

**HUMAN RESOURCE MANAGEMENT SYSTEM**

**Software Requirement Specification**

– HoChiMinh, July 2023–

| **#** | **Student ID** | **Student Name** | **Dedicated Percent (%)** |
| --- | --- | --- | --- |
| 1 | SE160052 | Mai Xuân Quân | 18% |
| 2 | SE151166 | Nguyễn Thanh Tùng | 17% |
| 3 | SE151143 | Nguyễn Lam Trường | 16% |
| 4 | SE150939 | Lê Hiếu Nghĩa | 16% |
| 5 | SE150307 | Nguyễn Thành Tài | 17% |
| 6 | SE150101 | Hồ Bảo Anh | 16% |
| **SUM** | | | 100% |

**Table of Contents**

[**I. Overview 4**](#_heading=h.72o6ko10z8yk)

[1. Introduction 4](#_heading=h.cuxot8lokqio)

[2. System Functions 4](#_heading=h.bwogde89f42a)

[**II. Use case 7**](#_heading=h.gtvhmkeipyux)

[1. Diagram 7](#_heading=h.68mez6khmqd0)

[2. Description 7](#_heading=h.scj6rw5zkxpj)

[**III. Functional Requirements 44**](#_heading=h.exsf2ggjxtsf)

[1. Create Employee 44](#_heading=h.w4r5nul0f1x4)

[2. Update Employee 44](#_heading=h.chl6p1ncdvsh)

[3. Manage Employee's Tax Requests 44](#_heading=h.yfy66dw45pou)

[4. Check Attendance 45](#_heading=h.9hv7299k7w7)

[5. View Employee Information 45](#_heading=h.kjv0jvquwsja)

[6. Change Information Request 45](#_heading=h.vjzz6ckm3flp)

[7. View Attendance 45](#_heading=h.gywfizmv31sw)

[8. Get the OT (Overtime) Income Information 45](#_heading=h.j1rdrxcdstd)

[9. Confirm Update Profile 45](#_heading=h.l8rryb8ne7xb)

[10. Overtime (OT) Request 46](#_heading=h.aldl26ux7rnr)

[11. Application for Leave 46](#_heading=h.hyli9fc1y514)

[12. Resignation Letter 46](#_heading=h.gyclx8scq1wj)

[13. Login 47](#_heading=h.9q6tsiv8dl8i)

[14. Logout 47](#_heading=h.zb0cbs1d59zn)

[15. Confirm HR Request 47](#_heading=h.pj454394d8o5)

[16. Request Leave 48](#_heading=h.bwtvwv4x728h)

[17. Request Resignation 48](#_heading=h.jie63z5m2q9s)

[18. Request Update Attendance 49](#_heading=h.5aipimnlu90r)

[19. Request Change Work Department 49](#_heading=h.8so0wklqs510)

[20. Request Tax Support 50](#_heading=h.856m9qx9kmbt)

[21. Request Overtime (OT) 51](#_heading=h.me57fm525ec4)

[**IV. Non-Functional Requirements 51**](#_heading=h.huoitpnqbqtl)

[1. External Interface Requirements 51](#_heading=h.c6rtv0487qvp)

[1.1 User Interfaces 51](#_heading=h.db8pp5zct5p6)

[2. Quality Attributes 53](#_heading=h.olbqe1pq9ie)

[2.1 Usability 53](#_heading=h.99b0ftsy6jbq)

[2.2 Performance 53](#_heading=h.n2yvjvw4eogj)

[2.3 Security 53](#_heading=h.nqvnxhqmnk1c)

[2.6 Reliability 53](#_heading=h.n05bkiw86fud)

[2.7 Design Constraints 53](#_heading=h.b55b0y4izyan)

# I. Overview

## 1. Introduction

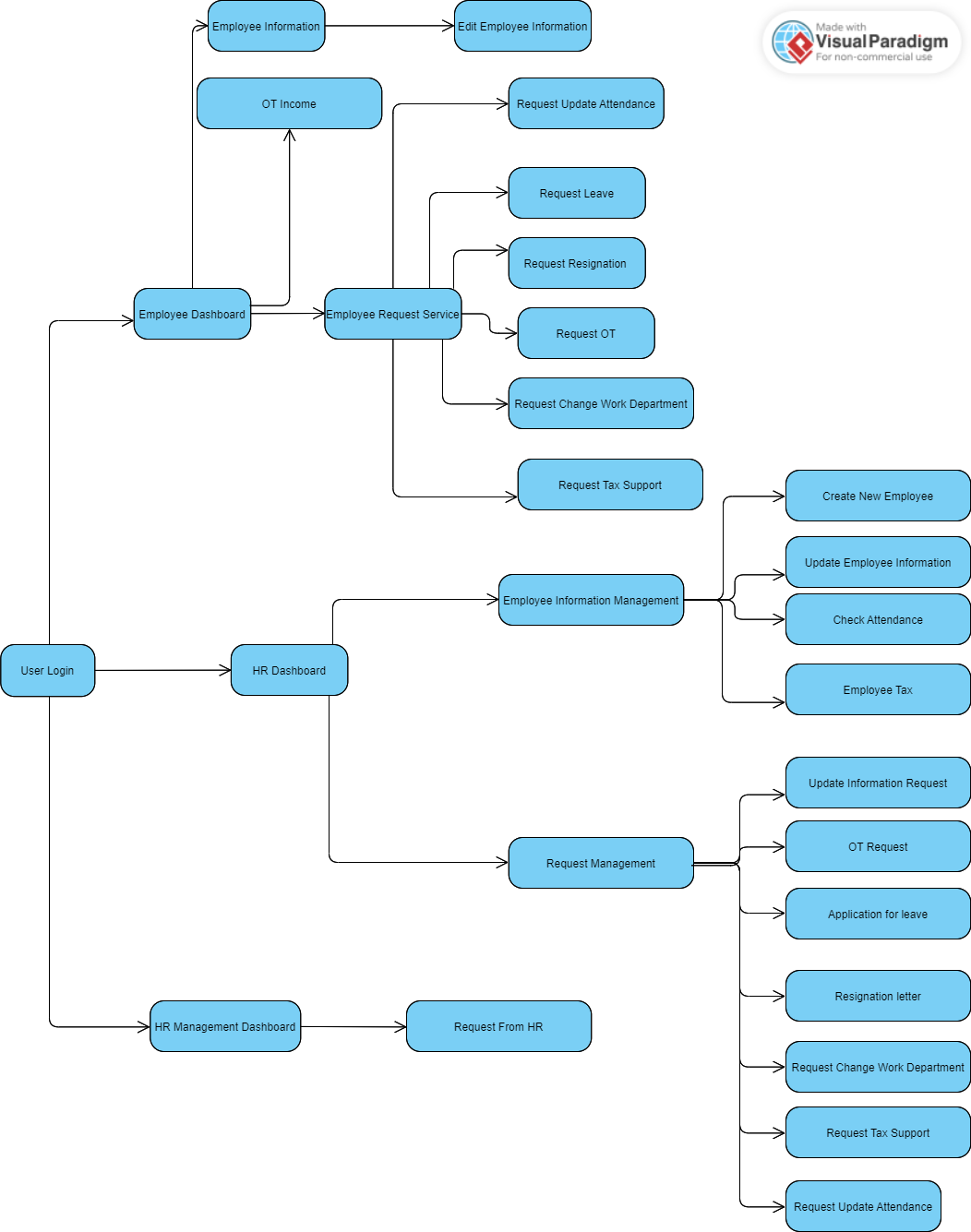
An HRMS is a software solution that integrates multiple HR functions into a single system, providing a centralised platform to effectively manage employee data, recruitment, and more. It offers a holistic approach to HR management, enabling organisations to optimise their workforce, enhance employee engagement, and drive overall organisational success.

By implementing an HRMS, businesses can eliminate the need for manual paperwork, reduce administrative overheads, and ensure accurate and up-to-date employee information. This not only improves efficiency but also enhances data security and compliance with legal and regulatory requirements.

Furthermore, an HRMS empowers HR professionals with advanced reporting and analytics capabilities, enabling them to make data-driven decisions and gain valuable insights into workforce trends, performance, and productivity. This helps organisations align their HR strategies with business objectives, identify areas for improvement, and foster a culture of continuous development.

## 2. System Functions

a. Screen Flow

**

b. Screen Details

| **#** | **Feature** | **Screen** | **Description** |
| --- | --- | --- | --- |
| 1 | Login | User Login | User must login to use website |
| 2 | View Personal Information | Employee Information | Display all employee information |
| 3 | Edit Personal Information | Edit Employee Information | Form to update employee information |
| 4 | Request To Update Attendance | Request Update Attendance | Form to request attendance checking in case wrong attendance data |
| 5 | Request To Leave | Request Leave | Form to request to leave |
| 6 | Request To Resignation | Request Resignation | Form to request resignation |
| 7 | Request OT | Request OT | Employee can fill this form to request OT |
| 8 | Request To Change Work Department | Request Change Work Department | Form to request change work department for employee |
| 9 | Tax Support | Request Tax Support | Form to request change/update tax information |
| 10 | Create New Employee | Create New Employee | Form to create new employee for HR, this page is used in case of a new employee joins company |
| 11 | Update Employee Information | Update Employee Information | HR can update employee information |
| 12 | Confirm request | Request Management | Contain all the link to the requests from employees so that the requests can be resolve |
| 13 | Confirm request | Screen for each type of requests | Screens to helps HR confirm, give comment to each type of request |

c. User Authorization

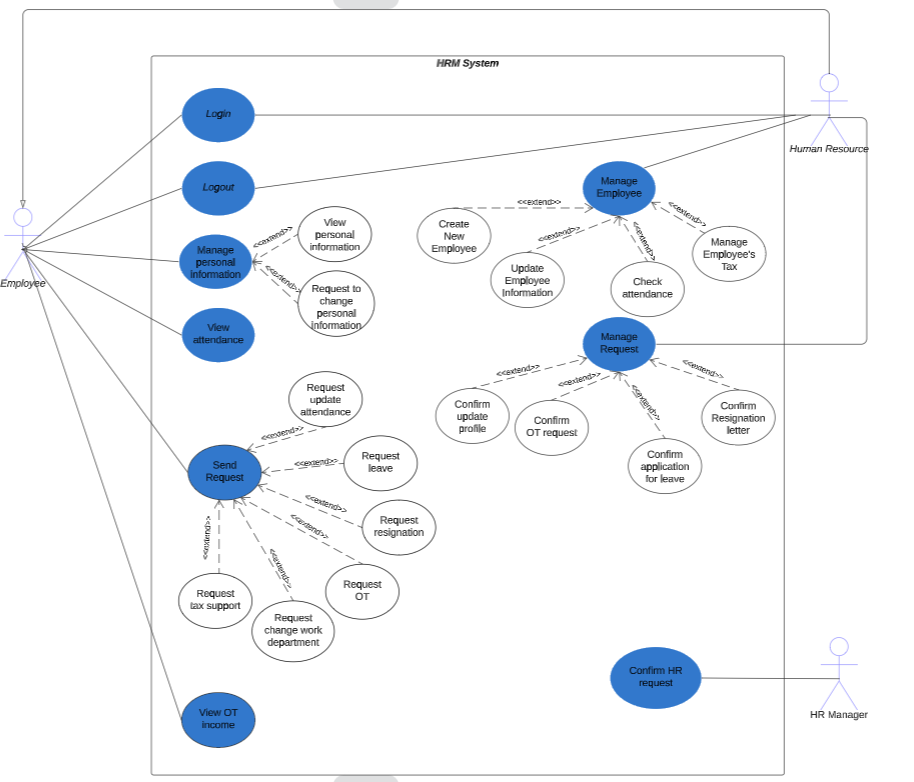
| **Screen** | **Employee** | **HR** | **HR Management** |
| --- | --- | --- | --- |
| User Login | X | X | X |
| Employee Information | X | X | X |
| Edit Employee Information | X | X | X |
| Request Update Attendance | X | X |  |
| Request Leave | X | X |  |
| Request Resignation | X | X |  |
| Request OT | X | X |  |
| Request Change Work Department | X | X |  |
| Request Tax Support | X | X |  |
| Create New Employee |  | X | X |
| Update Employee Information |  | X | X |
| Request Management |  | X | X |
| Screen for each type of requests |  | X | X |

In which:

* HR: Do all things normal employee can
* HR Manager: Supervisorof the system, resolve request of HR and employee
* Employees: Normal Employee

# II. Use case

## Diagram

****

## Description

| **ID** | **Use Case** | **Actors** | **Use Case Description** |
| --- | --- | --- | --- |
| UC-01 | Login | *Employee* | When Employees want to get into a website to use all functions, they will be forced to login first by their Emails and Passwords. |
| UC-02 | Logout | Employee/Manager | Employees want to exit the account of the system and delete all sessions. |
| UC-03 | View Personal Information | Employee/Manager | This use case allows users to access the system to retrieve their basic personal information. Also allow them to submit a petition to correct the incorrect information |
| UC-04 | View Attendance | Employee | This use case allows users to access the system to retrieve their attendance information for a period of time |
| UC-05 | Request update attendance | Employee | The "Request Update Attendance" use case involves the employee submitting a request to update their attendance record. This use case allows employees to request modifications or corrections to their recorded attendance information, such as clock-in/out times, breaks, or any other attendance-related details. |
| UC-06 | Request leave | Employee | The "Request Leave" use case involves an employee submitting a request for taking leave from work. This use case allows employees to request time off for various reasons, such as vacation, personal matters, medical leave, or any other approved leave type. |
| UC-07 | Request resignation | Employee | The "Request Resignation" use case involves an employee submitting a formal request to resign from their current employment position. This use case allows employees to initiate the resignation process, notify their intention to leave the organization, and provide necessary information for further actions related to the resignation. |
| UC-08 | Request OT | Employee | The "Request Overtime" use case involves an employee submitting a request to work additional hours beyond their regular working schedule. This use case allows employees to formally communicate their need for overtime work and provide relevant information for the approval and processing of the request. |
| UC-09 | Request change work department | Employee | The "Request Change Work Department" use case involves an employee submitting a request to change their assigned work department within the organization. This use case allows employees to communicate their desire for a department transfer and provide necessary information for the request to be reviewed and processed. |
| UC-10 | Request tax support | Employee | The "Request Tax Support" use case involves an employee requesting assistance or support related to tax-related matters from the organization. This use case enables employees to seek guidance, clarification, or resolution for tax-related issues, ensuring compliance and addressing any concerns they may have. |
| UC-11 | View OT income | Employee/Manager | This use case allows users to access the system to retrieve their overtime hours information for a period and their income from there. |
| UC-12 | Confirm HR request | HR Manager | This use case describes the process of confirming an HR request by the HR Manager. The HR Manager plays a critical role in reviewing and approving HR requests from the HR department or employees to ensure accuracy and compliance with relevant regulations and procedures. |
| UC-13 | Create New Employee | HR | The "Create New Employee" use case involves the process of onboarding a new employee into an organization's workforce. This use case outlines the necessary steps to create a comprehensive employee profile within the organization's HR or personnel management system. The primary objective is to gather and record accurate information about the new employee, ensuring a smooth transition into their role and integration into the organization. |
| UC-14 | Update Employee Information | HR | The "Update Employee Information" use case involves the process of modifying and updating an existing employee's information in the organization's HR or personnel management system. This use case outlines the necessary steps to ensure accurate and up-to-date employee data, reflecting any changes in personal, professional, or organizational details. |
| UC-15 | Check attendance | HR | The "Attendance Management" use case involves the process of tracking and managing the attendance of employees within an organization. This use case outlines the steps to record and monitor employee attendance, enabling accurate timekeeping, attendance analysis, and payroll processing. |
| UC-16 | Employee's Tax | HR | The "Employee Tax Management" use case involves the process of managing and ensuring compliance with tax obligations related to employees within an organization. This use case outlines the necessary steps to handle various aspects of employee taxation, including tax withholding, reporting, and documentation. |
| UC-17 | ConfirmHRRequest | HR Manager | Decide HR request by change it status (Approve/Decline) |

| *ID and Name:* | ***UC-01 Login*** | | |
| --- | --- | --- | --- |
| *Created By:* | *Nghĩa* | *Date Created:* |  |
| *Primary Actor:* | Employee | *Secondary Actors:* |  |
| *Description:* | Employees must login to access it by their emails and passwords. | | |
| *Trigger:* | *When they go to the website and want to use a function inside.* | | |
| *Preconditions:* | *Employees must remember their emails and passwords.* | | |
| *Postconditions:* | *Email and Password must be checked correctly.* | | |
| *Normal Flow:* | ***1.0 Login success:***   1. ***Employee/Manager go to the website with the default page is Login Page.*** 2. ***Input email and password into input field.*** 3. ***Go straight to the Home Page.***   ***2.0 Login fail:***   1. ***Employee/Manager go to the website with the default page is Login Page.*** 2. ***Input email and password into input field.*** 3. ***Go back Login Page*** | | |
| *Alternative Flows:* |  | | |
| *Exceptions:* |  | | |
| *Priority:* | *High* | | |
| *Frequency of Use:* | *Almost all humans in the company must use this everyday.* | | |
| *Business Rules:* |  | | |
| *Other Information:* |  | | |
| *Assumptions:* |  | | |

| *ID and Name:* | ***UC-02 Logout*** | | |
| --- | --- | --- | --- |
| *Created By:* | *Nghĩa* |  |  |
| *Primary Actor:* | Employee/Manager |  |  |
| *Description:* | Logged account (Employee/Manager) wants to exit his/her account from the website to go home or change to another account and all their job/ information will be removed from the session. | | |
| *Trigger:* | *When they want to remove all their information from a website.* | | |
| *Preconditions:* | *Login already* | | |
| *Postconditions:* |  | | |
| *Normal Flow:* | ***1.0 Logout flow:***   1. ***Click on logout button*** 2. ***Confirm logout*** | | |
| *Alternative Flows:* |  | | |
| *Exceptions:* |  | | |
| *Priority:* | *High* | | |
| *Frequency of Use:* | *Almost all humans in the company must use this everyday.* | | |
| *Business Rules:* |  | | |
| *Other Information:* |  | | |
| *Assumptions:* |  | | |

| *ID and Name:* | **UC-03 View personal information** | | |
| --- | --- | --- | --- |
| *Created By:* | Bảo Anh | | |
| *Primary Actor:* | Employee/Manager | | |
| *Description:* | This use case allows users to access the system to retrieve their basic personal information. Also allow them to submit a petition to correct the incorrect information | | |
| *Trigger:* | When they want to view their personal information. | | |
| *Preconditions:* | Login already | | |
| *Postconditions:* |  | | |
| *Normal Flow:* | 1. The user clicks on the avatar on the header 2. The profile screen will be shown | | |
| *Alternative Flows:* |  | | |
| *Exceptions:* |  | | |
| *Priority:* | High | | |
| *Frequency of Use:* | Sometimes | | |
| *Business Rules:* |  | | |
| *Other Information:* |  | | |
| *Assumptions:* |  | | |

| *ID and Name:* | **UC-04 View attendance** | | |
| --- | --- | --- | --- |
| *Created By:* | Bảo Anh | | |
| *Primary Actor:* | Employee/Manager | | |
| *Description:* | This use case allows users to access the system to retrieve their attendance information for a period of time | | |
| *Trigger:* | When they want to view their attendance information. | | |
| *Preconditions:* | Login already | | |
| *Postconditions:* |  | | |
| *Normal Flow:* | 1. The user clicks on the Check Attendance in the submenu. 2. The user choice the period of date that they want to view 3. Click to search button | | |
| *Alternative Flows:* |  | | |
| *Exceptions:* |  | | |
| *Priority:* | High | | |
| *Frequency of Use:* | Almost all humans in the company must use this everyday. | | |
| *Business Rules:* | The date in “from” must be before the date “to” | | |
| *Other Information:* |  | | |
| *Assumptions:* |  | | |

| *ID and Name:* | ***UC-05* Request update attendance** | | |
| --- | --- | --- | --- |
| *Created By:* | *Tài* |  |  |
| *Primary Actor:* | Employee |  |  |
| *Description:* | The Employee will send Request update attendance | | |
| *Trigger:* | *Employee identifies an attendance discrepancy: The employee notices an error or discrepancy in their recorded attendance, such as missing punches, incorrect time entries, or inaccurate attendance data.* | | |
| *Preconditions:* | *Existing attendance records: There should be existing attendance records for the employee that require updates or corrections. Without any existing records, there would be no need for an attendance update request.*  *Employee authentication: The employee must be authenticated and have the necessary permissions to access and submit attendance update requests.* | | |
| *Postconditions:* | *Updated attendance records: The attendance records for the employee are updated based on the requested changes. This could involve modifying the dates, times, or types of attendance entries, such as marking an absence as approved leave or adjusting clock-in/out times.*  *Notification to the employee: The employee is notified about the outcome of their attendance update request. This could be in the form of a confirmation message, email, or notification within the system, informing them whether the request was approved or denied.* | | |
| *Normal Flow:* | ***Employee opens the "Request Update Attendance" page or feature within the system.***  ***The system displays the attendance update form, which includes fields for entering the requested changes, such as date, time, type of attendance, and any relevant notes or comments.***  ***Employee fills out the form with the necessary information, specifying the desired updates to their attendance records.***  ***Employee submits the attendance update request by clicking the "Submit" or similar button.***  ***The system validates the submitted data, ensuring that all required fields are filled and the requested changes are within the allowed parameters.***  ***If the validation is successful, the system proceeds to process the attendance update request.*** | | |
| *Alternative Flows:* |  | | |
| *Exceptions:* | Invalid or incomplete data: If the employee submits the attendance update form with missing or invalid data, such as leaving required fields empty or providing incorrect date or time values, the system may display an error message indicating the need for valid data entry.  Unauthorized access: If the employee does not have the necessary permissions or access rights to request an attendance update, the system may deny the request and display an error message indicating insufficient privileges. | | |
| *Priority:* | *High* | | |
| *Frequency of Use:* |  | | |
| *Business Rules:* |  | | |
| *Other Information:* |  | | |
| *Assumptions:* |  | | |

| *ID and Name:* | ***UC-06* Request leave** | | |
| --- | --- | --- | --- |
| *Created By:* | *Tài* |  |  |
| *Primary Actor:* | Employee |  |  |
| *Description:* | The Employee will send request leave | | |
| *Trigger:* | *The employee requests to take leave.* | | |
| *Preconditions:* | *The employee must be authenticated and logged into the system.*  *The employee must have the necessary permissions or role to request leave.*  *The system must be accessible and functioning properly.*  *The required information for the leave request, such as start date, end date, and reason, must be known or provided by the employee* | | |
| *Postconditions:* | *The leave request is recorded and stored in the system.*  *The employee's leave balance is updated to reflect the leave request.*  *The leave request is sent for approval to the appropriate authority.*  *The employee receives a confirmation or acknowledgment of the leave request submission.*  *The employee is notified of the status of the leave request (e.g., approved, pending, rejected).* | | |
| *Normal Flow:* | ***The employee opens the leave request page or form.***  ***The system displays the leave request form to the employee, which includes fields for entering details such as leave start date, leave end date, reason for leave, etc.***  ***The employee fills out the required information in the leave request form.***  ***The employee submits the leave request form.***  ***The system validates the entered information to ensure it meets the required criteria (e.g., valid dates, minimum notice period).***  ***If the entered information is valid, the system records the leave request and updates the employee's leave balance.***  ***The system sends a notification or confirmation to the employee, indicating that the leave request has been successfully submitted.*** | | |
| *Alternative Flows:* |  | | |
| *Exceptions:* | invalid input: If the employee provides invalid or incomplete information in the leave request form (e.g., missing required fields, entering an invalid date format), the system may display an error message and prompt the employee to correct the information.  System error: In case of unexpected system errors, such as database connectivity issues or system crashes, the system may display a generic error message and prompt the employee to try again later or contact technical support. | | |
| *Priority:* | *High* | | |
| *Frequency of Use:* |  | | |
| *Business Rules:* |  | | |
| *Other Information:* |  | | |
| *Assumptions:* |  | | |

| *ID and Name:* | ***UC-07* Request resignation** | | |
| --- | --- | --- | --- |
| *Created By:* | *Tài* |  |  |
| *Primary Actor:* | Employee |  |  |
| *Description:* | The Employee will send Request resignation | | |
| *Trigger:* | *Employee's Resignation Decision* | | |
| *Preconditions:* | *The employee must be authenticated and logged into the system.*  *The employee must be currently employed by the organization: The employee must be an active member of the organization and currently hold a position within it.*  *The system must be accessible and functioning properly.*  *The required information for the Resignation request, such as start date, end date, and reason, must be known or provided by the employee* | | |
| *Postconditions:* | *The leave request is recorded and stored in the system.*  *The employee's leave balance is updated to reflect the leave request.*  *The leave request is sent for approval to the appropriate authority.*  *The employee receives a confirmation or acknowledgment of the leave request submission.*  *The employee is notified of the status of the leave request (e.g., approved, pending, rejected).* | | |
| *Normal Flow:* | ***The employee opens the leave request page or form.***  ***The system displays the leave request form to the employee, which includes fields for entering details such as leave start date, leave end date, reason for leave, etc.***  ***The employee fills out the required information in the leave request form.***  ***The employee submits the leave request form.***  ***The system validates the entered information to ensure it meets the required criteria (e.g., valid dates, minimum notice period).***  ***If the entered information is valid, the system records the leave request and updates the employee's leave balance.***  ***The system sends a notification or confirmation to the employee, indicating that the leave request has been successfully submitted.*** | | |
| *Alternative Flows:* |  | | |
| *Exceptions:* | invalid input: If the employee provides invalid or incomplete information in the leave request form (e.g., missing required fields, entering an invalid date format), the system may display an error message and prompt the employee to correct the information.  System error: In case of unexpected system errors, such as database connectivity issues or system crashes, the system may display a generic error message and prompt the employee to try again later or contact technical support. | | |
| *Priority:* | *High* | | |
| *Frequency of Use:* |  | | |
| *Business Rules:* |  | | |
| *Other Information:* |  | | |
| *Assumptions:* |  | | |

| *ID and Name:* | ***UC-08* Request OT** | | |
| --- | --- | --- | --- |
| *Created By:* | *Tài* |  |  |
| *Primary Actor:* | Employee |  |  |
| *Description:* | The Employee will send Request OT | | |
| *Trigger:* | *The trigger for the "Request OT" use case is when an employee decides to request overtime work.* | | |
| *Preconditions:* | *The employee must be currently employed by the organization.*  *The employee must have the necessary authorization or permission to request overtime work.*  *The employee must have completed their regular work hours or have valid reasons for requesting overtime beyond their regular schedule.* | | |
| *Postconditions:* | *The employee receives acknowledgement or confirmation of their overtime request submission.*  *The request is forwarded to the appropriate authority or department responsible for reviewing and approving overtime requests.*  *The employee may receive updates or notifications regarding the status of their overtime request, such as approval, rejection, or pending review.*  *If approved, the overtime work schedule is communicated to the employee, including the specific date, time, and duration of the overtime work.* | | |
| *Normal Flow:* | ***The Employee initiates the overtime request process by accessing the RequestOT page or feature in the system.***  ***The system displays the RequestOT form, prompting the Employee to provide the necessary details related to their overtime request, such as the date, start time, end time, reason, and any additional notes.***  ***The Employee fills out the RequestOT form with the required information.***  ***The Employee submits the completed RequestOT form.***  ***The system receives the submitted form and validates the data provided by the Employee.***  ***If the validation is successful, the system proceeds with processing the overtime request.***  ***The system records the overtime request in the database or appropriate storage.***  ***The system generates an acknowledgement or confirmation message, which is sent to the Employee, informing them that their overtime request has been received and is under review.***  ***The system forwards the overtime request to the relevant authority or department responsible for reviewing and approving overtime requests.***  ***The reviewing authority evaluates the overtime request based on factors such as availability of resources, operational needs, employee workload, and compliance with organizational policies.***  ***If the overtime request is approved, the reviewing authority notifies the Employee of the approval and provides details regarding the approved overtime work schedule, including the specific date, start time, end time, and any additional instructions or guidelines.***  ***The Employee acknowledges the approval and confirms their availability for the approved overtime work.*** | | |
| *Alternative Flows:* |  | | |
| *Exceptions:* | Overtime request rejection: If the reviewing authority determines that the overtime request cannot be approved based on organizational policies, operational constraints, or other factors, the system may notify the Employee about the rejection and provide a reason or explanation for the decision. The Employee may have the opportunity to revise the request or discuss the matter with the appropriate authority.  Invalid or missing data: If the Employee submits the RequestOT form with invalid or incomplete data, such as missing required fields or providing incorrect information, the system may generate an error message and prompt the Employee to correct the errors before resubmitting the form. | | |
| *Priority:* | *High* | | |
| *Frequency of Use:* |  | | |
| *Business Rules:* |  | | |
| *Other Information:* |  | | |
| *Assumptions:* |  | | |

| *ID and Name:* | ***UC-09* Request change work department** | | |
| --- | --- | --- | --- |
| *Created By:* | *Tài* |  |  |
| *Primary Actor:* | Employee |  |  |
| *Description:* | The Employee will send Request change work department | | |
| *Trigger:* | *Employee requests a change in their work department.* | | |
| *Preconditions:* | *There must be an available position or vacancy in the target department.*  *The employee must be an active member of the organization.*  *The employee must have the necessary qualifications or skills required for the target department* | | |
| *Postconditions:* | *The employee's request for a change in the work department is submitted and recorded in the system.*  *The request undergoes the necessary review and approval process by the appropriate authorities.*  *If the request is approved, the employee's work department is updated to the new assigned department.*  *The employee is notified of the outcome of their request, whether it is approved or denied.*  *If the request is denied, the employee's work department remains unchanged.* | | |
| *Normal Flow:* | ***The employee initiates the process by expressing their desire to change their work department.***  ***The employee accesses the "Request Change Work Department" feature through the appropriate interface or application.***  ***The system presents the employee with a form or interface to enter the necessary information related to their work department change request.***  ***The employee fills out the required fields, including their current department, desired department, reason for the change, and any additional details.***  ***Once the employee completes the form, they submit the request.***  ***The system receives the request and validates the entered information.***  ***The request is then routed to the appropriate authority or department responsible for reviewing and approving work department changes.***  ***The reviewing authority assesses the request, considering factors such as organizational needs, available positions, qualifications, and any other relevant criteria.***  ***If the request is approved, the system updates the employee's work department to the newly assigned department.***  ***The system generates a notification or confirmation message to inform the employee of the approved work department change.***  ***The employee receives the notification and is informed about their new work department assignment and any additional instructions, if applicable.***  ***If the request is denied, the system generates a notification or message indicating the denial, providing reasons for the decision, if available.***  ***The employee receives the denial notification and is informed that their work department will remain unchanged.***  ***The process concludes, and the employee's work department status is updated accordingly.*** | | |
| *Alternative Flows:* |  | | |
| *Exceptions:* | Invalid or incomplete request: If the employee submits an incomplete or invalid request form, the system may prompt them to provide the missing or corrected information before proceeding.  Unauthorized access: If an unauthorized employee attempts to access the "Request Change Work Department" feature, the system should deny access and display an appropriate error message.  Work department change not allowed: There may be certain business rules or restrictions in place that limit or prohibit work department changes. If the requested department change is not allowed, the system should inform the employee and provide an explanation.  Request review and approval process: The review and approval process may involve multiple steps and different authorities. If there are delays or bottlenecks in the approval process, the system should track and communicate the status to the employee, ensuring transparency and managing their expectations.  Conflicting work department requests: In situations where multiple employees request a change to the same department or if there are limited available positions, conflicts may arise. The system should handle such conflicts by applying predetermined rules or criteria to resolve them and notify the affected employees accordingly. | | |
| *Priority:* | *High* | | |
| *Frequency of Use:* |  | | |
| *Business Rules:* |  | | |
| *Other Information:* |  | | |
| *Assumptions:* |  | | |

| *ID and Name:* | ***UC-10* Request tax support** | | |
| --- | --- | --- | --- |
| *Created By:* | *Tài* |  |  |
| *Primary Actor:* | Employee |  |  |
| *Description:* | The Employee will send Request tax support | | |
| *Trigger:* | *the employee's recognition of the need for tax support and their decision to seek assistance from the organization's tax support services.* | | |
| *Preconditions:* | *The employee must be a registered member of the organization.*  *The employee must have a valid employee account with appropriate access privileges.*  *The organization must have established tax support services or a designated department responsible for handling tax-related inquiries and assistance.* | | |
| *Postconditions:* | *The employee's request for tax support is recorded and logged in the system.*  *The tax support team is notified about the employee's request and takes appropriate action.*  *The employee receives acknowledgment of their request for tax support.*  *The tax support team provides assistance and guidance to the employee regarding their tax-related inquiries or concerns.*  *The employee's tax-related issues are addressed and resolved to the best extent possible within the scope of the organization's tax support services.*  *The employee receives necessary documentation, advice, or instructions from the tax support team to fulfill their tax obligations effectively.* | | |
| *Normal Flow:* | ***The employee initiates the process by accessing the "Request Tax Support" feature or page.***  ***The system presents the tax support request form to the employee.***  ***The employee fills out the required information in the tax support request form, including their contact details, specific tax-related questions or concerns, and any relevant supporting documentation.***  ***The employee submits the completed tax support request form.***  ***The system validates the form data for completeness and correctness.***  ***If the form data is valid, the system proceeds to record the tax support request and assigns a unique identifier.***  ***The system generates a confirmation message or notification to acknowledge the employee's tax support request and provides them with the assigned request ID for future reference.***  ***The system forwards the tax support request to the appropriate tax support team or personnel responsible for handling such requests.***  ***The tax support team receives the request and reviews the details provided by the employee.*** | | |
| *Alternative Flows:* |  | | |
| *Exceptions:* | Invalid Form Data: If the employee submits an incomplete or incorrect tax support request form, the system displays an error message highlighting the missing or invalid information and prompts the employee to correct the form before resubmitting.  Technical Failure: If there is a technical failure or system error during the submission or processing of the tax support request, the system displays an error message informing the employee about the issue and advises them to try again later or contact technical support for assistance. | | |
| *Priority:* | *High* | | |
| *Frequency of Use:* |  | | |
| *Business Rules:* |  | | |
| *Other Information:* |  | | |
| *Assumptions:* |  | | |

| *ID and Name:* | **UC-11 View OT income** | | |
| --- | --- | --- | --- |
| *Created By:* | Bảo Anh | | |
| *Primary Actor:* | Employee/Manager | | |
| *Description:* | This use case allows users to access the system to retrieve their overtime hours information for a period and their income from there. | | |
| *Trigger:* | When they want to view their OT income information. | | |
| *Preconditions:* | Login already | | |
| *Postconditions:* |  | | |
| *Normal Flow:* | 1. The user clicks on the Income in the submenu. 2. The user chooses the from date and the to date on the headline. 3. The system will be shown the list of attendance. | | |
| *Alternative Flows:* |  | | |
| *Exceptions:* |  | | |
| *Priority:* | High | | |
| *Frequency of Use:* | Almost all humans in the company must use this everyday. | | |
| *Business Rules:* |  | | |
| *Other Information:* |  | | |
| *Assumptions:* |  | | |

| ID and Name: | **UC-12 Confirm HR request** | | |
| --- | --- | --- | --- |
| Created By: | Lam Trường |  |  |
| Primary Actor: | HR Manager |  |  |
| Description: | This use case describes the process of confirming an HR request by the HR Manager. The HR Manager plays a critical role in reviewing and approving HR requests from the HR department or employees to ensure accuracy and compliance with relevant regulations and procedures. | | |
| Trigger: | The trigger for this use case is when the HR Manager receives an HR request that requires confirmation. | | |
| Preconditions: | * The HR Manager confirms or rejects the HR request. * The confirmation result is recorded and communicated to the relevant HR department or employee. | | |
| Postconditions: | * The HR department determines the accurate amount of taxes to be deducted from the employee's salary. * The calculated tax amount is recorded and used for payroll processing and tax reporting purposes. | | |
| Normal Flow: | 1. The HR Manager receives a notification or accesses the HR system to view pending HR requests for confirmation. 2. The HR Manager reviews the detailed information of the HR request, including purpose, content, request date, and other relevant details. 3. The HR Manager evaluates the HR request based on regulations, procedures, policies, and other relevant factors. 4. The HR Manager decides to confirm or reject the HR request. 5. If the request is confirmed:   a. The HR Manager records the confirmation information in the system.  b. The HR Manager notifies the relevant HR department or employee about the confirmation result.   1. If the request is rejected:   a. The HR Manager records the rejection reason in the system.  b. The HR Manager notifies the relevant HR department or employee about the rejection result and provides the reason. | | |
| Alternative Flows: | If the HR Manager requires additional information or consultation from relevant parties:  a. The HR Manager contacts the corresponding HR department or employee to request additional information or consultation.  b. The HR Manager proceeds with the review of the HR request after receiving the necessary information or consultation. | | |
| Exceptions: | Technical failure: If there is a system error or technical issue preventing the confirmation process:  a. The system displays an error message indicating the technical failure.  b. The HR Manager can contact the technical support team to resolve the issue or try again later. | | |
| Priority: | High | | |
| Frequency of Use: | Depends on the volume of HR requests and the organization's processes. | | |
| Business Rules: | * Only the HR Manager has the authority to confirm or reject HR requests. * Specific regulations and procedures may apply when reviewing HR requests. | | |
| Other Information: | * The HR system should provide a user-friendly interface and detailed information about HR requests requiring confirmation. * Proper security measures should be in place to protect the confidentiality and integrity of HR information. | | |
| Assumptions: | * The HR Manager has the knowledge and authority necessary to review and confirm HR requests. * The HR system is functional and accessible to perform the HR request confirmation process. | | |

| ID and Name: | **UC-13 Create New Employee** | | |
| --- | --- | --- | --- |
| Created By: | Lam Trường |  |  |
| Primary Actor: | HR |  |  |
| Description: | This use case describes the process of creating a new employee record in the HR management system. The HR department is responsible for adding new employees to the organization's workforce. | | |
| Trigger: | The trigger for this use case is the hiring of a new employee. | | |
| Preconditions: | * The HR department has appropriate access rights and permissions to create new employee records. * The necessary information for creating a new employee record is available, including personal details, contact information, job title, department, and other relevant information. | | |
| Postconditions: | * A new employee record is successfully created in the HR management system. * The employee's information is stored in relevant databases, systems, and reports. | | |
| Normal Flow: | 1. The HR department logs into the HR management system. 2. The HR department navigates to the "New Employee" or "Add Employee" section. 3. The system presents a form to enter the employee's information. 4. The HR department fills in the required information for the new employee, including personal details, contact information, job title, department, etc. 5. The HR department verifies the accuracy of the entered information. 6. The HR department submits the form to create the new employee record. 7. The system validates the entered information and creates a new employee record in the employee database. 8. The system generates a confirmation message indicating the successful creation of the new employee record. | | |
| Alternative Flows: | If there are mandatory fields that are not filled in or contain invalid data:  a. The system highlights the missing or invalid fields and displays an error message.  b. The HR department corrects the fields and resubmits the form. | | |
| Exceptions: | Technical failure: If there is a system error or technical issue preventing the creation of the new employee record:  a. The system displays an error message indicating technical failure.  b. The HR department can try again later or contact the technical support team for assistance. | | |
| Priority: | High | | |
| Frequency of Use: | Moderate to High (Depending on the organization's hiring rate) | | |
| Business Rules: | * Only authorized HR personnel should have access to create new employee records. * Certain fields may have specific validation rules or restrictions (e.g., date format, character limits) that must be followed. | | |
| Other Information: | * The system should provide a user-friendly interface to make it easy for the HR department to create new employee records. * Proper security measures should be in place to protect the confidentiality and integrity of employee data. | | |
| Assumptions: | * The HR department has the necessary information and documentation to accurately create a new employee record. * The HR management system is functional and accessible for performing the create process. | | |

| ID and Name: | **UC-14 Update Employee Information** | | |
| --- | --- | --- | --- |
| Created By: | Lam Trường | Date Created: |  |
| Primary Actor: | HR | Secondary Actors: |  |
| Description: | This use case describes the process of updating employee information by the HR department. The HR department needs to make changes to employee records such as personal details, contact information, job title, department, and other relevant information. | | |
| Trigger: | This use case describes the process of updating employee information by the HR department. The HR department needs to make changes to employee records such as personal details, contact information, job title, department, and other relevant information. | | |
| Preconditions: | * The HR department must have appropriate access rights and permissions to update employee information. * The employee whose information needs to be updated must already exist in the system. | | |
| Postconditions: | * The employee's information is successfully updated in the system. * The updated information is reflected in relevant databases, systems, and reports. | | |
| Normal Flow: | 1. The HR department logs into the HR management system. 2. The HR department navigates to the employee information update section. 3. The system presents a list of employees for whom information can be updated. 4. The HR department selects the employee whose information needs to be updated. 5. The system displays the employee's current information. 6. The HR department makes the necessary changes to the employee's information. 7. The HR department verifies the changes and ensures their accuracy. 8. The HR department submits the updated information. 9. The system validates the updated information and stores it in the employee database. 10. The system generates a confirmation message indicating the successful update of the employee's information. | | |
| Alternative Flows: | 1. If the HR department selects an employee who does not exist in the system:   a. The system displays an error message indicating that the employee does not exist.  b. The HR department can choose to search for the correct employee or cancel the update process.   1. If there are mandatory fields that are not filled in or contain invalid data:   a. The system highlights the missing or invalid fields and displays an error message.  b. The HR department corrects the fields and resubmits the updated information. | | |
| Exceptions: | Technical failure: If there is a system error or technical issue, preventing the update process from completing:  a. The system displays an error message indicating the technical failure.  b. The HR department can try again later or contact the technical support team for assistance. | | |
| Priority: | Medium | | |
| Frequency of Use: | High (HR departments frequently update employee information as needed) | | |
| Business Rules: | * Only authorized HR personnel should have access to update employee information. * Certain fields may have specific validation rules or restrictions (e.g., date format, character limits) that must be followed. | | |
| Other Information: | * The system should provide a user-friendly interface to make it easy for the HR department to update employee information. * Proper security measures should be in place to protect the confidentiality and integrity of employee data. | | |
| Assumptions: | * The HR department has the necessary knowledge and training to update employee information accurately. * The HR management system is functional and accessible for performing the update process. | | |

| ID and Name: | **UC-15 Check attendance** | | |
| --- | --- | --- | --- |
| Created By: | Lam Trường |  |  |
| Primary Actor: | HR |  |  |
| Description: | This use case describes the process of checking the attendance of employees by the HR department. The HR department needs to track and monitor the attendance of employees to ensure compliance with attendance policies and record accurate attendance data. | | |
| Trigger: | The trigger for this use case is the need to check the attendance of employees, which can be on a daily, weekly, monthly, or ad-hoc basis. | | |
| Preconditions: | * The HR department has appropriate access rights and permissions to check employee attendance. * The attendance tracking system is in place and properly configured to record employee attendance. | | |
| Postconditions: | * The HR department obtains accurate attendance data for the selected time period or date. * The attendance data can be used for various purposes such as payroll processing, performance evaluation, and attendance reporting. | | |
| Normal Flow: | 1. The HR department logs into the HR management system. 2. The HR department navigates to the attendance tracking section or module. 3. The HR department selects the desired time period or specific date for which they want to check attendance. 4. The system retrieves and displays a list of employees along with their attendance status (present, absent, late, etc.) for the selected time period or date. 5. The HR department reviews the attendance data and makes any necessary notes or annotations. 6. The HR department may export or generate attendance reports for further analysis or documentation purposes. | | |
| Alternative Flows: | If there is a need to check the attendance of a specific employee:  a. The HR department can search for the employee by name or employee ID.  b. The system retrieves and displays the attendance data specifically for the selected employee. | | |
| Exceptions: | Technical failure: If there is a system error or technical issue preventing the retrieval of attendance data:  a. The system displays an error message indicating the technical failure.  b. The HR department can try again later or contact the technical support team for assistance. | | |
| Priority: | Medium | | |
| Frequency of Use: | High (Attendance tracking is typically a regular task for HR departments) | | |
| Business Rules: | * Only authorized HR personnel should have access to check employee attendance. * Attendance policies and rules should be clearly defined and communicated to employees. | | |
| Other Information: | * The attendance tracking system should be reliable and capable of accurately recording and presenting attendance data. * The system should provide relevant filters and search options to facilitate the HR department's navigation and retrieval of attendance data. | | |
| Assumptions: | * Employees are responsible for accurately recording their attendance through a reliable system or process. * The HR management system is functional and accessible for performing the attendance checking process. | | |

| ID and Name: | **UC-16 Employee's Tax** | | |
| --- | --- | --- | --- |
| Created By: | Lam Trường |  |  |
| Primary Actor: | HR |  |  |
| Description: | This use case describes the process of calculating an employee's tax obligations by the HR department. The HR department needs to determine the appropriate amount of taxes to be deducted from an employee's salary based on their income, tax regulations, and other relevant factors. | | |
| Trigger: | * The trigger for this use case is the need to calculate an employee's tax obligations, typically on a regular basis such as monthly or bi-monthly. | | |
| Preconditions: | * The HR department has appropriate access rights and permissions to calculate employee taxes. * The necessary information for tax calculation is available, including employee's income, tax brackets, deductions, allowances, and other relevant data. | | |
| Postconditions: | 1. The HR department determines the accurate amount of taxes to be deducted from the employee's salary. 2. The calculated tax amount is recorded and used for payroll processing and tax reporting purposes. | | |
| Normal Flow: | 1. The HR department accesses the tax calculation module or system. 2. The HR department selects the employee for whom tax calculation is to be performed. 3. The system retrieves the employee's income information and applicable tax rules. 4. The HR department verifies the accuracy of the income and other relevant data. 5. The HR department applies the relevant tax brackets, deductions, and allowances to calculate the employee's taxable income. 6. The HR department calculates the tax amount based on the applicable tax rates and formulas. 7. The HR department verifies the calculated tax amount and ensures its accuracy. 8. The calculated tax amount is recorded in the employee's payroll record for deduction purposes. | | |
| Alternative Flows: | If there are specific tax exemptions or adjustments applicable to the employee:  a. The HR department applies the exemptions or adjustments as per the tax regulations and guidelines. | | |
| Exceptions: | Technical failure: If there is a system error or technical issue preventing the tax calculation process:  a. The system displays an error message indicating the technical failure.  b. The HR department can try again later or contact the technical support team for assistance. | | |
| Priority: | High | | |
| Frequency of Use: | * Regular (Tax calculation is performed on a recurring basis as part of payroll processing) | | |
| Business Rules: | * Only authorized HR personnel should have access to calculate employee taxes. * Tax regulations and rules should be followed accurately to ensure compliance with tax laws. | | |
| Other Information: | * The tax calculation system should be up-to-date with the latest tax regulations and rates. * Proper security measures should be in place to protect the confidentiality and integrity of employee tax information. | | |

| *ID and Name:* | ***UC-17 ConfirmHRRequest*** | | |
| --- | --- | --- | --- |
| *Created By:* | *Nghĩa* |  |  |
| *Primary Actor:* | HR Manager |  |  |
| *Description:* | The HR Manager will accept all HR requests and decide to approve or decline those requests. | | |
| *Trigger:* | *The HR Manager reads the HR request and decides to approve or decline that request by changing its status.* | | |
| *Preconditions:* | *Login first and user must be HR Manager* | | |
| *Postconditions:* |  | | |
| *Normal Flow:* | ***1.0 Login success and role must be HR Manager:***   1. ***View all HR requests*** 2. ***Select a request to view detail*** 3. ***Change status request by approve or decline*** 4. ***Send back request to HR*** | | |
| *Alternative Flows:* |  | | |
| *Exceptions:* |  | | |
| *Priority:* | *High* | | |
| *Frequency of Use:* | *Depends on how much HR in company.* | | |
| *Business Rules:* |  | | |
| *Other Information:* |  | | |
| *Assumptions:* |  | | |

# III. Functional Requirements

## Create Employee

* The "Create Employee" function enables authorised users, such as administrators or HR, to add new employee records to the system. Users can input employee information.
* When triggering the "Create Employee" function, users are presented with an interface to enter employee details. Mandatory fields are validated to ensure completeness, and data validation checks are performed to ensure accurate data entry. Upon submission, the function processes the data, generates a unique employee ID if necessary, and stores the record in the system's database. Appropriate error handling is implemented to handle issues such as duplicate employee IDs or database connectivity problems.

## Update Employee

* The "Update Employee" function allows authorised users like administrators or HR to modify existing employee information in the system. Users can select an employee and make changes to their personal details, contact information, salary, and tax-related information.
* When using the "Update Employee" function, users are presented with a screen displaying a list of employees. After selecting an employee, they can edit the desired fields, which are pre-populated with the existing data. The function validates the updated information, ensuring accurate data entry and compliance with business rules. Upon submission, the function updates the employee's record in the database, handling potential errors and providing appropriate error messages.

## Manage Employee's Tax Requests

* The "Manage Employee's Tax Requests" function allows tax administrators or HR to review and process tax requests submitted by employees. Users can access a user interface to view and evaluate requests, accepting or denying them based on specific criteria or business rules.
* The function presents tax requests to users, providing options to accept or deny each request. Upon accepting or denying a request, the function updates the request's status in the database. Appropriate error handling is implemented to handle any issues during request processing.

## Check Attendance

* The "Check Attendance" function enables attendance managers or HR to track and monitor employee attendance. Users can access an interface to view attendance records, generate attendance reports, and verify employee attendance status.
* The function retrieves attendance data from the database and applies predefined rules to determine attendance status. It allows users to generate reports summarising attendance information. Error handling is implemented to address potential issues during data retrieval and processing.

## View Employee Information

* The "View Employee Information" function allows authorised users to access and view the details of employees stored in the system. Users, such as administrators or HR and Employees, can navigate to a designated interface where they can search for employees based on various criteria, such as employee ID, name, department, or role. Upon selecting an employee, the function retrieves and displays their information, including personal details, contact information, salary, tax code, and attendance records if applicable. The function should provide a clear and organised presentation of the employee's information for easy reference and analysis.

## Change Information Request

* The "Change Information Request" function enables employees to submit requests for changes to their personal or employment-related information. Users can access a dedicated interface to submit these requests, specifying the type of information to be modified and providing the updated details. The function should include validation checks to ensure that the requested changes adhere to predefined rules and policies. Upon submission, the function records the request in the system and notifies the appropriate personnel for review and processing.

## View Attendance

* The "View Attendance" function allows authorised users, such as Employees, to access and review their attendance records. Users can navigate to an interface where they can check their attendance. The function retrieves and displays attendance data, including dates, times of arrival and departure, leave records, and any additional notes related to attendance. The function should support filters and sorting options to facilitate easy navigation and analysis of attendance records.

## Get the OT (Overtime) Income Information

* The "Get the OT Income Information" function enables authorised users, such as Employees, to obtain information regarding overtime income for them. Users can access a designated interface to specify the desired time period. The function retrieves and presents the relevant data, including the employee's name, overtime hours worked, applicable pay rates, and calculated overtime income. The function should provide accurate and up-to-date information for proper payroll processing and financial analysis.

## Confirm Update Profile

* The "Confirm Update Profile" function allows HR managers to review and verify changes made to employees' personal information before submission. Users are presented with a screen displaying the proposed modifications, including updated fields and their new values. They can carefully review the changes and ensure their accuracy. The function provides options to either confirm or cancel the updates. Upon confirmation, the system processes and stores the modified information, adhering to validation rules. In case of cancellation, the function reverts the profile to its previous state. By incorporating the "Confirm Update Profile" function, users have control over their data accuracy and can confidently update their profiles with accuracy and precision.

## Overtime (OT) Request

* The "Overtime (OT) Request" function allows employees to submit requests for working additional hours beyond their regular schedule. Users can access a designated interface where they provide the necessary information for the OT request, such as the date(s) they wish to work overtime, the duration or number of hours, and a brief explanation of the reason for the request.
* Once the request is submitted, the function records it in the system and notifies the relevant stakeholders, such as HR or HR managers. Upon approval or denial of the request, the function updates the request status and notifies the employee accordingly.
* By incorporating the "Overtime (OT) Request" function, the system streamlines the process of requesting and managing overtime work, ensuring transparency, fair allocation of additional hours, and accurate compensation for employees.

## Application for Leave

* The "Application for Leave" function allows employees to submit requests for time off. Users access a designated interface where they provide the necessary details, including the start and end dates of the leave period, the reason for the leave, and any additional notes or attachments required.
* Once the request is submitted, the function records it in the system and notifies the appropriate HR for review and approval.
* After the request is approved or denied, the function updates the request status and notifies the employee accordingly. Approved leave requests are reflected in the employee's leave balance and considered for scheduling purposes.
* By incorporating the "Application for Leave" function, the system provides employees with a streamlined and efficient process for requesting time off. It ensures compliance with company policies, facilitates effective leave management, and promotes transparency and communication between employees and management.

## Resignation Letter

* The "Resignation Letter" function enables employees to submit their formal resignation to their employers. This functionality provides a structured and standardized process for employees to communicate their intention to leave the company.
* When triggering the "Resignation Letter" function, employees are typically required to draft a letter that includes essential details such as their name, employee ID, position, last working day, and a brief statement expressing their intent to resign. The function may also include additional fields for providing reasons for resignation or any other relevant information.
* Once the resignation letter is submitted, the function records it in the system and triggers a notification to the appropriate stakeholders, such as HR personnel or supervisors, for further processing.
* The "Resignation Letter" function plays a crucial role in formalizing the resignation process, ensuring clear communication between the employee and the employer. By implementing this function, the system streamlines the resignation process, facilitates proper documentation, and enables efficient handling of employee departures within the organization.

## Login

* The "Login" function allows users to access the system by providing their credentials to authenticate their identity. This function ensures that only authorized individuals can access the system and its functionalities.
* When initiating the "Login" function, users are presented with a login screen where they enter their username and password. The function verifies the entered credentials against the stored user database to validate the user's identity.
* If the provided credentials are correct, the function grants the user access to the system and redirects them to the appropriate user interface based on their role or permissions. In case of incorrect credentials, the function displays an error message, notifying the user of the authentication failure.
* The "Login" function should incorporate security measures, such as encryption of user credentials during transmission and password hashing for secure storage. It should also include features like password reset or account lockout mechanisms to enhance security and user experience.
* By implementing the "Login" function, the system ensures secure access to authorized users and protects sensitive information. It provides a reliable authentication mechanism to safeguard the system and its data from unauthorized access.

## Logout

* The "Logout" function allows users to securely sign out and terminate their session within the system. This functionality ensures that user sessions are properly closed and prevents unauthorized access to the system in case of shared or public devices.
* When triggering the "Logout" function, users initiate the process of ending their session by either clicking on a designated logout button or accessing a specific logout option within the user interface. The function should also include an automatic logout feature after a period of inactivity to enhance security.
* Upon logout, the function clears the user's session data, invalidates their authentication tokens, and redirects them to a designated logout confirmation page or the login screen. It ensures that any sensitive user information or temporary data associated with the session is properly cleared from the system.
* The "Logout" function should adhere to best practices in session management, ensuring that no residual user data remains accessible after logout and minimizing the risk of session hijacking or unauthorized access.
* By incorporating the "Logout" function, the system promotes security and privacy by allowing users to effectively end their sessions and protect their accounts from unauthorized access. It ensures that users have control over their session status and provides a seamless and secure user experience.

## Confirm HR Request

* The "Confirm HR Request" function enables designated personnel, such as HR managers or administrators, to review and approve or deny HR-related requests submitted by employees. This functionality ensures proper validation and processing of HR-related tasks within the organization.
* When triggering the "Confirm HR Request" function, authorized users are presented with a list of pending HR requests, categorized by type or priority. The requests may include items such as leave applications, employee profile updates, salary adjustments, or any other HR-related tasks.
* The function provides options for HR personnel to review the details of each request, including relevant information and supporting documentation. Based on the provided information, HR personnel can either approve the request, deny it with appropriate reasons, or request further clarification or additional documentation from the employee.
* Upon confirming or denying the request, the function updates the request status and notifies the employee or relevant stakeholders of the decision. Approved requests trigger the necessary actions or updates in the HR system, such as updating employee records, adjusting payroll, or processing leave entitlements.
* By incorporating the "Confirm HR Request" function, the system streamlines the HR request approval process, ensures consistency in handling HR tasks, and maintains accurate employee records. It facilitates effective communication between HR personnel and employees, reduces manual paperwork, and enhances overall HR management efficiency.

## Request Leave

* The "Request Leave" function allows employees to submit requests for time off or leave from work. This functionality provides a streamlined process for employees to communicate their need for leave and enables efficient management of leave requests within the organization.
* When triggering the "Request Leave" function, employees access a designated interface where they provide the necessary details for their leave request. The interface typically includes fields for selecting the desired leave dates, specifying the type of leave (e.g., vacation, sick leave), indicating the reason for the leave, and attaching any required supporting documents.
* The function validates the entered information to ensure compliance with company policies, leave entitlement rules, and any predefined criteria for leave approval. This may involve checking available leave balances, verifying the requested dates against the team's schedule, and considering any leave blackout periods.
* Once the leave request is submitted, the function records it in the system and notifies the relevant stakeholders, such as supervisors or managers, for review and approval. The function should handle any exceptional cases, such as leave requests that exceed available leave balances or overlapping leave periods.
* Upon approval or denial of the leave request, the function updates the request status and notifies the employee accordingly. Approved requests are reflected in the employee's leave balance, and any necessary adjustments are made to the team's schedule and workload distribution.
* By implementing the "Request Leave" function, the system streamlines the process of requesting and managing employee leave, ensuring transparency, adherence to policies, and efficient handling of leave entitlements. It enhances communication between employees and managers, minimizes administrative effort, and promotes effective leave management within the organization.

## Request Resignation

* The "Request Resignation" function allows employees to formally submit their resignation to their employer. This functionality provides a structured and standardized process for employees to communicate their intent to resign and enables efficient handling of the resignation process within the organization.
* When triggering the "Request Resignation" function, employees access a designated interface where they provide the necessary details for their resignation. The interface typically includes fields for entering the resignation date, specifying the reason for resigning, and providing any additional comments or feedback.
* The function validates the entered information to ensure completeness and accuracy. It may also include additional checks, such as verifying the required notice period and ensuring that the resignation date aligns with company policies.
* Once the resignation request is submitted, the function records it in the system and notifies the relevant stakeholders, such as HR personnel or supervisors, for further processing. The function may prompt the employee to confirm their decision or provide additional information, if necessary.
* Upon approval of the resignation request, the function updates the employee's status in the system, initiates the necessary offboarding procedures, and communicates the next steps to the employee. It may involve tasks such as conducting exit interviews, facilitating knowledge transfer, and processing final payments or benefits.
* By incorporating the "Request Resignation" function, the system streamlines the resignation process, ensures proper documentation, and enables efficient handling of employee departures. It facilitates clear communication between employees and management, allows for smooth transition planning, and maintains accurate records of employee status changes within the organization.

## Request Update Attendance

* The "Request Update Attendance" function allows employees to submit requests for updating their attendance records. This functionality provides a mechanism for employees to report any discrepancies or corrections related to their recorded attendance data.
* When triggering the "Request Update Attendance" function, employees access a designated interface where they provide the necessary details for their attendance update request. The interface typically includes fields for specifying the date(s) and the nature of the update required, such as marking attendance for a missed day, correcting an incorrect entry, or adding overtime hours.
* The function validates the entered information to ensure completeness and accuracy. It may include checks to verify the eligibility of the requested update based on company policies, timekeeping rules, and any predefined limitations or restrictions.
* Once the attendance update request is submitted, the function records it in the system and notifies the relevant stakeholders, such as HR personnel or supervisors, for review and processing. The function should handle exceptional cases, such as requests that exceed a certain timeframe or require additional approvals.
* Upon approval of the attendance update request, the function updates the attendance records accordingly, reflecting the requested changes in the employee's attendance history. The system may also recalculate relevant metrics, such as total hours worked or overtime calculations, based on the updated data.
* By implementing the "Request Update Attendance" function, the system facilitates transparency and accuracy in attendance management. It allows employees to report and rectify any attendance discrepancies, ensures fairness in timekeeping, and maintains reliable attendance records for payroll and reporting purposes.

## Request Change Work Department

* The "Request Change Work Department" function allows employees to submit requests for transferring to a different department within the organization. This functionality provides a formalized process for employees to communicate their desire to change their work department and enables efficient handling of department transfer requests.
* When triggering the "Request Change Work Department" function, employees access a designated interface where they provide the necessary details for their department change request. The interface typically includes fields for selecting the desired department, specifying the reasons for the transfer, and providing any additional comments or supporting information.
* The function validates the entered information to ensure completeness and accuracy. It may also perform checks, such as verifying the availability of positions in the requested department, considering the employee's qualifications or seniority, and assessing the impact on team composition and workload distribution.
* Once the department change request is submitted, the function records it in the system and notifies the relevant stakeholders, such as HR personnel and the managers of the involved departments, for review and processing. The function may initiate a review process to assess the feasibility of the transfer and determine its impact on the organization.
* Upon approval of the department change request, the function updates the employee's department information in the system, triggers the necessary updates in team assignments or reporting structures, and communicates the transfer details to the employee and relevant stakeholders.
* By incorporating the "Request Change Work Department" function, the system streamlines the process of requesting and managing department transfers, ensuring proper documentation, and facilitating effective organizational alignment. It enhances communication between employees, HR personnel, and managers, promotes employee career development opportunities, and maintains accurate records of departmental changes within the organization.

## Request Tax Support

* The "Request Tax Support" function allows employees to submit requests for tax-related support or assistance from the organization's tax department or designated personnel. This functionality provides a structured process for employees to seek guidance, clarification, or resolution regarding tax-related matters.
* When triggering the "Request Tax Support" function, employees access a designated interface where they provide the necessary details for their tax support request. The interface typically includes fields for specifying the nature of the tax issue or query, attaching relevant documents or forms, and providing any additional context or background information.
* The function validates the entered information to ensure completeness and relevance. It may include checks to determine the appropriateness of the requested tax support and ensure that the employee has provided sufficient details for effective resolution.
* Once the tax support request is submitted, the function records it in the system and notifies the relevant stakeholders, such as tax department personnel or designated tax advisors, for review and processing. The function may include a routing mechanism to direct the request to the appropriate personnel based on the nature of the tax issue or the employee's tax-related profile.
* Upon receiving the tax support request, the designated personnel review the details, analyze the situation, and provide the necessary guidance, information, or assistance to address the employee's tax-related concerns. The function should facilitate effective communication channels between the employee and the tax department, enabling timely responses and updates.
* By implementing the "Request Tax Support" function, the system enhances employee access to tax-related support and resources, ensures consistent handling of tax queries, and promotes compliance with tax regulations. It improves transparency and communication between employees and the tax department, facilitates timely resolution of tax-related issues, and contributes to overall tax management within the organization.

## Request Overtime (OT)

* The "Request Overtime" function allows employees to submit requests for working overtime beyond their regular working hours. This functionality provides a structured process for employees to communicate their need for additional work hours and enables efficient management of overtime requests within the organization.
* When triggering the "Request Overtime" function, employees access a designated interface where they provide the necessary details for their overtime request. The interface typically includes fields for specifying the date(s) and time(s) when the employee intends to work overtime, indicating the reason for the overtime, and providing any additional comments or documentation.
* The function validates the entered information to ensure compliance with company policies and any predefined criteria for approving overtime. This may involve checks such as verifying the availability of overtime slots, considering the employee's workload and performance, and assessing any cost implications associated with the overtime work.
* Once the overtime request is submitted, the function records it in the system and notifies the relevant stakeholders, such as supervisors or managers, for review and approval. The function should handle exceptional cases, such as requests that exceed allowable overtime limits or require special approvals.
* Upon approval of the overtime request, the function updates the employee's schedule and relevant timekeeping records to reflect the approved overtime hours. It may also trigger adjustments in payroll calculations, ensuring accurate compensation for the additional work rendered.
* By incorporating the "Request Overtime" function, the system streamlines the process of requesting and managing overtime work, ensures transparency and fairness in overtime allocation, and maintains accurate records of overtime hours worked. It facilitates effective communication between employees and supervisors, enables proper compensation for additional work, and promotes efficient utilization of resources within the organization.

# IV. Non-Functional Requirements

## 1. External Interface Requirements

*[This section provides information to ensure that the system will communicate properly with users and with external hardware or software elements.]*

### 1.1 User Interfaces

UI-1: The interface is designed according to Microsoft's Application form standards

UI-2: Use English language

UI-3: Arial font

**1.3 Hardware Interfaces**

HI-1: Server Configuration

CPU : CPU Intel Core i9-12900KF (5.20GHz, 16 Nhân 24 Luồng, 30M Cache, Alder Lake)

RAM : 256GB RAM 3200MHz

Storage : 15 TB

Operating System : MS Windows Server 2022 R2

Phần mềm : Microsoft IIS 8.x, .NET 6

Database server

CPU : CPU Intel Core i9-12900KF (5.20GHz, 16 cores 24 threads , 30M Cache, Alder Lake)

RAM : 256GB RAM 1333MHz

Storage : 50 TB

Operating System : MS Windows Server 2012 R2

Software : SQL Server 2019

HI-2: Client Device

PC Device

CPU : Intel® Core™ i7-11850HE

RAM : 16GB RAM 2666MHZ

Storage : SSD: 1TB, HDD: 1TB

Operating System : Windows 11

Screen : 24-inch 16:9 format, 2K

## 2. Quality Attributes

### 2.1 Usability

USE-1: The software is easy to use, does not take too much training time.

### 2.2 Performance

PER-1: For operations that do not process much, each processing operation should not take more than 30 seconds

### 2.3 Security

SEC-1: Must be logged in to perform system operations

SEC-2: Ensure employees' personal information is not exposed

**2.5 Availability**

AVL-1: The system must be ready at all times

### 2.6 Reliability

REL-1: The system is capable of operating 24/24

### 2.7 Design Constraints

DES-1: Programming language: C#11, .NET 6

DES-2: Database: SQL Server 2019

DES-3: IDE: Visual Studio 2022

DES-4: Design tools: MS Paint, Visual Paradigm, Lucid