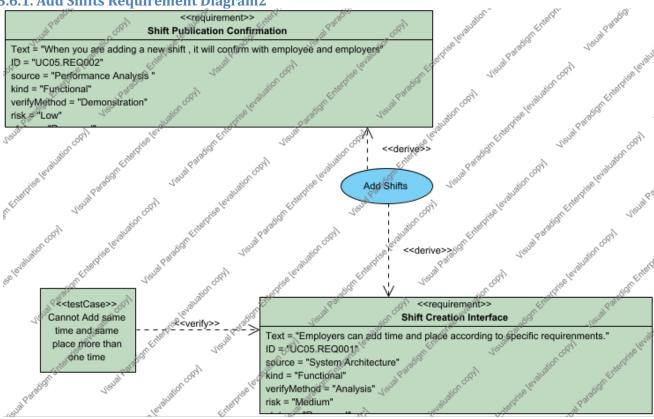
### 5.5. Relationships

Relationship	From	То	
--------------	------	----	--

Relationship	From	То
<sup>«d</sup> » unnamed	Add Shifts	Shift Publication Confirmation
<sup>≪d</sup> ≫ unnamed	Add Shifts	Shift Creation Interface
— unnamed	£ <u>Employer</u>	Add Shifts

### 5.6. Sub Diagrams

5.6.1. Add Shifts Requirement Diagram2



## **5.7. Reference Diagrams**

## 6. Drop Shifts

ID: UC03

Permits an employee to drop a shift they can no longer attend.

### **6.1. Primary Actors**

₹ <u>Employee</u>

### 6.2. Details

Level	N/A
Complexity	N/A
Use Case Status	N/A
Implementation Status	N/A
Preconditions	Employee is scheduled for shifts.
Post-conditions	Shift is dropped and made available to others.

Author	N/A
Assumptions	N/A

#### 6.3. Scenarios

#### **6.3.1. Scenario**

1. Employee selects a scheduled shift and drops it.

### 6.4. Requirements



ID: UC03.REQ001

Employees must be able to drop a shift they cannot attend, provided that the action is in compliance with the scheduling policy (e.g., notice given 24 hours in advance)

## **a** 6.4.2. Shift Drop Confirmation

ID: UC03.REQ003

Employee should receive confirmation after dropping the shift.

## 6.4.3. Shift Replacement Proposal

ID: UC03.REQ002

When Employee drop shift, it should be available for next employee.

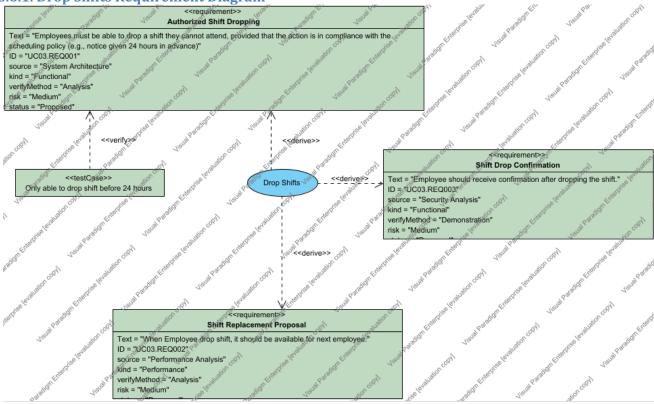
### 6.5. Relationships

Relationship From	То	
-------------------	----	--

Relationship	From	То
<sup>≪d</sup> <b>ॐ</b> unnamed	<u>Drop Shifts</u>	Authorized Shift Dropping
<sup>≪d</sup> ≫ unnamed	Drop Shifts	Shift Drop Confirmation
<sup>≪d</sup> unnamed	Drop Shifts	Shift Replacement Proposal
— unnamed	£ Employee	Drop Shifts

### 6.6. Sub Diagrams

6.6.1. Drop Shifts Requirement Diagram



## **6.7. Reference Diagrams**

## 7. Employee Verification

ID: UC04

The system confirms the identity and eligibility of the employee to take or drop shifts.

### 7.1. Primary Actors

子 <u>Employer</u>

#### 7.2. Details

Level	N/A
Complexity	N/A
Use Case Status	N/A
Implementation Status	N/A

Preconditions	Employee is attempting to take or drop shifts.
Post-conditions	Employee's action on shifts is either permitted or denied based on verification.
Author	N/A
Assumptions	N/A

### 7.3. Scenarios

#### **7.3.1. Scenario**

1. The system automatically verifies the employee's credentials and eligibility.

### 7.4. Requirements



ID: UC04.REQ002

Need to add Employees on the system so they will get their checks and payee.

**7.4.2.** Verify Employee Credentials

ID: UC04.REQ001

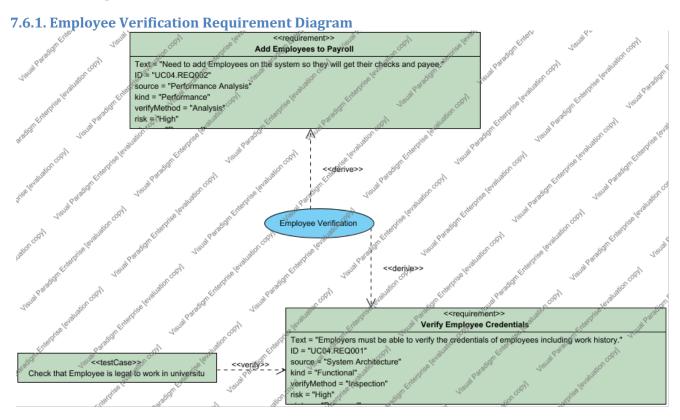
Employers must be able to verify the credentials of employees including work history.

### 7.5. Relationships

Relationship	From	То	
--------------	------	----	--

Relationship	From	То
<sup>≪d</sup> <b></b> unnamed	<u>Employee Verification</u>	Add Employees to Payroll
<sup>«d</sup> » unnamed	Employee Verification	Verify Employee Credentials
— unnamed	£ <u>Employer</u>	Employee Verification

## 7.6. Sub Diagrams



### 7.7. Reference Diagrams

## 8. Registration

Allows an employee to register in the system to gain access to functionalities such as taking or dropping shifts.

## 8.1. Primary Actors

₹ <u>Employee</u>

### 8.2. Details

Level	N/A
Complexity	N/A
Use Case Status	N/A
Implementation Status	N/A
Preconditions	Employee is not already registered.
Post-conditions	Employee is registered and can log into the system.

Author	N/A
Assumptions	N/A

#### 8.3. Scenarios

#### **8.3.1. Scenario**

1. The system automatically verifies the employee's credentials and eligibility.

### 8.4. Requirements

8.4.1. Collect User Information

The system must provide a user-friendly form to collect essential information from the employee during the registration process.

### **8.4.2. Email Address Verification**

ID: UC01.REQ002

ID: UC01.REQ001

The system must validate that the email address provided by the new user is unique and not already registered in the system.

### **8.4.3. Password Creation and validation**

ID: UC01.REQ003

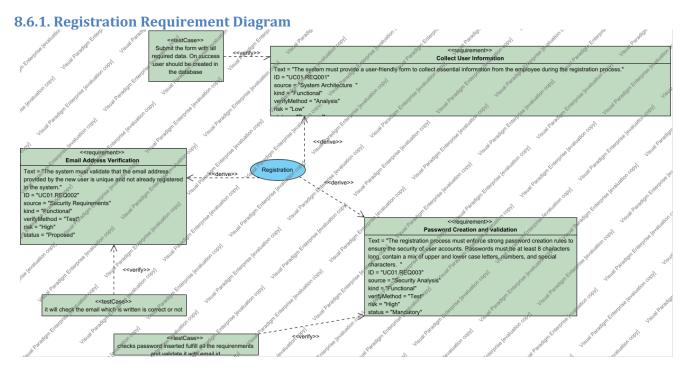
The registration process must enforce strong password creation rules to ensure the security of user accounts. Passwords must be at least 8 characters long, contain a mix of upper and lower case letters, numbers, and special characters.

### 8.5. Relationships

Relationship	From	То
--------------	------	----

Relationship	From	То
<sup>«d</sup> unnamed	Registration	Collect User Information
<sup>≪d</sup> unnamed	Registration	Password Creation and validation
<sup>≪d</sup> ≽ unnamed	Registration	Email Address Verification
— unnamed	£ Employee	Registration

### 8.6. Sub Diagrams



## 8.7. Reference Diagrams

## 9. Remove Employees

ID: UC06

Enables the employer to remove employees from the system.

## 9.1. Primary Actors



### 9.2. Details

7	
Level	N/A
Complexity	N/A
Use Case Status	N/A
Implementation Status	N/A
Preconditions	Employer decides an employee should no longer have access.
Post-conditions	Employee is removed and cannot log in or take shifts.
Author	N/A
Assumptions	N/A

### 9.3. Scenarios

#### **9.3.1. Scenario**

1. Employer selects an employee from the system and removes them.

### 9.4. Requirements

**9.4.1.** Available to Record Students points

ID: UC06.REQ002

If employee is late then they add points and record information.

**2** 9.4.2. Employee Removal Authorization

ID: UC06.REQ001

Employer has power to remove employees.

**9.4.3. Remove Employee from Database** 

ID: UC06.REQ003

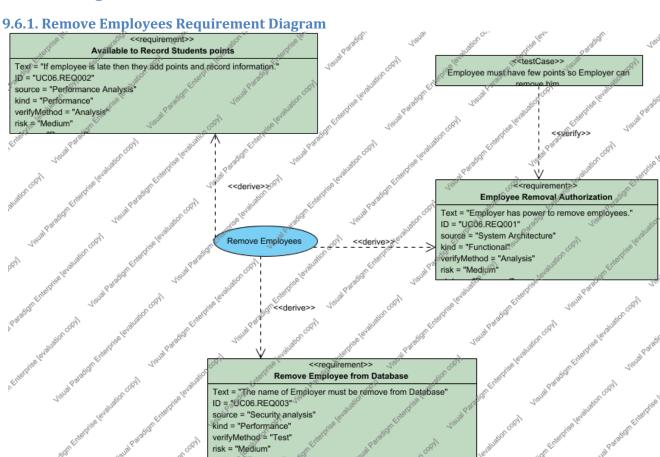
The name of Employer must be remove from Database

### 9.5. Relationships

Relationship From To

Relationship	From	То
<sup>≪d</sup> unnamed	Remove Employees	Available to Record Students points
<sup>«:d</sup> ÿ unnamed	Remove Employees	Employee Removal Authorization
<sup>≪d</sup> ÿ unnamed	Remove Employees	Remove Employee from Database
— unnamed	£ Employer	Remove Employees

### 9.6. Sub Diagrams



### 9.7. Reference Diagrams

### **● 10. Take Shifts**

ID: UC02

Allows an employee to pick up available shifts.

### 10.1. Primary Actors

£ Employee

#### 10.2. Details

Level	N/A
Complexity	N/A
Use Case Status	N/A

Implementation Status	N/A
Preconditions	Employee is registered and verified.
Post-conditions	Employee is scheduled for the selected shifts.
Author	N/A
Assumptions	N/A

#### 10.3. Scenarios

### **10.3.1. Scenario**

1. Employee views available shifts and selects the ones they wish to take.

### 10.4. Requirements



### 10.4.1. Shift Conflict Detection

ID: UC02.REQ002

The system must automatically detect and prevent an employee from taking shifts that conflict with their existing schedule.



## **10.4.2. Shift selection avaibility**

ID: UC02.REQ001

Employees must be able to view and select available shifts for which they are qualified. The system should update the availability in real-time.



### **10.4.3. Shift Take Acknowledgment**

ID: UC02.REQ003

Upon taking a shift, the system should confirm the action with the employee and update their schedule immediately.

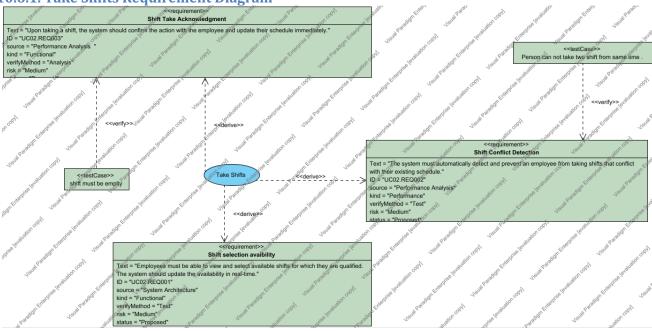
### 10.5. Relationships

Relationship From	То
-------------------	----

Relationship	From	То
<b>≝d</b> unnamed	Take Shifts	Shift Take Acknowledgment
<sup>≪d</sup> ≫ unnamed	Take Shifts	Shift Conflict Detection
<sup>≪d</sup> ≫ unnamed	Take Shifts	Shift selection avaibility
— unnamed	Employee	Take Shifts

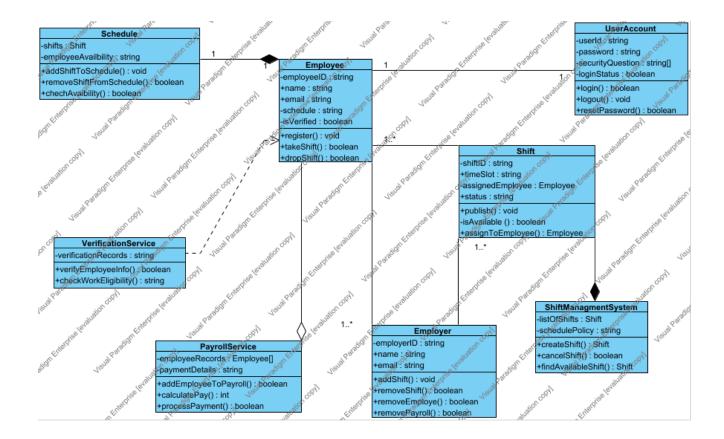
## 10.6. Sub Diagrams

10.6.1. Take Shifts Requirement Diagram



## 10.7. Reference Diagrams

## 11. Design Model Class Diagram



## **12. Employee**

### 12.1. Properties

Visibility	public
Abstract	false
Leaf	false
Root	false
Active	false

### 12.2. Attributes Summary

Name	Description
email	
employeeID	
isVerified	
<b>⊖</b> name	
e schedule	

### 12.3. Operations Summary

|--|

### Name Description dropShift egister egister **⊖** takeShift 12.4. Attributes **●** 12.4.1. email Visibility public Type string 12.4.2. employeeID Visibility private Type string € 12.4.3. isVerified Visibility private Type boolean **12.4.4.** name Visibility public Type string **●** 12.4.5. schedule Visibility private Type string 12.5. Operations **⊖** 12.5.1. dropShift Visibility public boolean **Return Type ⊕** 12.5.2. register Visibility public void **Return Type ⊖** 12.5.3. takeShift Visibility public **Return Type** boolean

### 12.6. Relationships

Relationship From	То
-------------------	----

Relationship	From	То
— unnamed	<b>Employee</b>	Shift
— unnamed	<u>Employee</u>	<u>UserAccount</u>
— unnamed	<u>Employee</u>	Schedule Schedule
— unnamed	<u>Employer</u>	Employee
— unnamed	<u>PayrollService</u>	<u>Employee</u>

## **13. Employer**

## 13.1. Properties

Visibility	public
Abstract	false
Leaf	false
Root	false
Active	false

## 13.2. Attributes Summary

Name	Description	
<b>⊖</b> email		
employerID		
<b>⊖</b> name		

### 13.3. Operations Summary

10101 operati	tolor operations building			
Name	Description			
addShift     addShift     addShift				
emoveEmploy	e			
eremovePayr	oll			
eremoveShift				

### 13.4. Attributes

### **⊖** 13.4.1. email

Visibility	public
Туре	string

### **☐** 13.4.2. employerID

Visibility	private		
Туре	string		

### **●** 13.4.3. name

Visibility public

**Type** string

### 13.5. Operations

**⊖** 13.5.1. addShift

Visibility public

Return Type void

**⊖** 13.5.2. removeEmploye

Visibility public

Return Type boolean

**⊕** 13.5.3. removePayroll

Visibility public

Return Type boolean

### 13.5.4. removeShift

Visibility public

Return Type boolean

### 13.6. Relationships

Relationship	From	То
— unnamed	<b>Employer</b>	Shift
— unnamed	<u>Employer</u>	<u>Employee</u>

## **14. PayrollService**

### 14.1. Properties

Visibility	public
Abstract	false
Leaf	false
Root	false
Active	false

## 14.2. Attributes Summary

Name Description	
------------------	--

## Name Description employeeRecords paymentDetails 14.3. Operations Summary Name Description addEmployeeToP ayroll processPayment 14.4. Attributes **●** 14.4.1. employeeRecords Visibility private Employee[] Type **●** 14.4.2. paymentDetails Visibility private Type string 14.5. Operations € 14.5.1. addEmployeeToPayroll Visibility public **Return Type** boolean 14.5.2. calculatePay Visibility public **Return Type** int \varTheta 14.5.3. processPayment Visibility public **Return Type** boolean

### 14.6. Relationships

Relationship From	То	
-------------------	----	--

Relationship	From	То
— unnamed	PayrollService	Employee

### **15. Schedule**

### 15.1. Properties

Visibility	public
Abstract	false
Leaf	false
Root	false
Active	false

## **15.2. Attributes Summary**

Name	Description
$\Theta$	
employeeAvailbili	
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Shifts
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# 15.3. Operations Summary Name Description

Name	Description
et chechAvaibility	
emoveShiftFrom Schedule	

### 15.4. Attributes

## **15.4.1. employeeAvailbility**

Visibility	private
Туре	string

### **●** 15.4.2. shifts

Visibility	private
Туре	<u>Shift</u>

## 15.5. Operations

<b>15.5.1.</b> addShift	tToSchedule
Visibility	public
Return Type	void

## 15.5.2. chechAvaibility

Visibility public

Return Type boolean

### € 15.5.3. removeShiftFromSchedule

Visibility public

Return Type boolean

### 15.6. Relationships

Relationship	From	То
— unnamed	<u>Employee</u>	<u>Schedule</u>

### **16. Shift**

### 16.1. Properties

Visibility	public
Abstract	false
Leaf	false
Root	false
Active	false

### 16.2. Attributes Summary

Name	Description	
assignedEmploye e		
e shiftID		

**⊖** timeSlot

### 16.3. Operations Summary

Name	Description
⇔     assignToEmploye     e	
e is Available	
e publish	

### 16.4. Attributes

## **☐** 16.4.1. assignedEmployee

	Bironzinprojec	
Visibility	private	
Туре	<u>Employee</u>	

### **●** 16.4.2. shiftID

Visibility private

**Type** string

### **●** 16.4.3. status

Visibility public

**Type** string

### **●** 16.4.4. timeSlot

Visibility public

**Type** string

### 16.5. Operations

### **●** 16.5.1. assignToEmployee

Visibility public

Return Type <u>Employee</u>

### **⊖** 16.5.2. isAvailable

Visibility private

Return Type boolean

### **⊖** 16.5.3. publish

Visibility public

Return Type void

### 16.6. Relationships

Relationship	From	То
— unnamed	Employee	Shift
— unnamed	<u>Employer</u>	Shift
— unnamed	<u>ShiftManagmentSystem</u>	Shift Shift

### **■ 17. ShiftManagmentSystem**

### 17.1. Properties

Visibility	public
Abstract	false
Leaf	false
Root	false
Active	false

### 17.2. Attributes Summary

|--|

### Name Description schedulePolicy 17.3. Operations Summary Name Description e cancelShift ereateShift findAvailableShift 17.4. Attributes 17.4.1. listOfShifts Visibility private Type Shift **●** 17.4.2. schedulePolicy Visibility private Type string 17.5. Operations 17.5.1. cancelShift Visibility public **Return Type** boolean 17.5.2. createShift Visibility public **Return Type** Shift \varTheta 17.5.3. findAvailableShift Visibility public **Return Type** Shift 17.6. Relationships Relationship From To Shift ShiftManagmentSystem — unnamed

### 18. UserAccount

Visibility	public		
Abstract	false		

Leaf	false
Root	false
Active	false

### **18.2.** Attributes Summary

TOILITION ID MOO.	J G GIIII J		
Name	Description		
☐ loginStatus			
e password			
escurityQuestion			
e userId			

## 18.3. Operations Summary

Name	Description
⊖ login	
<b>⊖</b> logout	
eresetPassword	

### 18.4. Attributes

🛡 18.4.1. logii	ıStatus		
Visibility	private		
Туре	boolean		

<b>18.4.2.</b> pass	word		
Visibility	private		
_			

Type	string	
<b>⊜</b> 18.4.3.	securityQuestion	

Visibility	private	
Туре	string[]	

<b>18.4.4.</b> userId	
Visibility	private
Туре	string

## 18.5. Operations

<b>⊖</b> 18.5.1. login				
Visibility	public			
Return Type	boolean			
<b>⊖</b> 18.5.2. logout				
Visibility	public			

Return Type void

**⊕** 18.5.3. resetPassword

Visibility public

Return Type boolean

18.6. Relationships

Relationship	From	То
— unnamed	<u>Employee</u>	<u>UserAccount</u>

### 19. VerificationService

### 19.1. Properties

Visibility	public	
Abstract	false	
Leaf	false	
Root	false	
Active	false	

### 19.2. Attributes Summary

Name	Description
$\Theta$	
verificationRecor	
ds	

### **19.3. Operations Summary**

Name	Description	
eheckWorkEligibil		
⊖ verifyEmployeeIn fo		

### 19.4. Attributes

## **⊖** 19.4.1. verificationRecords

Visibility	private	
Type	string	

## 19.5. Operations

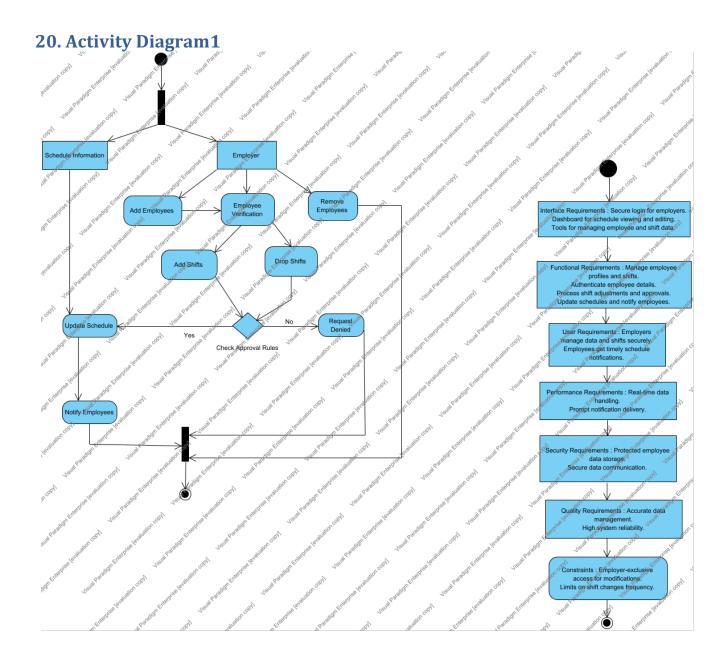
<b>⊕</b> 19.5.1. checkWorkEligibility
---------------------------------------

Visibility	public
Return Type	string

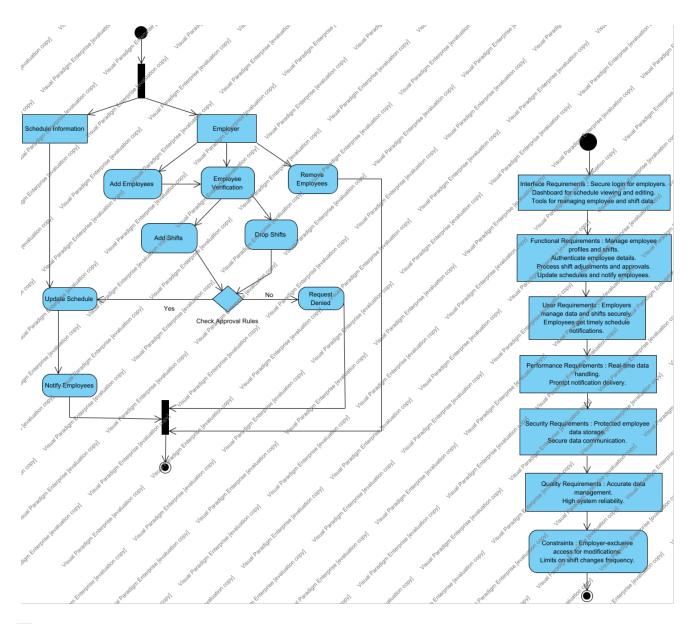
## 19.5.2. verifyEmployeeInfo

Visibility public

Return Type boolean



## 21. Activity Diagram1



## **21.1. Add Employees**

#### 21.1.1. Properties

Effect	N/A
Visibility	Unspecified
Must isolate	false
Leaf	false

### 21.1.2. Relationships

Relationship	From	То
<u>CF</u> unnamed	Add Employees	<u>Employee Verification</u>
unnamed	<u>Employer</u>	Add Employees

### **21.2.** Add Shifts

Effect	N/A	
Visibility	Unspecified	

Must isolate	false	
Leaf	false	

### 21.2.2. Relationships

Relationship	From	То
<u>CF</u> unnamed	Add Shifts	** Check Approval Rules
<u>CF</u> unnamed	Employee Verification	Add Shifts

## **3.** 21.3. Check Approval Rules

### 21.3.1. Properties

Visibility	Unspecified
Must isolate	false
Leaf	false

### 21.3.2. Relationships

Relationship	From	То
<u>CF</u> No	Check Approval Rules	Request Denied
<u>CF</u> unnamed	Drop Shifts	Check Approval Rules
<u>CF</u> unnamed	Add Shifts	Check Approval Rules
Yes	Check Approval Rules	<u>Update Schedule</u>

# **21.4.** Constraints: Employer-exclusive access for modifications. Limits on shift changes frequency.

### 21.4.1. Properties

Effect	N/A
Visibility	Unspecified
Must isolate	false
Leaf	false

### 21.4.2. Relationships

Relationship	From	То
©F unnamed	Constraints: Employer- exclusive access for modifications. Limits on shift changes frequency.	o unnamed
<u>○F</u> unnamed	Quality Requirements	Constraints: Employer- exclusive access for modifications. Limits on shift changes frequency.

## **21.5. Drop Shifts**

### 21.5.1. Properties

Effect	N/A
Visibility	Unspecified
Must isolate	false
Leaf	false

### 21.5.2. Relationships

Relationship	From	То
<u>CF</u> unnamed	Drop Shifts	* Check Approval Rules
<u>CF</u> unnamed	Employee Verification	Drop Shifts

## **21.6.** Employee Verification

### 21.6.1. Properties

Effect	N/A
Visibility	Unspecified
Must isolate	false
Leaf	false

### 21.6.2. Relationships

Relationship	From	То
<u>CF</u> unnamed	<b>Employee Verification</b>	<u>Add Shifts</u>
<u>CF</u> unnamed	<b>Employee Verification</b>	Drop Shifts
<u>CF</u> unnamed	Add Employees	<b>Employee Verification</b>
unnamed	<b>Employer</b>	Employee Verification

## **21.7. Employer**

Parameter	N/A
Upper bound	N/A

Ordering kind	FIFO
Visibility	Unspecified
Control type	false
Must isolate	false
Leaf	false

### 21.7.2. Relationships

Relationship	From	То
unnamed	<u>Employer</u>	<b>Employee Verification</b>
unnamed	<u>Employer</u>	Add Employees
unnamed	<u>Employer</u>	Remove Employees
<u>○F</u> unnamed	<b>∔</b> <u>unnamed</u>	<u>Employer</u>

## **21.8. Functional Requirements**

### 21.8.1. Properties

Parameter	N/A
Upper bound	N/A
Ordering kind	FIFO
Visibility	Unspecified
Control type	false
Must isolate	false
Leaf	false

### 21.8.2. Relationships

Relationship	From	То
unnamed	Functional Requirements	User Requirements
<u>○F</u> unnamed	Interface Requirements	Functional Requirements

## **21.9.** Interface Requirements

#### 21.9.1. Properties

21.7.1. Toperties	
Parameter	N/A
Upper bound	N/A
Ordering kind	FIFO
Visibility	Unspecified
Control type	false
Must isolate	false
Leaf	false

### 21.9.2. Relationships

Relationship	From	То	
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Relationship	From	То
unnamed	Interface Requirements	Functional Requirements
unnamed	<u>unnamed</u>	Interface Requirements

## **21.10.** Notify Employees

### **21.10.1. Properties**

Effect	N/A
Visibility	Unspecified
Must isolate	false
Leaf	false

### 21.10.2. Relationships

Relationship	From	То
<u>CF</u> unnamed	Notify Employees	<del>ऄ</del> <u>unnamed</u>
<u>CF</u> unnamed	Update Schedule	Notify Employees

## **21.11.** Performance Requirements

### **21.11.1. Properties**

Parameter	N/A
Upper bound	N/A
Ordering kind	FIFO
Visibility	Unspecified
Control type	false
Must isolate	false
Leaf	false

### 21.11.2. Relationships

Relationship	From	То
—→ unnamed	Performance Requirements	Security Requirements
○F→ unnamed	<u>User Requirements</u>	Performance Requirements

## **21.12.** Quality Requirements

ZI.IZ.I. I Toper tie	
Parameter	N/A
Upper bound	N/A
Ordering kind	FIFO
Visibility	Unspecified
<b>Control type</b>	false
Must isolate	false

### 21.12.2. Relationships

Relationship	From	То
<u>○F</u> unnamed	Quality Requirements	Constraints: Employer- exclusive access for modifications. Limits on shift changes frequency.
unnamed	Security Requirements	Quality Requirements

## **21.13.** Remove Employees

### **21.13.1. Properties**

Effect	N/A
Visibility	Unspecified
Must isolate	false
Leaf	false

### 21.13.2. Relationships

Relationship	From	То
<u>CF</u> unnamed	Remove Employees	<del>∛</del> <u>unnamed</u>
<u>○F</u> unnamed	<u>Employer</u>	Remove Employees

### **21.14.** Request Denied

### **21.14.1. Properties**

ZIII IIII Topere	
Effect	N/A
Visibility	Unspecified
Must isolate	false
Leaf	false

### 21.14.2. Relationships

Relationship	From	То
<sup>CF</sup> No	* Check Approval Rules	Request Denied
<u>CF</u> unnamed	Request Denied	<del>ऄ</del> → <u>unnamed</u>

### **21.15. Schedule Information**

Parameter	N/A
Upper bound	N/A
Ordering kind	FIFO
Visibility	Unspecified
Control type	false

Must isolate	false
Leaf	false

### 21.15.2. Relationships

Relationship	From	То
unnamed	Schedule Information	Update Schedule
_OF→ unnamed	<b>→</b> unnamed	Schedule Information

## **21.16. Security Requirements**

### **21.16.1. Properties**

Parameter	N/A
Upper bound	N/A
Ordering kind	FIFO
Visibility	Unspecified
Control type	false
Must isolate	false
Leaf	false

### 21.16.2. Relationships

Relationship	From	То
unnamed	Security Requirements	Quality Requirements
○F→ unnamed	Performance Requirements	Security Requirements

### **21.17.** unnamed

### **21.17.1. Properties**

Visibility	Unspecified
Must isolate	false
Leaf	false

### 21.17.2. Relationships

Relationship	From	То
©F unnamed	Constraints: Employer- exclusive access for modifications. Limits on shift changes frequency.	o unnamed

### **21.18. unnamed**

Visibility	Unspecified
Must isolate	false
Leaf	false

### 21.18.2. Relationships

Relationship	From	То
unnamed	<u>unnamed</u>	Interface Requirements

## **≯** 21.19. unnamed

### **21.19.1. Properties**

Visibility	Unspecified
Combine duplicate	true
Must isolate	false
Leaf	false

### 21.19.2. Relationships

Relationship	From	То
<u>CF</u> unnamed	<del>≸</del> <u>unnamed</u>	unnamed
<u>CF</u> unnamed	Notify Employees	<b>≱</b> <u>unnamed</u>
<u>CF</u> unnamed	Request Denied	<del>≱</del> <u>unnamed</u>
<u>CF</u> unnamed	Remove Employees	<del>≸</del> <u>unnamed</u>

## **岩21.20. unnamed**

### **21.20.1. Properties**

Visibility	Unspecified
Must isolate	false
Leaf	false

### 21.20.2. Relationships

Relationship	From	То
unnamed	<b>→</b> <u>unnamed</u>	Schedule Information
unnamed	<b>→</b> <u>unnamed</u>	<u>Employer</u>
<sup>CF</sup> unnamed	<u>unnamed</u>	<b>♯</b> <u>unnamed</u>

### **21.21. unnamed**

### 21.21.1. Properties

Visibility	Unspecified
Must isolate	false
Leaf	false

### 21.21.2. Relationships

Relationship From To	Relationship	From	То	
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Relationship	From	То
<u>CF</u> unnamed	<del>≸</del> > <u>unnamed</u>	unnamed

## **1** 21.22. unnamed

### **21.22.1. Properties**

Visibility	Unspecified
Must isolate	false
Leaf	false

### 21.22.2. Relationships

Relationship	From	То
©F unnamed	<u>unnamed</u>	<b>♯</b> <u>unnamed</u>

## **21.23. Update Schedule**

### **21.23.1. Properties**

Effect	N/A
Visibility	Unspecified
Must isolate	false
Leaf	false

### 21.23.2. Relationships

Relationship	From	То
<u>CF</u> unnamed	Update Schedule	Notify Employees
○F unnamed	Schedule Information	Update Schedule
CF Yes	Check Approval Rules	<u>Update Schedule</u>

### **21.24.** User Requirements

### **21.24.1. Properties**

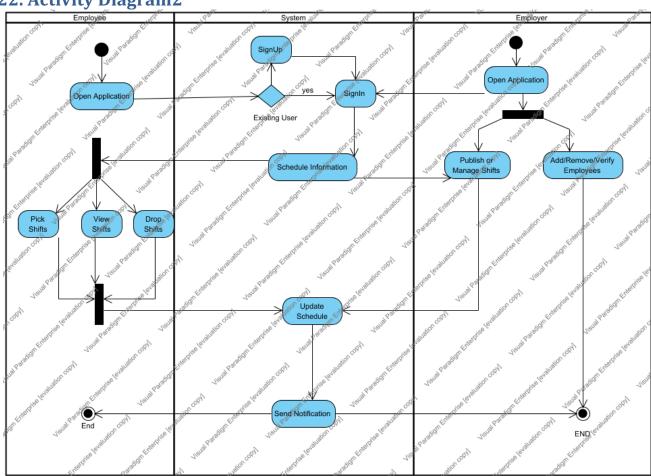
Parameter	N/A
Upper bound	N/A
Ordering kind	FIFO
Visibility	Unspecified
Control type	false
Must isolate	false
Leaf	false

### 21.24.2. Relationships

Relationship	From	То

Relationship	From	То
unnamed	User Requirements	Performance Requirements
unnamed	Functional Requirements	User Requirements

## 22. Activity Diagram2



## **23. Open Application**

## 23.1. Properties

Effect	N/A
Visibility	Unspecified
Must isolate	false
Leaf	false

## 23.2. Relationships

Relationship	From	То	

Relationship	From	То
<u>CF</u> unnamed	Open Application	
<u>CF</u> unnamed	Open Application	SignIn
<u>CF</u> unnamed	unnamed	Open Application

## **24. Open Application**

## 24.1. Properties

Effect	N/A
Visibility	Unspecified
Must isolate	false
Leaf	false

## 24.2. Relationships

Relationship	From	То
<u>CF</u> unnamed	Open Application	* Existing User
<u>CF</u> unnamed	unnamed	Open Application

### **25.** Schedule Information

### 25.1. Properties

Effect	N/A
Visibility	Unspecified
Must isolate	false
Leaf	false

### 25.2. Relationships

Relationship	From	То
<u>CF</u> unnamed	Schedule Information	Publish or Manage Shifts
<u>CF</u> unnamed	Schedule Information	<b>♯</b> unnamed
<u>CF</u> unnamed	<u>SignIn</u>	Schedule Information

### **26. Send Notification**

Effect	N/A
Visibility	Unspecified
Must isolate	false
Leaf	false

## 26.2. Relationships

Relationship	From	То
<u>CF</u> unnamed	Send Notification	● END
<sup>CF</sup> unnamed	Send Notification	End
<sup>CF</sup> unnamed	<u>Update Schedule</u>	Send Notification

### **27. Swimlane**

### **1** 28. Swimlane 2

## **29. View Shifts**

### 29.1. Properties

Effect	N/A
Visibility	Unspecified
Must isolate	false
Leaf	false

### 29.2. Relationships

Relationship	From	То
<u>CF</u> unnamed	<u>View Shifts</u>	<del>ず</del> unnamed
<u>CF</u> unnamed	₩unnamed	<u>View Shifts</u>

## **■ 30. Drop Shifts**

## **30.1. Properties**

Effect	N/A
Visibility	Unspecified
Must isolate	false
Leaf	false

## 30.2. Relationships

Relationship	From	То
<u>CF</u> unnamed	Drop Shifts	<b>≯</b> unnamed
©F unnamed	<b>♯</b> unnamed	Drop Shifts

### **31. Pick Shifts**

|--|--|

Visibility	Unspecified
Must isolate	false
Leaf	false

### 31.2. Relationships

Relationship	From	То
<u>CF</u> unnamed	Pick Shifts	<del>╡</del> unnamed
<u>CF</u> unnamed	式unnamed	Pick Shifts

## **■** 32. SignIn

### 32.1. Properties

Effect	N/A
Visibility	Unspecified
Must isolate	false
Leaf	false

## 32.2. Relationships

Relationship	From	То
<u>CF</u> unnamed	<u>SignIn</u>	Schedule Information
<u>CF</u> unnamed	Open Application	<u>SignIn</u>
<u>CF</u> unnamed	SignUp	<u>SignIn</u>
<u>CF</u> yes	* Existing User	SignIn

## 33. SignUp

### 33.1. Properties

Effect	N/A
Visibility	Unspecified
Must isolate	false
Leaf	false

## 33.2. Relationships

Relationship	From	То
<u>CF</u> unnamed	SignUp	<u>SignIn</u>
<u>CF</u> unnamed	* Existing User	SignUp

## **34.** Update Schedule

|--|

Visibility	Unspecified
Must isolate	false
Leaf	false

## 34.2. Relationships

Relationship	From	То
<u>CF</u> unnamed	<u>Update Schedule</u>	Send Notification
<u>CF</u> unnamed	Publish or Manage Shifts	<u>Update Schedule</u>
<u>CF</u> unnamed	<b>≯</b> unnamed	<u>Update Schedule</u>

## **■ 35. Add/Remove/Verify Employees**

## **35.1. Properties**

Effect	N/A
Visibility	Unspecified
Must isolate	false
Leaf	false

## 35.2. Relationships

Relationship	From	То
©F unnamed	Add/Remove/Verify Employees	© END
<u>CF</u> unnamed	<b>⊀</b> unnamed	Add/Remove/Verify Employees

## **36.** Publish or Manage Shifts

## 36.1. Properties

Effect	N/A
Visibility	Unspecified
Must isolate	false
Leaf	false

### 36.2. Relationships

Relationship	From	То
<u>CF</u> unnamed	Publish or Manage Shifts	Update Schedule
<u>CF</u> unnamed	<b>♯</b> unnamed	Publish or Manage Shifts
<u>CF</u> unnamed	Schedule Information	Publish or Manage Shifts