



User Requirement Specifications

Title Page

- Title of document: User Requirement Specifications
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Agreements with Client

The client has agreed that the first version of the desktop application should be completed within 6 weeks. The focus of the first version will be on the employee management system and the other functionalities are extra at this point of time.

Functional Requirements

System Capabilities

1. CRUD Functionalities

- **ID:** FR-1
- **Name:** Perform CRUD operations on employee records.
- **Constraints:** Managers and HR Managers can create, read, update, and delete employee records.

2. Authentication & Authorization:

- **ID:** FR2
- **Name:** Implement authentication and authorization mechanism.
- **Constraints:** Only authorized users (Managers and HR Managers) can access and manipulate employee data.

3. Enforcing Business Rules

- **ID:** FR3
- **Name:** Implement business rules and regulations governing employee management.
- **Constraints:** Ensure compliance with regulations.

Employee Information

The system should store the following information about each employee:

- Name, surname, username & password
- Address
- Email address
- Date of birth

- BSN number
- Employee department
- Employment start date
- Employment end date (if applicable)
- Reason for termination (if applicable)
- Emergency contact information (spouse's name and phone number)

Department Roles

1. **Human Resources:** HR Managers
2. **Customer Service Department:** Sales Representatives, Support Employees, Cashiers
3. **Security:** Security Guards
4. **Logistic Department:** Depot Workers

Prioritization

The employee management part will be completed first, other parts will be completed later.

Non-Functional Requirements

1. Performance

- **ID:** NFR-1
- **Name:** Ensure the system performs efficiently even with a large number of employees.
- **Constraints:** Response time should be within 2 seconds for most operations.

2. Maintainability

- **ID:** NFR-2

- **Name:** Design the system for easy maintenance and future updates.
- **Constraints:** Code should follow industry-standard coding practices and be well-documented.

3. Security

- **ID:** NFR-3
- **Name:** Implement security measures to protect employee data
- **Constraints:** Use encryption for sensitive data, implement secure authentication mechanisms.

4. Scalability

- **ID:** NFR-4
- **Name:** Design the system to handle future growth in terms of users and data
- **Constraints:** The system should support at least 1000 employees initially and scale to accommodate more.

Use Cases

Add New Employee

- **UC ID:** UC-1
- **Description:** HR Manager adds a new employee to the system.
- **Trigger:** HR Manager initiates the process.
- **Pre-condition:** HR Manager is logged in.
- **Post-condition:** New employee added successfully.

Main Success Scenario (MSS):

1. HR Manager initiates the process to add a new employee.
2. System prompts HR Manager to enter personal information, department, and employment details.
3. HR Manager enters the required information.
4. System validates the information and adds the new employee to the database.

5. System confirms successful addition.

Extensions:

- **3a:** HR Manager cancels the process.
 - **MSS Steps:**
 1. System cancels the operation.
 2. End of use case.
- **3b:** HR Manager encounters an error during data entry.
 - **MSS Steps:**
 1. System displays an error message.
 2. HR Manager corrects the error and continues from step 3.

Update Employee Information

- **UC ID:** UC-2
- **Description:** HR Manager updates the information of an existing employee.
- **Trigger:** HR Manager initiates the process.
- **Pre-condition:** HR Manager is logged in.
- **Post-condition:** Employee information updated successfully.

MSS:

1. HR Manager selects the employee to update.
2. System displays the current information of the selected employee.
3. HR Manager modifies the required information.
4. System validates the changes and updates the employee information.
5. System confirms successful update.

Extensions:

- **3a:** HR Manager cancels the update.
 - **MSS Steps:**

1. System cancels the operation.
 2. End of use case.
- **3b:** HR Manager encounters an error during data modification.
 - **MSS Steps:**
 1. System displays an error message.
 2. HR Manager corrects the error and continues from step 3.

Remove Employee

- **UC ID:** UC-3
- **Description:** HR Manager removes an employee from the system.
- **Trigger:** HR Manager initiates the process.
- **Pre-condition:** HR Manager is logged in.
- **Post-condition:** Employee removed successfully.

MSS:

1. HR Manager selects the employee to remove.
2. System prompts HR Manager for confirmation.
3. HR Manager confirms the removal.
4. System removes the employee from the database.
5. System confirms successful removal.

Extensions:

- **3a:** HR Manager cancels the removal.
 - **MSS Steps:**
 1. System cancels the operation.
 2. End of use case.

Search for Employee

- **UC ID:** UC-4

- **Description:** HR Manager searches for a specific employee within the system.
- **Trigger:** HR Manager initiates the search.
- **Pre-condition:** HR Manager is logged in.
- **Post-condition:** Search results displayed.

MSS:

1. HR Manager initiates the search by entering criteria like name, department, or employee ID.
2. System retrieves and displays the search results.

Extensions:

- **2a:** No matching employees found.
 - **MSS Steps:**
 1. System displays a message indicating no matching employees.
 2. End of use case.

Filter Employees

- **UC ID:** UC-5
- **Description:** HR Manager filters the list of employees based on specific criteria.
- **Trigger:** HR Manager initiates the filter.
- **Pre-condition:** HR Manager is logged in.
- **Post-condition:** Filtered employee list displayed.

MSS:

1. HR Manager selects the filter criteria, such as department, employment status, or position.
2. System filters the employee list based on the selected criteria.
3. System displays the filtered employee list.

Extensions:

- **2a:** HR Manager cancels the filter.
 - **MSS Steps:**
 1. System cancels the operation.
 2. End of use case.

View Employee Worksheets

- **UC ID:** UC-6
- **Description:** Department Manager views the worksheets of specific employees.
- **Trigger:** Department Manager initiates the view.
- **Pre-condition:** Department Manager is logged in.
- **Post-condition:** Employee worksheets displayed.

MSS:

1. Department Manager selects the employee whose worksheets to view.
2. System retrieves and displays the worksheets of the selected employee.

Extensions:

- **2a:** Department Manager cancels the view.
 - **MSS Steps:**
 1. System cancels the operation.
 2. End of use case.

Assign Worksheets to Employees

- **UC ID:** UC-7
- **Description:** Department Manager assigns worksheets or tasks to employees within their department.
- **Trigger:** Department Manager initiates the assignment.
- **Pre-condition:** Department Manager is logged in.

- **Post-condition:** Worksheets assigned successfully.

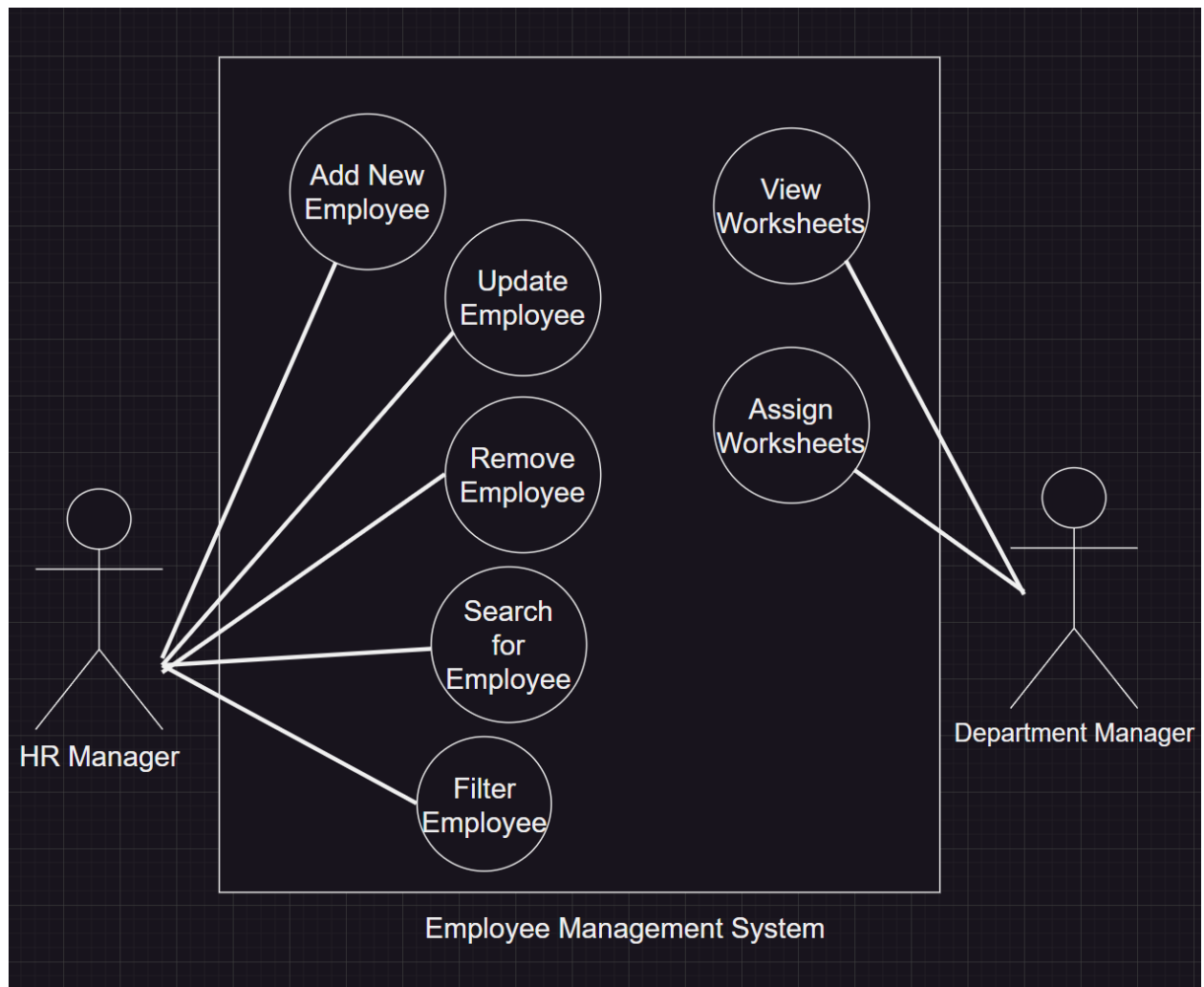
MSS:

1. Department Manager selects the employee to assign worksheets.
2. System prompts Department Manager to enter details of the assignment.
3. Department Manager enters the required information.
4. System validates the information and assigns worksheets to the selected employee.
5. System confirms successful assignment.


Extensions:

- **2a:** Department Manager cancels the assignment.
 - **MSS Steps:**
 1. System cancels the operation.
 2. End of use case.


Use Case Diagram



GUI




search




Department

▼

Add employee 

| Name | Email | Department | Role |
|--------------------------|-------|------------|------|
| <input type="checkbox"/> | | | |
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| <input type="checkbox"/> | | | |

 Employee Details

Name

Boris

Surname

Petrov

Role

HR Manager ▼

Email

boris.petrov@fontys.nl

Remove employee

Website Wireframe

The system should include a website that allows employees to check their schedules.