# Software Requirements Specifications (SRS)

## User Requirement Specification

The system has five actors including: guest, customer, staff, admin and system.

|  |  |
| --- | --- |
| **Actor** | **Description** |
| Guest | Person join to website but not login into system. |
| Customer | Person who want to rent offices and logged into system |
| Admin | Person who manage account and ban/ unban account |
| Manager | Person who manage request, contact customer, schedule staff…. |
| Staff | Person who in charge of create office, receive and process the appointment/ repair/ rental/ return office request |
| System | System will manage the schedule to process contract time, send notification, suggest office for customer |

Table : Overall user requirement specification

### Guest requirement

* **Register:** Guest need to register to become member of system.
* **Search office:** Customer can search suitable office by criteria such as price, location, name….
* **Login**: Guest uses email and password to login into the system to search or request office.

### Customer requirement

* **Search office:** Customer can search suitable office by criteria such as price, location, name….
* **Send request:** Customer can send request about book appointment, repair something in office, rental, and request cancel before expire…
* **Rate and comment office:** Customer can rate and comment satisfaction about office they renting.

### Admin requirement

* **Logout:** When finish all activities at website they can log out of system.
* **Manager member:** Admin can add, edit, remove or ban/ unban account.

### Manager requirement

* **Contact with customer:** Manager can notify customer when task is done.
* **Manager contract:** Manager can create, edit contract.
* **Monitor request:** Manager can confirm about request repair, rental, appointment.
* **Schedule staff:** manager can schedule staff to contact with customer when request has been approved by manager.

### Staff requirement

* **Logout:** When finish all activities at website they can log out of system.
* **Contact with customer:** staff have to check task list about the appointment with customer and change status of the appointment when finish his task.
* **Monitor office:** staff can add, edit or remove comment about office.
* **Repair amenities:** staff have to check task list about the request repair amenities and change status of that request after repair complete.

### System requirement

* **Send notification mail:** system will send notification mail to customer when appointment has been approved and scheduled or request repair has been accepted.
* **Send notification SMS (short message service):** system will send notification mail to customer when their contract will be expired in one month.
* **Suggest office:** system will suggest some offices which is nearly suitable with what customer searching.
* **Schedule request:** system will auto schedule all request about appointment and repair when those request has been approved by manager.

## System Requirement Specification

### External Interface Requirements

#### User Interfaces

* User interface must be friendly, simple.
* All functions should be showed clearly and don’t make user confuse.

#### Hardware Interfaces

* The system will use the standard hardware and data communications resources of a standard computer.

#### Software Interfaces

* The website run in Firefox and Chrome browsers.

#### Communications Protocol

* The website uses:
* HTTP/HTTPS protocol for communication between the web browser and the web server.
* TCP/IP network protocol for communication with HTTP protocol.
* WAP protocol for sending message for customer.

### System Overview Use Case:

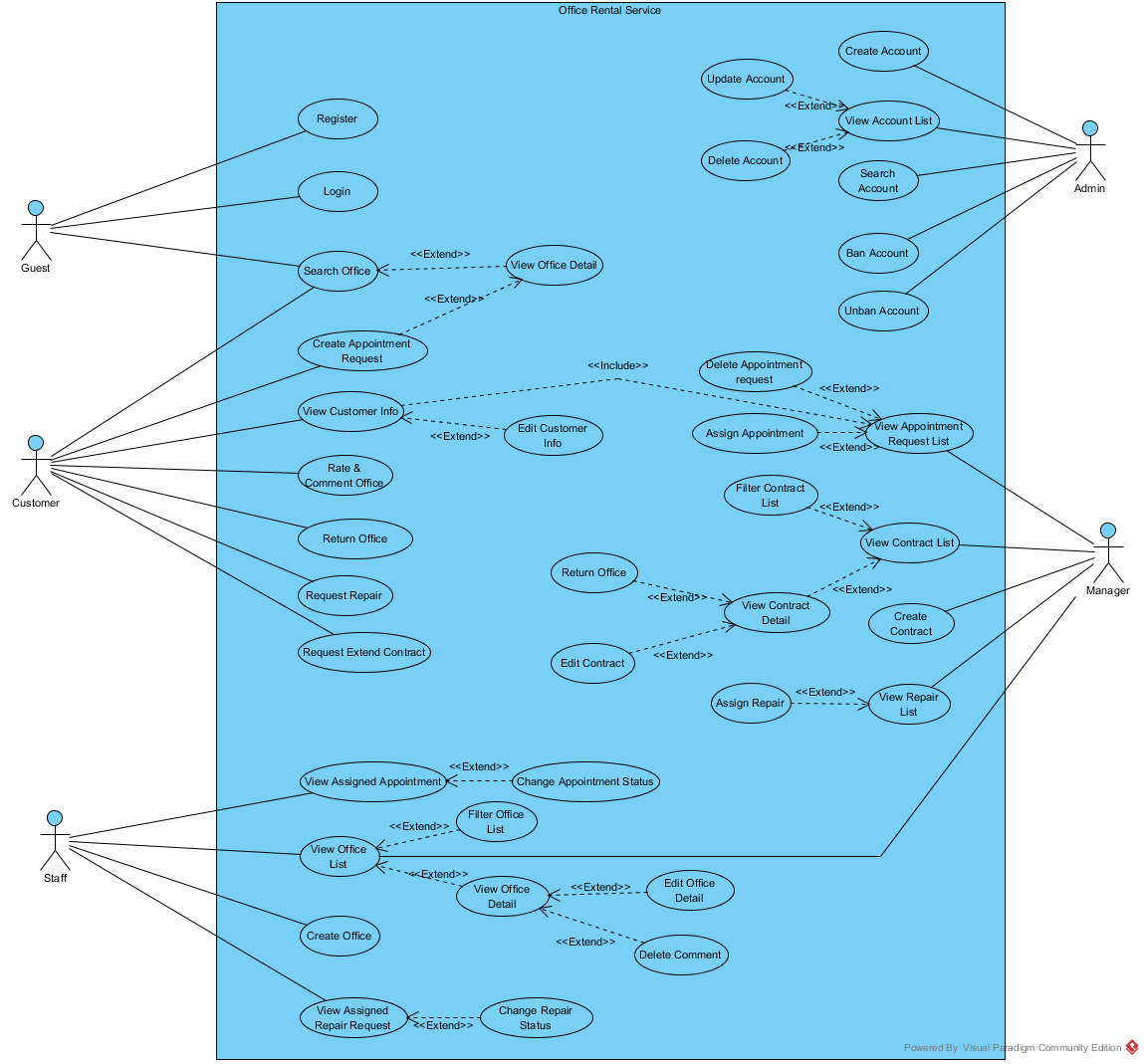


Figure : Use Case Overview

### List of Use Case:

#### <Guest>Overview Use Case

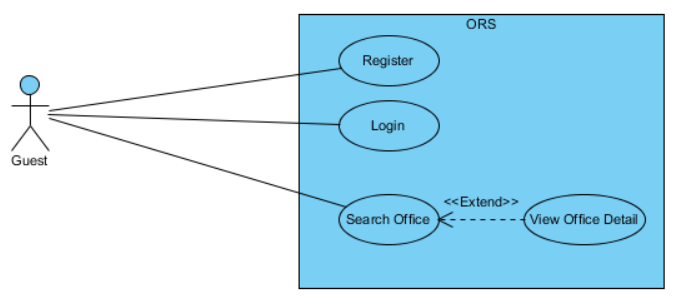


Figure : <Guest>Overview Use Case

##### <Guest> Register

**Use Case Diagram**

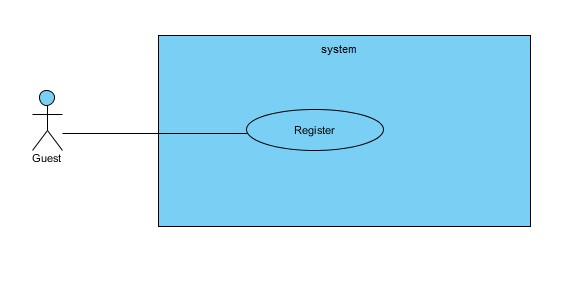


Figure : <Guest> Register

**Use Case Specification**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **USE CASE – REGISTER** | | | | |
| **Use-case No.** | UC011 | **Use-case Version** | | 1.0 |
| **Use-case Name** | Register | | | |
| **Author** | Trần Lê Tuấn | | | |
| **Date** | 01/06/2015 | **Priority** | Normal | |
| **Actor:**   * Guest   **Summary:**   * This use case allows guest create account.   **Goal:**   * Help guest to create new account.   **Trigger:**   * Click “Đăng ký” button.   **Pre-conditions:**   * User want to create new account   **Post conditions:**   * **Success**: The new account will be added into database. * **Failure**: Cannot create account. System displays error message on register page.   **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Click “Đăng ký” button | System redirect to [Register Page], contain a register form :   * Họ và tên: Textbox (min length: 6, max length: 50) * Tên đăng nhập:   In format: /^(\w+[\.])\*\w+@@(\w+\.)+[a-zA-Z]+$/   * Địa chỉ Email: Textbox * Mật khẩu: Password Filed (min length: 8, max length: 20) * Xác nhận mật khẩu: Password Field (min length: 8, max length: 20) * Ngày sinh: Date time picker * Quận: Dropdownlist * Phường: Textbox * Số nhà/ đường: Textbox * Số điện thoại: Textbox (min length: 10, max length: 11)   In format: /^[0-9]\*$/   * Đăng ký[ Register :button] * Xóa[Clear: button] | | 2 | Input information.  Clicks “Đăng ký” button. | [Exceptions 1,2 3,4,5,6]  Redirect to [Home Page] and displays popup:”Bạn đã đăng ký tài khoản thành công!”. |   **Alternative Scenario:**   |  |  |  | | --- | --- | --- | |  | Actor Action | System Response | | 1 | Click on the “Xóa trắng” button. | All information in register form is cleared. |   **Exceptions:**   |  |  |  | | --- | --- | --- | | No. | Actor Action | System Response | | 1 | “Họ và tên”, “Địa chỉ email”, “Mật khẩu”, “Xác nhận mật khẩu”, “Ngày sinh”, “Địa chỉ” are blank. | Display error message:” Vui lòng nhập đầy đủ thông tin yêu cầu!” | | 2 | Email is already exists. | Display error message:”Email này đã được sử dụng để đăng ký thành viên!” | | 3 | Password is less than 8 or more than 32 characters characters. | Display error message “Yêu cầu mật khẩu từ 8-32 kí tự!” | | 4 | Guest fills password and re-password different | Display error message” Mật khẩu nhập lại chưa chính xác !” | | 5 | Phone Number is not a number or less than 10 numbers or greater than 11 numbers. | Display error message “Số điện thoại không hợp lệ!” | | 6 | Full Name is less than 6 characters or greater than 50 characters. | Display error message “Vui lòng nhập tên từ 6 đến 50 ký tự!” |   **Relationships:** N/A  **Business Rules**:   * Username must be different from username of existed account of system. | | | | |

Table : <Guest> Register

##### <Guest> Login

**Use Case Diagram**

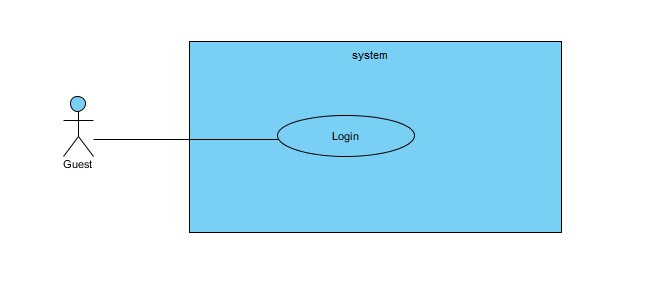


Figure : <Guest> Login

**Use Case Specification**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **USE CASE – LOGIN** | | | | |
| **Use-case No.** | UC012 | **Use-case Version** | | 2.0 |
| **Use-case Name** | Login | | | |
| **Author** | Trần Lê Tuấn | | | |
| **Date** | 25/05/2015 | **Priority** | Normal | |
| **Actor:**   * Guest   **Summary:**   * This use case allows user to login to system   **Goal:**   * User can login into system   **Triggers:**   * Click “Đăng nhập” button.   **Preconditions:**   * The member has already had an account of this system.   **Post Conditions:**   * **Success:** User successfully login into the system * **Failure:** User cannot login, error message is display   **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Click “Đăng nhập” button | Show [Login Page] with the login form:   * Tên đăng nhập: Textbox   In format: /^(\w+[\.])\*\w+@@(\w+\.)+[a-zA-Z]+$/   * Mật khẩu: Password Filed (min length: 8, max length: 32) * Đăng Nhập: Button * Tạo tài khoản: Link * Quên mật khẩu: Link | | 2 | Input email and password.  Click on “Đăng Nhập” button.  [Alternative 1,2] | [Exceptions 1,2 3]  Save login session  Redirect to [Curent Page]. |   **Alternative Scenario:**   |  |  |  | | --- | --- | --- | |  | Actor Action | System Response | | 1 | Click on “Tạo tài khoản” link. | Redirect to Register page. | | 2 | Click on “Quên mật khẩu” link. | Redirect to ResetPassword page. |   **Exceptions:**   |  |  |  | | --- | --- | --- | | No. | Actor Action | System Response | | 1 | Email or Password textbox is empty. | Display error message “Vui lòng nhập đầy đủ thông tin địa chỉ email và mật khẩu!”. | | 2 | Email or Passowrd not correct. | Display error message “Email hoặc mật khẩu không chính xác, vui lòng thử lại!” | | 3 | Cannot login due to database connection | Display error message “Không thể đăng nhập. Vui lòng thử lại” |   **Relationships:** N/A  **Business Rules:**   * Customer can only login in [customer login] page * Staff and admin can only login in [staff login] page | | | | |

Table : <Guest> Login

##### <Guest, Customer> Search office

**Use Case Diagram**

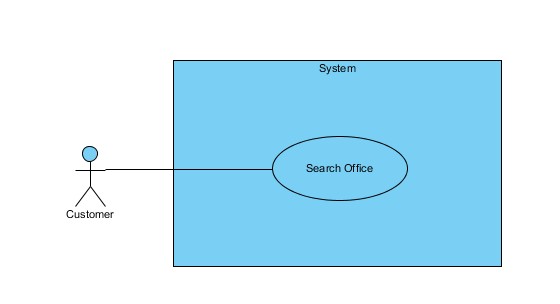


Figure : <Guest, Customer> Search office

**Use Case Specification**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **USE CASE – SEARCH OFFICE** | | | | |
| **Use-case No.** | UC013 | **Use-case Version** | | 2.0 |
| **Use-case Name** | Search office | | | |
| **Author** | Trần Lê Tuấn | | | |
| **Date** | 18/05/2015 | **Priority** | Normal | |
| **Actor:**   * Guest * Customer   **Summary:**   * This use case allows customer search office.   **Goal:**   * Customer can find success an office.   **Trigger:**   * Fill information in text fill or choice some available information. * Click “Tìm kiếm” in home page.   **Pre-conditions:**  **Post conditions:**   * **Success:** Search office successful. * **Fail:** Show message error and show which information error.   **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Fill information in home page. | Show error message or success message  Tên văn phòng: Textbox  Giá thuê: Dropdown list  Quận: Dropdown list  Thành phố: Dropdown list  Số người: Dropdown list | | 2 | Click “Tìm kiếm” button.  [Alternative 1] | [Exceptions 1]  Show result page. |   **Alternative Scenario:**   |  |  |  | | --- | --- | --- | |  | Actor Action | System Response | | 1 | Click to “Xoá trắng” button. | All information in register form is cleared. |   **Exceptions:**   |  |  |  | | --- | --- | --- | |  | Actor Action | System Response | | 1 | Cannot send request due to database connection | Show error message: “Không thể sửa thông tin, vui lòng thử lại sau.” |   **Relationships:** N/A  **Business Rules**: . | | | | |

Table : Search office

##### <Guest, Customer> View office detail

**Use Case Diagram**

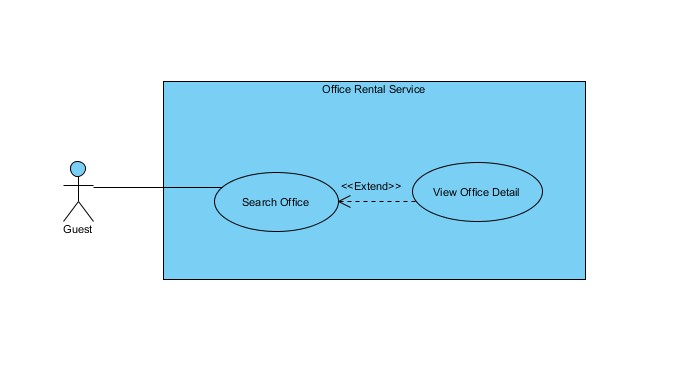


Figure : <Guest, Customer> View office detail

**Use Case Specification**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **USE CASE – VIEW OFFICE DETAIL** | | | | |
| **Use-case No.** | UC014 | **Use-case Version** | | 2.0 |
| **Use-case Name** | View Office Detail | | | |
| **Author** | Trần Lê Tuấn | | | |
| **Date** | 25/05/2015 | **Priority** | Normal | |
| **Actor:**   * Guest * Customer   **Summary:**   * This use case allows guest search office information.   **Goal:**   * Guest can search information.   **Triggers:**   * Fill information in the textbox or chose some suggest in search form. * Click “Tìm kiếm” button.   **Preconditions:**  **Post Conditions:**   * **Success**: Office result is showed successfully. * **Fail:** Cannot show office information.   **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Click on suggest offices. | Show office information include:  Tên văn phòng: Label.  Giới thiệu văn phòng: Text Area.  Quận: Label  Thành phố: Label  Số người: Label  Giá Thuê: Label  Thông tin thêm: Text Area.  [Exception 1] |   **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | No. | Actor Action | System Response | |  |  |  |   **Exceptions:**   |  |  |  | | --- | --- | --- | | No. | Actor Action | System Response | | 1 | Cannot send request due to database connection | Show error message: “Không thể xem thông tin, vui lòng thử lại sau.” |   **Relationships:** Office  **Business Rules:** | | | | |

Table : <Guest, Customer> View office detail

#### <Customer>Overview Use Case

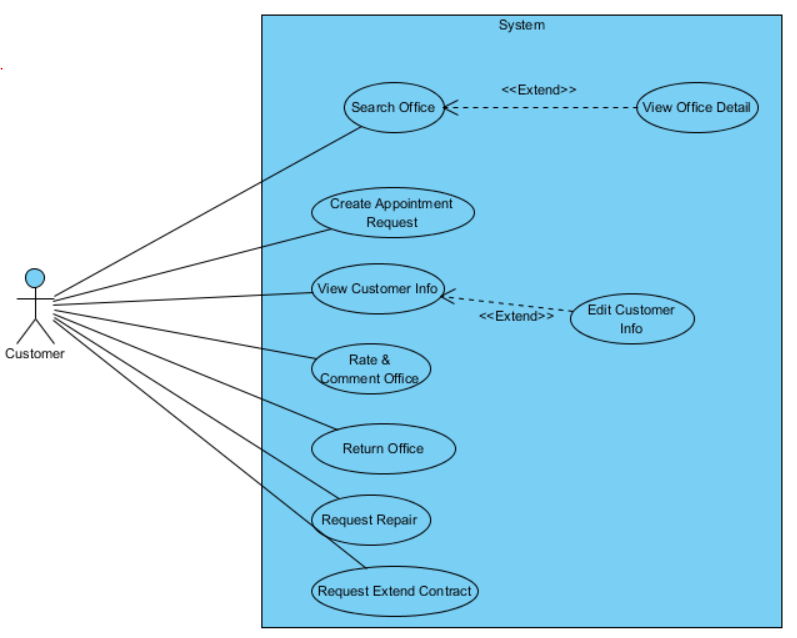


Figure : <Customer>Overview Use Case

##### <Customer> Create appointment request

**Use Case Diagram**

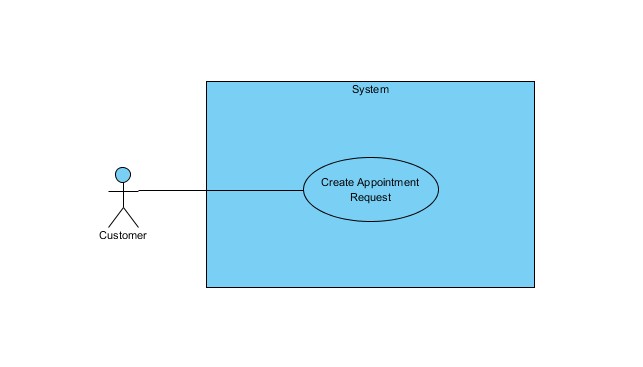


Figure : <Customer> Create appointment request

**Use Case Specification**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **USE CASE – CREATE APPOINTMENT REQUEST** | | | | |
| **Use-case No.** | UC021 | **Use-case Version** | | 2.0 |
| **Use-case Name** | Register | | | |
| **Author** | Trần Lê Tuấn | | | |
| **Date** | 18/09/2014 | **Priority** | Normal | |
| **Actor:**   * Customer   **Summary:**   * This use case allows customer request appointment   **Goal:**   * Customer can request appointment after they found suitable office   **Trigger:**   * Click to office which is suitable * Click “Đặt lịch hẹn” in office detail page   **Pre-conditions:**   * User must log in the system with Customer role. * Customer must have enough information (phone, address, name) to request appointment   **Post conditions:**   * **Success:** Request appointment successful. * **Fail:** Show message error and show which information error.   **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Click to office which suitable with customer | Open office detail :   * Tên văn phòng: Label * Thông tin văn phòng: Text area * Số điện thoại: Text * Đặt lịch hẹn: Button | |  | Click “Đặt lịch hẹn” button. | Show popup with required information of the customer: | | 3 | Input required information to popup | * Tên khách hàng: Textbox * Số điện thoại: Textbox * Email: Textbox * Tên yêu cầu: Textbox * Yêu cầu: Text area * Gửi: Button. * Xóa trắng: Button. | | 4 | Click “Gửi” button  [Alternative 1] | [Exception 1]  Show error message or success message |   **Alternative Scenario:**   |  |  |  | | --- | --- | --- | |  | Actor Action | System Response | | 1 | Click to “Xóa trắng” button. | All information in register form is cleared. |   **Exceptions:**   |  |  |  | | --- | --- | --- | |  | Actor action | System Response | | 1 | Cannot send request due to database connection | Show error message: “Không thể sửa thông tin, vui lòng thử lại sau.” |   **Relationships:** N/A  **Business Rules**:   * Customer can request appointment which offices have status available. | | | | |

Table : <Customer> Create appointment request

##### <Customer> View customer info

**Use Case Diagram**

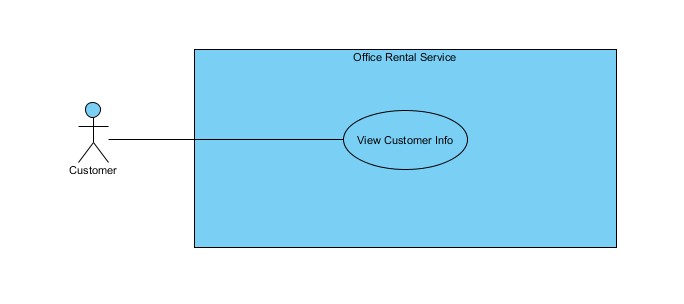


Figure : <Customer> View customer info

**Use Case Specification**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **USE CASE – EDIT CUSTOMER INFORMATION** | | | | |
| **Use-case No.** | UC002 | **Use-case Version** | | 2.0 |
| **Use-case Name** | View Customer Info | | | |
| **Author** | Trần Lê Tuấn | | | |
| **Date** | 25/05/2015 | **Priority** | Normal | |
| **Actor:**   * Customer   **Summary:**   * This use case allows customer view customer information.   **Goal:**   * Show successful customer information.   **Triggers:**   * Click “Thông tin cá nhân” in menu.   **Preconditions:**   * Customer must be login.   **Post Conditions:**   * **Success**: customer information is showed successfully. * **Fail:** Cannot view customer information.   **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Click “Thông tin cá nhân” on menu. | Show customer information  Display customer details includes:   * Họ và tên: Label * Tên đăng nhập: Label * Địa chỉ Email: Label * Giới tính: Label * Ngày sinh: Label * Địa chỉ: Label * Số điện thoại: Label   [Exception 1] |   **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | No. | Actor Action | System Response | |  |  |  |   **Exceptions:**   |  |  |  | | --- | --- | --- | | No. | Actor Action | System Response | | 1 | Cannot view due to database connection | Show error message: “Không xem thông tin, vui lòng thử lại sau.” |   **Relationships:** Customer  **Business Rules:**   * Customer information must exist in database. | | | | |

Table : <Customer> View customer info

##### <Customer> Edit customer info

**Use Case Diagram**

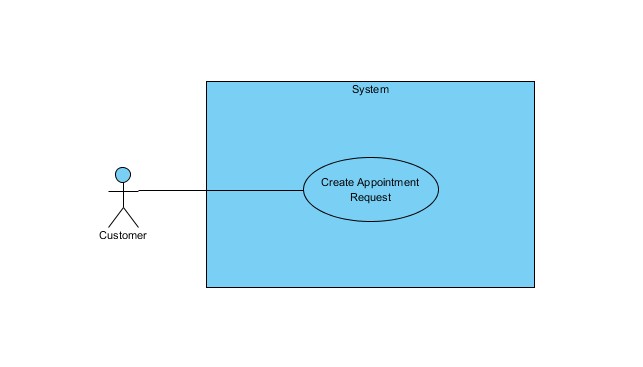


Figure : <Customer> Edit customer info

**Use Case Specification**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **USE CASE – EDIT CUSTOMER INFORMATION** | | | | |
| **Use-case No.** | UC023 | **Use-case Version** | | 2.0 |
| **Use-case Name** | Edit customer information | | | |
| **Author** | Trần Lê Tuấn | | | |
| **Date** | 25/05/2015 | **Priority** | Normal | |
| **Actor:**   * Customer   **Summary:**   * This use case allows customer edit information.   **Goal:**   * Customer can edit information.   **Triggers:**   * Click “Thông tin cá nhân” in menu. * Click “Sửa thông tin cá nhân” submenu. * Fill information in the text box. * Click “Đồng ý” button.   **Preconditions:**   * Customer must be login.   **Post Conditions:**   * **Success**: customer information is edited successfully. * **Fail:** Cannot edit customer information.   **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Click “Thông tin cá nhân” on menu. | Show customer information  Display customer details includes:   * Họ và tên: Label * Tên đăng nhập: Label * Địa chỉ Email: Label * Giới tính: Label * Ngày sinh: Label * Địa chỉ: Label * Số điện thoại: Label | | 2 | Click “Sửa thông tin” on submenu. | Display office details includes:   * Họ và tên: Textbox (min length: 6, max length: 50) * Tên đăng nhập:   In format: /^(\w+[\.])\*\w+@@(\w+\.)+[a-zA-Z]+$/   * Địa chỉ Email: Textbox * Mật khẩu: Password Filed (min length: 8, max length: 20) * Xác nhận mật khẩu: Password Field (min length: 8, max length: 20) * Giới tính: Dropdownlist * Ngày sinh: Date time picker * Quận: Dropdownlist * Phường: Textbox * Số nhà/ đường: Textbox * Số điện thoại: Textbox (min length: 10, max length: 11)   In format: /^[0-9]\*$/   * Đồng ý[ OK :button] * Hủy[Cancel:button] | | 2 | Click “Đồng ý” button on screen.  [Alternative 1] | Show successful message “Sửa thông tin thành công” on screen.  [Exception 1] | |  |  |  |   **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | No. | Actor Action | System Response | | 1 | Click “Huỷ” button. | Close rate office page and go to home page. |   **Exceptions:**   |  |  |  | | --- | --- | --- | | No. | Actor Action | System Response | | 1 | Cannot send request due to database connection | Show error message: “Không thể sửa thông tin, vui lòng thử lại sau.” |   **Relationships:** Member  **Business Rules:**   * Customer can edit information. | | | | |

Table : <Customer> Edit customer info

##### <Customer> Rate and comment office

**Use Case Diagram**

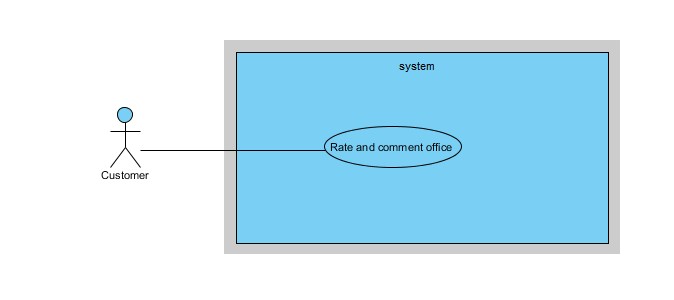


Figure : <Customer> Rate and comment office

**Use Case Specification**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **USE CASE – RATE AND COMMENT OFFICE** | | | | |
| **Use-case No.** | UC024 | **Use-case Version** | | 2.0 |
| **Use-case Name** | Rate and comment office | | | |
| **Author** | Trần Lê Tuấn | | | |
| **Date** | 25/05/2015 | **Priority** | Normal | |
| **Actor:**   * Customer   **Summary:**   * This use case allows customer rate and comment office.   **Goal:**   * Customer can rate and comment office.   **Triggers:**   * Click “Thông tin văn phòng” in menu. * Click “Đánh giá văn phòng” submenu. * Fill information in the text box. * Click “Gửi” button.   **Preconditions:**   * Customer must be login.   **Post Conditions:**   * **Success**: rate and comment office is sent successfully. * **Fail:** Cannot rate and comment office.   **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Click “Đánh giá văn phòng” on submenu. | Show page rate and comment  Display office details includes:   * Details of product: * Tên văn phòng: label * Địa chỉ: label * Email: textbox * Đánh giá : textbox   “Gửi” : button  “Huỷ” : button | | 2 | Click “Gửi” button on screen.  [Alternative 1] | Show successful message “Gửi đánh giá thành công” on screen.  [Exception 1] | |  |  |  |   **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | No. | Actor Action | System Response | | 1 | Click “Huỷ” button. | Close rate office page and go to home page. |   **Exceptions:**   |  |  |  | | --- | --- | --- | | No. | Actor Action | System Response | | 1 | Cannot send request due to database connection | Show error message: “Không thể gửi đánh giá, vui lòng thử lại sau.” |   **Relationships:** Staff Member  **Business Rules:**   * Customer can send rate and comment office to staff. | | | | |

Table : <Customer> Rate and comment office

##### <Customer> Request return office (before due)

**Use Case Diagram**

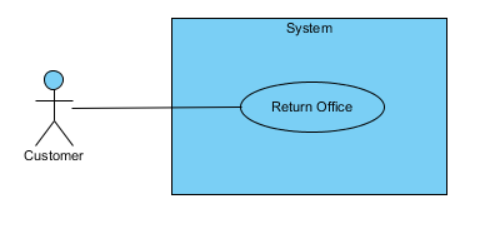


Figure : <Customer> Request return office

**Use Case Specification**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **USE CASE – REQUEST RETURN OFFICE (BEFORE DUE)** | | | | |
| **Use-case No.** | UC025 | **Use-case Version** | | 2.0 |
| **Use-case Name** | Request return office (before due) | | | |
| **Author** | Trần Lê Tuấn | | | |
| **Date** | 25/05/2015 | **Priority** | Normal | |
| **Actor:**   * Customer   **Summary:**   * This use case allows customer to send request cancel to manager.   **Goal:**   * Customer can send request cancel to manager successful.   **Triggers:**   * Click “Thông tin văn phòng” in menu. * Click “Gửi yêu cầu hủy hợp đồng” submenu. * Fill information in the text box. * Click “Gửi” button.   **Preconditions:**   * Customer must have an avaiable contract.   **Post Conditions:**   * **Success**: request cancel is sent successfully. * **Fail:** Cannot send request cancel.   **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Click “Gửi yêu cầu trả văn phòng trước hạn” on submenu. | Show page create request  Display office details includes:   * Details of request: * Tên yêu cầu: textbox * Địa chỉ: label * Email: textbox * Yêu cầu : textbox   “Gửi” : button  “Huỷ” : button | | 2 | Click “Gửi” button on screen.  [Alternative 1] | Show successful message “Gửi yêu cầu thành công.” on screen.  [Exception 1] | |  |  |  |   **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | No. | Actor Action | System Response | | 1 | Click “Huỷ” button. | Close request page and go to home page. |   **Exceptions:**   |  |  |  | | --- | --- | --- | | No. | Actor Action | System Response | | 1 | Cannot send request due to database connection | Show error message: “Không thể gửi yêu cầu, vui lòng thử lại sau.” |   **Relationships:** Contract Customer  **Business Rules:**   * Customer can send request to manager. * Request must be approved by manager. | | | | |

Table : <Customer> Request return office

##### <Customer> Request repair

**Use Case Diagram**

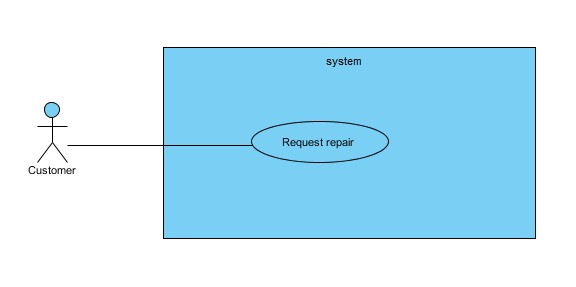


Figure : <Customer> Request repair

**Use Case Specification**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **USE CASE – REQUEST REPAIR** | | | | |
| **Use-case No.** | UC026 | **Use-case Version** | | 2.0 |
| **Use-case Name** | Request repair | | | |
| **Author** | Trần Lê Tuấn | | | |
| **Date** | 25/05/2015 | **Priority** | Normal | |
| **Actor:**   * Customer   **Summary:**   * This use case allows customer to send request repair to manager.   **Goal:**   * Customer can send request repair to manager successful.   **Triggers:**   * Click “Thông tin văn phòng” in menu. * Click “Gửi yêu cầu sửa chữa” submenu. * Fill information in the text box. * Click “Gửi” button.   **Preconditions:**   * Customer can send request repair to manage.   **Post Conditions:**   * **Success**: request repair is sent successfully. * **Fail:** Cannot send request repair   **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Click “Gửi yêu cầu sửa chữa” on submenu. | Show page create request  Display office details includes:   * Details of request: * Tên yêu cầu: textbox * Loại yêu cầu: dropdownlist * Địa chỉ: label * Email: textbox * Yêu cầu : textbox   “Gửi” : button  “Huỷ” : button | | 2 | Click “Gửi” button on screen.  [Alternative 1] | Show successful message “Gửi yêu cầu thành công.” on screen.  [Exception 1] | |  |  |  |   **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | No. | Actor Action | System Response | | 1 | Click “Huỷ” button. | Close request page and go to home page. |   **Exceptions:**   |  |  |  | | --- | --- | --- | | No. | Actor Action | System Response | | 1 | Cannot send request due to database connection | Show error message: “Không thể gửi yêu cầu, vui lòng thử lại sau.” |   **Relationships:** Manage Member  **Business Rules:**   * Customer can send request to manager. * Request must be approved by manager. | | | | |

Table : <Customer> Request repair

##### <Customer> Request extend contract

**Use Case Diagram**

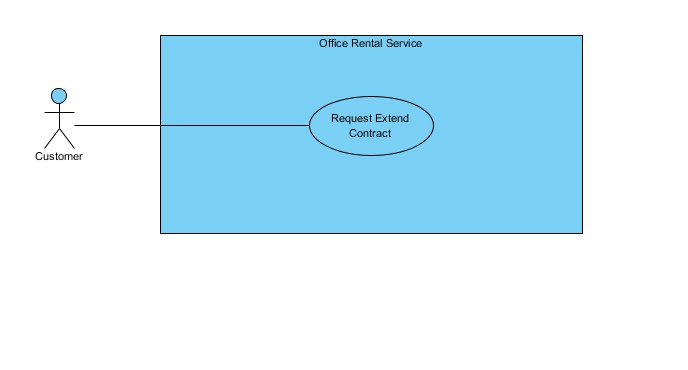


Figure : <Customer> Request extend contract

**Use Case Specification**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **USE CASE – REQUEST EXTEND CONTRACT** | | | | |
| **Use-case No.** | UC027 | **Use-case Version** | | 2.0 |
| **Use-case Name** | Request Extend Contract | | | |
| **Author** | Trần Lê Tuấn | | | |
| **Date** | 25/05/2015 | **Priority** | Normal | |
| **Actor:**   * Customer   **Summary:**   * This use case allows customer edit information.   **Goal:**   * Customer can edit information.   **Triggers:**   * Click “Thông tin hợp đồng” in menu. * Click “Gia hạn hợp đồng” submenu. * Fill information in the text box. * Click “Gửi” button.   **Preconditions:**   * Customer must be login. * Contract information must exist in database   **Post Conditions:**   * **Success**: Customer send request successfully. * **Fail:** Cannot send request.   **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Click “Thông tin hợp đồng” on menu. | Show page rate and comment  Display office details includes:   * Details of product: * Tên văn phòng: label * Địa chỉ: label * Email: textbox * Tên yêu cầu : textbox * Nội dung yêu cầu : text area   “Gửi” : button  “Xoá trắng” : button | | 2 | Fill information in page. |  | | 3 | Click “Gửi” button on screen.  [Alternative 1] | Show successful message “Gửi yêu cầu thành công” on screen.  [Exception 1] | |  |  |  |   **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | No. | Actor Action | System Response | | 1 | Click “Xoá trắng” button. | All information in request form is cleared. |   **Exceptions:**   |  |  |  | | --- | --- | --- | | No. | Actor Action | System Response | | 1 | Cannot send request due to database connection | Show error message: “Không thể gửi yêu cầu, vui lòng thử lại sau.” |   **Relationships:** Customer Contract  **Business Rules:**   * Contract information must exist in database. | | | | |

Table : <Customer> Request extend contract

#### <Staff> Overview Use Case

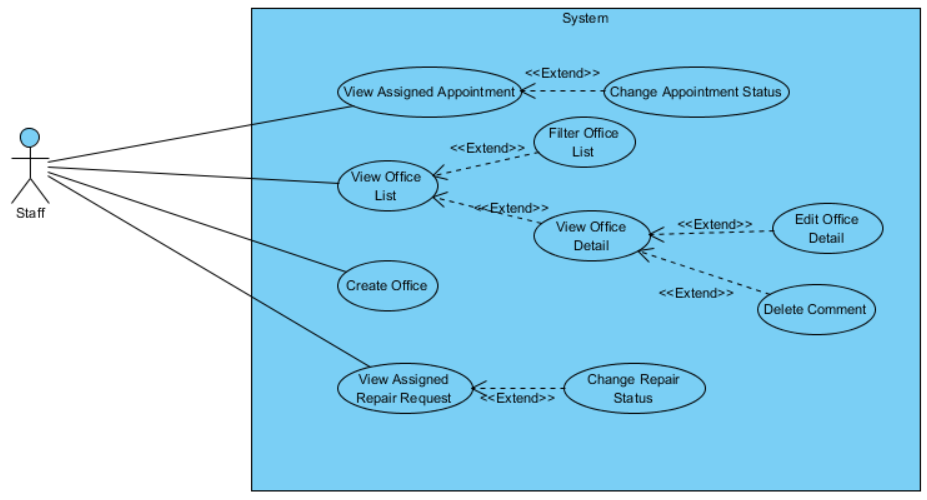


Figure : <Staff> Overview Use Case

##### <Staff>View Assigned Appointment

**Use Case Diagram**

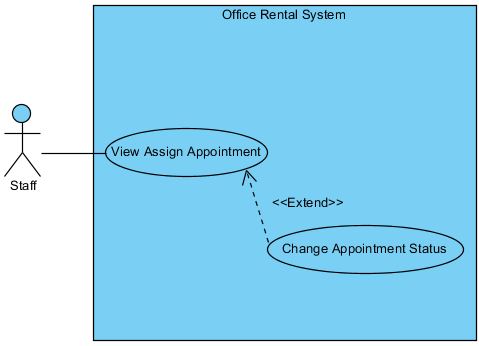
**

Figure : <Staff>View Assigned Appointment

**Use Case Specification**

|  |  |  |  |
| --- | --- | --- | --- |
| **USE CASE VIEW ASSIGNED APPOINTMENT** | | | |
| **Use Case No.** | UC031 | **Use Case Version** | 1.0 |
| **Use Case Name** | View Assigned Appointment | | |
| **Author** | Trương Tiến Thành | | |
| **Date** | 29/05/2015 | **Priority** | High |
| **Actor:**   * Staff   **Summary:**   * This use case allows staff to view time to meet customer at the office they want to rent.   **Goal:**   * Staff can view time to meet customer.   **Triggers:**   * Click “Xem công việc” in menu. * Choose “Lịch gặp khách hàng” in drop down menu.   **Preconditions:**   * User must log in the system with Staff role.   **Post Conditions:**   * **Success:** Display appointment list. * **Fail:** Cannot load appointment list.   **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Choose “Lịch gặp khách hàng” in drop down menu at staff page. | Display all appointment with status.  [Alternative 1] [Exception 1] |   **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | Choose “Lịch gặp khách hàng” in drop down menu at staff page. | Display message: “Không có lịch gặp khách hàng.” |   **Exceptions:**   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | Cannot view list appointment to database connection. | Display error message: “Không thể tải lịch gặp khách hàng. Vui lòng thử lại sau.” |   **Relationships:** Change Appointment Status  **Business Rules:**   * List of appointment is sorted by status with the status “Incomplete” on top of list. | | | |

Table : <Staff>View Assigned Appointment

##### <Staff> Change Appointment Status

**Use Case Diagram**

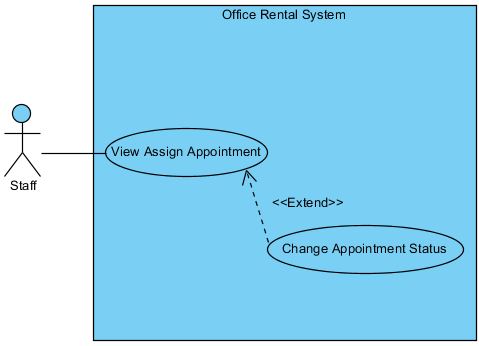
**

Figure : <Staff>View Assigned Appointment

**Use Case Specification**

|  |  |  |  |
| --- | --- | --- | --- |
| **USE CASE CHANGE APPOINTMENT STATUS** | | | |
| **Use Case No.** | UC032 | **Use Case Version** | 1.0 |
| **Use Case Name** | Change Appintment Status | | |
| **Author** | Trương Tiến Thành | | |
| **Date** | 29/05/2015 | **Priority** | High |
| **Actor:**   * Staff   **Summary:**   * This use case allows staff to change status of appointment when they finish meeting customer at office.   **Goal:**   * Staff change status from incomplete to complete.   **Triggers:**   * Click “Xem công việc” in menu. * Choose “Lịch gặp khách hàng” in drop down menu. * Click “Hoàn thành” button.   **Preconditions:**   * User must log in the system with Staff role. * Staff can change status after they meet customer. * At least there is one appointment with customer.   **Post Conditions:**   * **Success:** Appointment’s status is changed to “Hoàn thành”. * **Fail:** Appointment’s status isn’t updated in database.   **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | On appointment page, clicks “Hoàn thành” button next to the appointment that he/she finished. | Display message “Đã thay đổi trang thái sang hoàn thành.”  [Exception 1] |   **Alternative Scenario:** N/A  **Exceptions:**   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | Cannot change status due to database connection. | Display error message: “Không thể thay đổi trang thái. Vui lòng thử lại sau.” |   **Relationships:** View Assigned Appointment.  **Business Rules:**   * Cannot change status “Hoàn thành” to “Chưa hoàn thành”. * Staff should notify to manage before change status. | | | |

Table : <Staff>View Assigned Appointment

##### <Staff, Manager>View Office List

**Use Case Diagram**

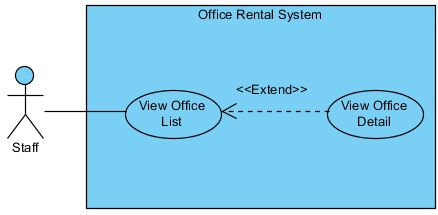
**

Figure : <Staff, Manager>View office list

**Use Case Specification**

|  |  |  |  |
| --- | --- | --- | --- |
| **USE CASE VIEW OFFICE LIST** | | | |
| **Use Case No.** | UC033 | **Use Case Version** | 1.0 |
| **Use Case Name** | View Office List | | |
| **Author** | Trương Tiến Thành | | |
| **Date** | 28/05/2015 | **Priority** | Normal |
| **Actor:**   * Staff, Manager   **Summary:**   * This use case allows staff or manager to view a lot of office by list.   **Goal:**   * Staff or manager can view list of office.   **Triggers:**   * Click “Xem văn phòng” in menu.   **Preconditions:**   * User must log in the system with Staff role.   **Post Conditions:**   * **Success:** Display list of office. * **Fail:** Cannot load list of office.   **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Click “Xem văn phòng” in menu at staff page. | Display all office by list.  [Alternative 1] [Exception 1] |   **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | Click “Xem văn phòng” in menu at staff page. | Display message: “Không có văn phòng nào.” |   **Exceptions:**   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | Cannot view list of office due to database connection. | Display error message: “Không thể tải danh sách văn phòng. Vui lòng thử lại sau.” |   **Relationships:** View office detail, Filter office list  **Business Rules:**   * List of office is sorted by date with the newest date on top of list. * User can filter by status or district. | | | |

Table : <Staff, Manager>List of Office

##### <Staff, Manager>View Office Detail

**Use Case Diagram**

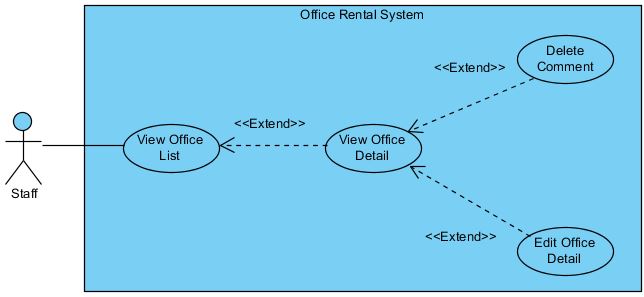
**

Figure : <Staff, Manager>View office detail

**Use Case Specification**

|  |  |  |  |
| --- | --- | --- | --- |
| **USE CASE VIEW OFFICE DETAIL** | | | |
| **Use Case No.** | UC034 | **Use Case Version** | 1.0 |
| **Use Case Name** | View Office Detail | | |
| **Author** | Trương Tiến Thành | | |
| **Date** | 28/05/2015 | **Priority** | Normal |
| **Actor:**   * Staff, manager   **Summary:**   * This use case allows staff or manager to view information of office.   **Goal:**   * Staff or manager can view information of office.   **Triggers:**   * Click “Xem văn phòng” in menu. * Click “Xem chi tiết văn phòng” button.   **Preconditions:**   * User must log in the system with Staff role. * At least there is one office in database.   **Post Conditions:**   * **Success:** Display detail information of office. * **Fail:** Cannot load information of office.   **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Click “Xem chi tiết văn phòng” button next to the office that user want to view. | Display office detail page.  [Exception 1] |   **Alternative Scenario:** N/A  **Exceptions:**   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | Cannot view detail of office due to database connection. | Display error message: “Không thể tải trang chi tiết văn phòng. Vui lòng thử lại sau.” |   **Relationships:** View Office List, Edit Office Detail, Delete Comment.  **Business Rules:**   * The display is different from the customer view | | | |

Table : <Staff, Manager>View Office Detail

##### <Staff> Delete Comment

**Use Case Diagram**

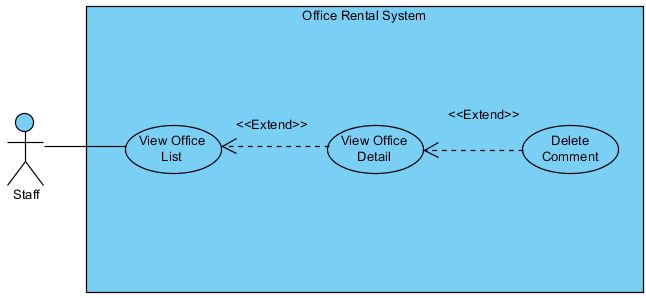


Figure : <Staff>Delete Comment

**Use Case Specification**

|  |  |  |  |
| --- | --- | --- | --- |
| **USE CASE DELETE COMMENT** | | | |
| **Use Case No.** | UC035 | **Use Case Version** | 1.0 |
| **Use Case Name** | Delete Comment | | |
| **Author** | Trương Tiến Thành | | |
| **Date** | 30/05/2015 | **Priority** | Normal |
| **Actor:**   * Staff   **Summary:**   * This use case is used to remove comment.   **Goal:**   * Staff can remove comment of customer.   **Triggers:**   * Click “Xem văn phòng” in menu. * Click “Xem chi tiết văn phòng” button. * Click “Xóa bình luận” button.   **Preconditions:**   * User must be logged in the system with Staff role. * At least there is one comment.   **Post Conditions:**   * **Success:** Remove comment successful. * **Fail:** Can’t remove comment.   **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Click “Xóa bình luận” button of comment that he/she wants to remove. | Show popup:   * “Bạn muốn xóa bình luận này?”. * “Có” button. * “Không” button. | | 2 | Click on “Có” button.  [Alternative 1] | Remove comment from database.  Show popup:   * “Đã xóa thành công” message. * “Đóng” button.   [Exception 1] | | 3 | Click on “Đóng” button. | Close current popup. |   **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | Click on “Không” button. | Close current popup. |   **Exceptions:**   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | Cannot remove comment due to database connection | Display error message: “Không thể xóa bình luận này. Vui lòng thử lại sau.” |   **Relationships:** View Office Detail  **Business Rules:**   * Only remove spam comment. | | | |

Table : <Staff>Delete Comment

##### <Staff, Manager>Edit Office Detail

**Use Case Diagram**

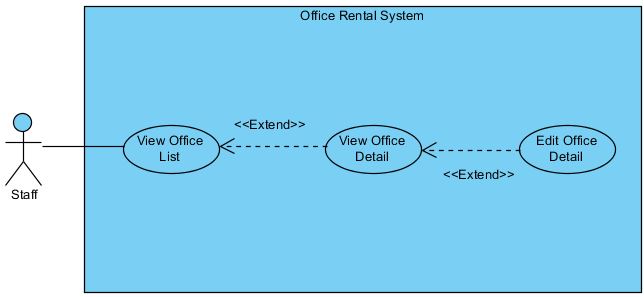


Figure : <Staff, Manager>Edit Office Detail

**Use Case Specification**

|  |  |  |  |
| --- | --- | --- | --- |
| **USE CASE EDIT OFFICE DETAIL** | | | |
| **Use Case No.** | UC036 | **Use Case Version** | 1.0 |
| **Use Case Name** | Edit Office Detail | | |
| **Author** | Trương Tiến Thành | | |
| **Date** | 28/05/2015 | **Priority** | Normal |
| **Actor:**   * Staff, Manager   **Summary:**   * This use case is used to edit information of office.   **Goal:**   * Staff or manager can edit information of a office.   **Triggers:**   * Click “Xem văn phòng” in menu. * Click “Xem chi tiết văn phòng” button. * Click “Cập nhật văn phòng” button   **Preconditions:**   * User must be logged in the system with Staff/Manager role. * At least there is one office in database.   **Post Conditions:**   * **Success:** New information of office is updated. * **Fail:** Cannot update information of office.   **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Clicks “Cập nhật văn phòng” button on the row of office that he/she wants to edit. | Redirect to update office page. It includes:   * Tên văn phòng: Text box (Name, length [3, 50], required)   [Exception 2]   * Địa chỉ: Text box (Address, min length: 6, required). * Quận: Drop down list (District, required) * Hình ảnh: Button (Image] * Trạng thái: Drop down list (Status, required) * Mô tả văn phòng: Text area (Description, length [3, 500], required)   [Exception 3]   * Giá thuê: Text box (Price, type number, required)   [Exception 4]   * Đơn vị giá: Drop down list (PriceTerm, require) * Số tầng: Text box (Floor, type number, required)   [Exception 5]   * Loại văn phòng: Drop down list (Category, required) * Tiện ích: Check box (Amenity) * Tổng diện tích: Text box (Area, type number, min length: 50, required)   [Exception 6, 7]   * Cập nhật: button   [Exception 1, 8]   * Hủy: button | | 3 | Edit information and clicks on “Cập nhật” button.  [Alternative 1] | Show popup:   * “Cập nhập thành công” message. * “Đóng” button | | 4 | Clicks on “Đóng” button | Redirect to office detail page. |   **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | Clicks on “Hủy” button | Redirect to office detail page. |   **Exceptions:**   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | Cannot update office. | Shows error message “Không thể cập nhật văn phòng. Vui lòng thử lại sau” | | 2 | Name is less than 3 characters or more than 50 characters. | Shows error message “Tên văn phòng từ 3 đến 50 ký tự!”. | | 3 | Description is less than 3 characters or more than 500 characters. | Shows error message “Mổ tả văn phòng từ 3 đến 500 ký tự!”. | | 4 | Price is not a number. | Shows error message “Giá thuê không hợp lệ!” | | 5 | Floor is not a number. | Shows error message “Số tầng không hợp lệ!” | | 6 | Area is smaller than 50. | Shows error message “Tổng diện tích tối thiểu cho thuê là 50m2!” | | 7 | Area is not a number. | Shows error message “Tổng diện tích không hợp lệ!” | | 8 | “Tên văn phòng”, “Địa chỉ”, “Hình ảnh”, “Trạng thái”, “Mô tả văn phòng”, “Giá thuê”, “Đơn vị giá”, “Số tầng”, “Loại văn phòng”, “Tiện ích”, “Tổng diện tích” are empty. | Shows error message “Vui lòng nhập đầy đủ thông tin yêu cầu!” |   **Relationships:** View Office Detail  **Business Rules:**   * Information of office should be clearly and correctly. | | | |

Table : <Staff, Manager>Edit Office Detail

##### <Staff> Create office

**Use Case Diagram**

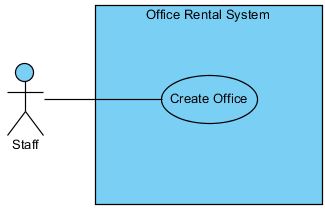


Figure : <Staff> Create Office

**Use Case Specification**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **USE CASE – CREATE OFFICE** | | | | |
| **Use-case No.** | UC037 | **Use-case Version** | | 1.0 |
| **Use-case Name** | Create Office | | | |
| **Author** | Trương Tiến Thành | | | |
| **Date** | 25/05/2015 | **Priority** | Normal | |
| **Actor:**   * Staff   **Summary:**   * This usecase allow staff to create a new office.   **Goal**:   * Staff can add new office to system.   **Triggers:**   * Click “Thêm mới văn phòng” button.   **Preconditions:**   * User logged in successfully with Staff role.   **Post Conditions:**   * **Success:** A successful message will be displayed, new office will be added. After reloaded staff page, new row of office will be display. * **Fail:** Display error message and cannot add new office to database.   **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Clicks “Thêm mới văn phòng” button on staff page. | Show the page with title “Thêm mới văn phòng”. The create office page includes:   * Tên văn phòng: Text box (Name, length [3, 50], required)   [Exception 2]   * Địa chỉ: Text box (Address, min length: 6, required) * Quận: Drop down list (District, required) * Hình ảnh: Button (Image] * Mô tả văn phòng: Text area (Description, length [3, 500], required)   [Exception 3]   * Giá thuê: Text box (Price, type number, required)   [Exception 4]   * Đơn vị giá: Drop down list (PriceTerm, require) * Số tầng: Text box (Floor, type number, required)   [Exception 5]   * Loại văn phòng: Drop down list (Category, required) * Tiện ích: Check box (Amenity) * Tổng diện tích: Text box (Area, type number, min: 50, required)   [Exception 6, 7]   * Tạo mới: button   [Exception 1, 8]   * Hủy: button | | 2 | Inputs information into all fields and clicks “Tạo mới” button.  [Alternative 1] | Show successfully message: “Đã thêm thành công văn phòng!” and redirect to staff page. |   **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | Staff clicks “Hủy” button. | The data in all fields will be reset and redirect to staff page. |   **Exceptions:**   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | “Tên văn phòng”, “Địa chỉ”, “Hình ảnh”, “Trạng thái”, “Mô tả văn phòng”, “Giá thuê”, “Đơn vị giá”, “Số tầng”, “Loại văn phòng”, “Tiện ích”, “Tổng diện tích” are empty. | Shows error message “Vui lòng nhập đầy đủ thông tin yêu cầu!” | | 2 | Name is less than 3 characters or more than 50 characters. | Shows error message “Tên văn phòng từ 3 đến 50 ký tự!”. | | 3 | Description is less than 3 characters or more than 500 characters. | Shows error message “Mổ tả văn phòng từ 3 đến 500 ký tự!”. | | 4 | Price is not a number. | Shows error message “Giá thuê không hợp lệ!” | | 5 | Floor is not a number. | Shows error message “Số tầng không hợp lệ!” | | 6 | Area is smaller than 50. | Shows error message “Tổng diện tích tối thiểu cho thuê là 50m2!” | | 7 | Area is not a number. | Shows error message “Tổng diện tích không hợp lệ!” | | 8 | Cannot create new office | Shows error message “Không thể thêm mới văn phòng. Vui lòng thử lại sau” | | 9 |  |  |   **Relationships:** View Office Detail  **Business Rules:**   * When select office type “Văn phòng nguyên căn”, the price term available “Nguyên căn” and “Liên hệ”, while type “Tòa nhà văn phòng”, the price term available: “/m2” , “/người”, and “Liên hệ” * Staffs can add new office to system when there is a new office for lease contact with us. * Office name should be different from existed office of system. * Office information should be clearly and correctly. | | | | |

Table : <Staff>Create Office

##### <Staff>View Assigned Repair Request

**Use Case Diagram**

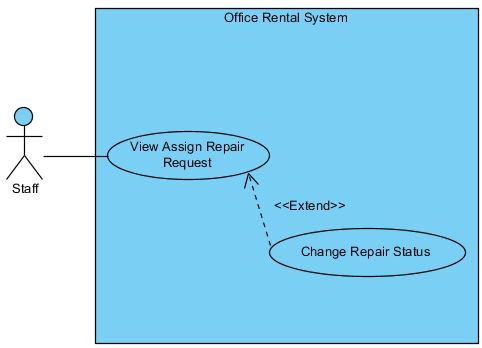
**

Figure : <Staff>View Assigned Repair Request

**Use Case Specification**

|  |  |  |  |
| --- | --- | --- | --- |
| **USE CASE VIEW ASSIGNED REPAIR REQUEST** | | | |
| **Use Case No.** | UC038 | **Use Case Version** | 1.0 |
| **Use Case Name** | View Assigned Repair Request | | |
| **Author** | Trương Tiến Thành | | |
| **Date** | 28/05/2015 | **Priority** | High |
| **Actor:**   * Staff   **Summary:**   * This use case allows staff to view task repairing that manager assign after customers request.   **Goal:**   * Staff can view task repairing.   **Triggers:**   * Click “Xem công việc” in menu. * Choose “Sửa chữa” in drop down menu.   **Preconditions:**   * User must log in the system with Staff role.   **Post Conditions:**   * **Success:** Display repair request. * **Fail:** Cannot load repair request.   **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Choose “Sửa chữa” in drop down menu at staff page. | Display all repair request with status in repairing page.  [Alternative 1] [Exception 1] |   **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | Choose “Sửa chữa” in drop down menu at staff page. | Display message: “Không có yêu cầu sửa chữa nào.” |   **Exceptions:**   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | Cannot view repair request due to database connection. | Display error message: “Không thể tải yêu cầu sửa chữa. Vui lòng thử lại sau.” |   **Relationships:** Change Repair Status  **Business Rules:**   * List of repair request is sorted by status with the status “Incomplete” on top of list. | | | |

Table : <Staff>View Assigned Repair Request

##### <Staff>Change Repair Status

**Use Case Diagram**

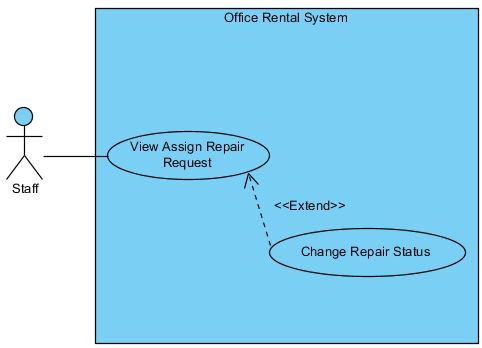
**

Figure : <Staff>Change Repair Status

**Use Case Specification**

|  |  |  |  |
| --- | --- | --- | --- |
| **USE CASE CHANGE REPAIR STATUS** | | | |
| **Use Case No.** | UC039 | **Use Case Version** | 1.0 |
| **Use Case Name** | Change Repair Status | | |
| **Author** | Trương Tiến Thành | | |
| **Date** | 28/05/2015 | **Priority** | High |
| **Actor:**   * Staff   **Summary:**   * This use case allows staff to change status of request when they finish repair.   **Goal:**   * Staff can change status after they complete task repairing. * Staff change status from incomplete to complete.   **Triggers:**   * Click “Xem công việc” in menu. * Choose “Sửa chữa” in drop down menu. * Click “Hoàn thành” button.   **Preconditions:**   * User must log in the system with Staff role. * At least there is one request repair from customer.   **Post Conditions:**   * **Success:** Repair request’s status is changed to “Hoàn thành”. * **Fail:** Repair request’s status isn’t updated in database.   **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | On repairing page, clicks “Hoàn thành” button next to the repair request that he/she finished. | Display message “Đã thay đổi trang thái sang hoàn thành.”  [Exception 1] |   **Alternative Scenario:** N/A  **Exceptions:**   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | Cannot change status due to database connection. | Display error message: “Không thể thay đổi trang thái. Vui lòng thử lại sau.” |   **Relationships:** View Assigned Repair Request  **Business Rules:**   * Cannot change status “Hoàn thành” to “Chưa hoàn thành”. * Staff should notify to manager after change status. | | | |

Table : <Staff>Change Repair Status

#### <Manager> Overview Use Case

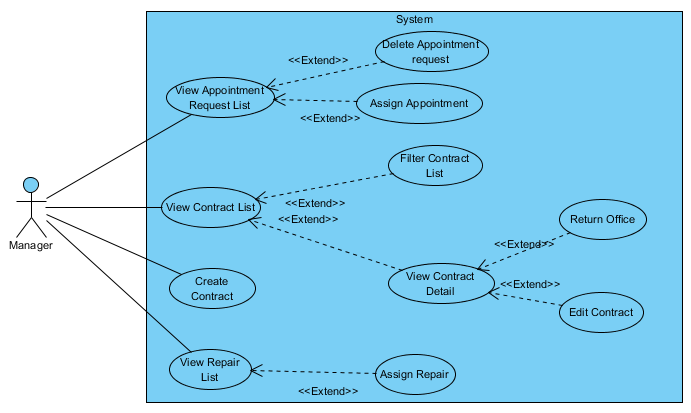


Figure : <Manager> Overview Use Case

##### <Manager> View Appointment Request List

**Use Case Diagram**

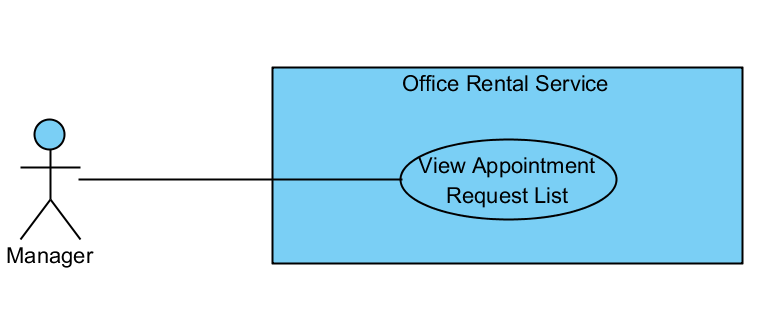


Figure : <Manager> View Appointment Request List

**Use Case Specification**

|  |  |  |  |
| --- | --- | --- | --- |
| **USE CASE VIEW APPOINTMENT REQUEST LIST** | | | |
| **Use Case No.** | UC041 | **Use Case Version** | 1.0 |
| **Use Case Name** | View Appointment Request List | | |
| **Author** | Nguyễn Vũ Hoàng Quốc | | |
| **Date** | 31/05/2015 | **Priority** | Normal |
| **Actor:**   * Manager   **Summary:**   * This use case allows manager see all appointment request   **Goal:**   * Show all appointment request   **Triggers:**   * From the menu bar:   + Select “ Appointment ” menu.   **Preconditions:**   * There are request appointment from customer * Requests from customers are valid and send successful   **Post Conditions:**   * **Success:** All appointment request are shown * **Fail:** Cannot get appointment list from database.   **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Click “Appointment” button on menu bar of manager role | * Show all request appointment list in which includes:   + Customer name   + Assigned staff   + Office   + Time   [Exception 1] |   **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | |  | . |  |   **Exceptions:**   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | Cannot load appointment list from database | Display error message: “Cannot get request appointment list. Please try again” |   **Relationships:** Delete Appointment request, Assign Appointment, View Customer Info  **Business Rules:**   * Manager can view all list appointment from customer’s request | | | |

Table : <Manager> View Appointment Request List

##### <Manager> Delete Appointment request

**Use Case Diagram**

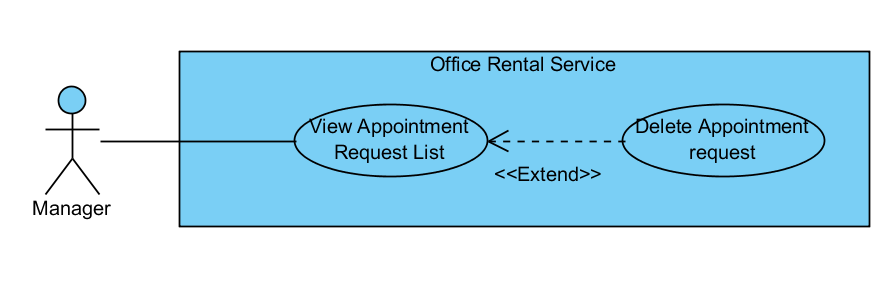


Figure : <Manager> Delete Appointment request

**Use Case Specification**

|  |  |  |  |
| --- | --- | --- | --- |
| **USE CASE DELETE APPOINTMENT REQUEST** | | | |
| **Use Case No.** | UC042 | **Use Case Version** | 1.0 |
| **Use Case Name** | Delete Appointment request | | |
| **Author** | Nguyễn Vũ Hoàng Quốc | | |
| **Date** | 31/05/2015 | **Priority** | Normal |
| **Actor:**   * Manager   **Summary:**   * This use case allows manager delete appointment request which is not suitable   **Goal:**   * Delete appointment request successful   **Triggers:**   * From the menu bar:   + Select “Appointment” menu.   + Choose appointment   + Click “Delete” button on appointment detail page   **Preconditions:**   * There are request appointment from customer * Requests from customers are valid and send successful   **Post Conditions:**   * **Success:** Appointment request is deleted successful * **Fail:** Delete error.   **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Click “Appointment” button on menu bar of manager role | * Show all request appointment list   [Exception 1] | | 2 | Choose the appointment in appointment list. | * Show detail of this appointment   [Exception 2] | | 3 | Click “Delete” button on appointment detail page | * Show warning popup: “Are you sure to delete this appointment?” with “Yes” and “No button” | | 4 | Click “Yes” button on warning popup  [Alternative 1] | * Show successful message: “The appointment has been deleted”   [Exception 3] |   **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | Click “No” button on warning popup | * Close warning popup |   **Exceptions:**   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | Cannot load appointment list from database | Display error message: “Cannot get request appointment list. Please try again” | | 2 | Cannot get detail of chosen appointment from database | Display error message: “Cannot get data this appointment. Please try again” | | 3 | Delete error | Display error message: “Cannot delete this appointment. Please try again” |   **Relationships:** Appointment Request List  **Business Rules:**   * Manager can delete appointment from customer’s request if there are some error with customer’s error. * When delete, system will send email to customer’s mail. | | | |

Table : <Manager> Delete Appointment request

##### <Manager> Assign Appointment

**Use Case Diagram**

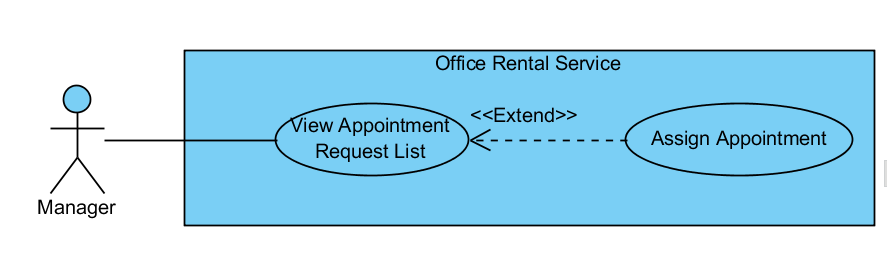


Figure : <Manager> Assign Appointment

**Use Case Specification**

|  |  |  |  |
| --- | --- | --- | --- |
| **USE CASE ASSIGN APPOINTMENT** | | | |
| **Use Case No.** | UC043 | **Use Case Version** | 1.0 |
| **Use Case Name** | Assign Appointment | | |
| **Author** | Nguyễn Vũ Hoàng Quốc | | |
| **Date** | 31/05/2015 | **Priority** | Normal |
| **Actor:**   * Manager   **Summary:**   * This use case allows manager assign appointment request to staff   **Goal:**   * Assign appointment to staff successful   **Triggers:**   * From the menu bar:   + Select “Appointment” menu.   + Choose appointment   + Click “Assign” button on appointment detail page   + Choose staff in staff list   + Click “Assign” button on staff list   **Preconditions:**   * There are request appointment from customer * Requests from customers are valid and send successful * Manager checked the appointment is suitable   **Post Conditions:**   * **Success:** Appointment request is assign successful * **Fail:** Assign error.   **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Click “Appointment” button on menu bar of manager role | * Show all request appointment list   [Exception 1] | | 2 | Choose the appointment in appointment list. | * Show detail of this appointment   [Exception 2] | | 3 | Click “Assign” button on appointment detail page | * Show list of staffs | | 4 | Choose staff in staff list  [Alternative 1] | * Show “checked” at staff was chosen | | 5 | Click “Assign” button on list staff | * Show success message: “Assign successful”   [Exception 3] |   **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | Click “close” button on list staff | * Show appointment detail page |     **Exceptions:**   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | Cannot load appointment list from database | Display error message: “Cannot get request appointment list. Please try again” | | 2 | Cannot get detail of chosen appointment from database | Display error message: “Cannot get data this appointment. Please try again” | | 3 | Assign error | Display error message: “Cannot assign this appointment to staff. Please try again” |   **Relationships:** Appointment Request List  **Business Rules:**   * Manager can assign appointment from customer’s request to staff if the request is suitable. * When assign, system will send email to staff’ and add the request to staff’s task list. | | | |

Table : <Manager> Assign Appointment

##### <Manager> View Customer Info

**Use Case Diagram**

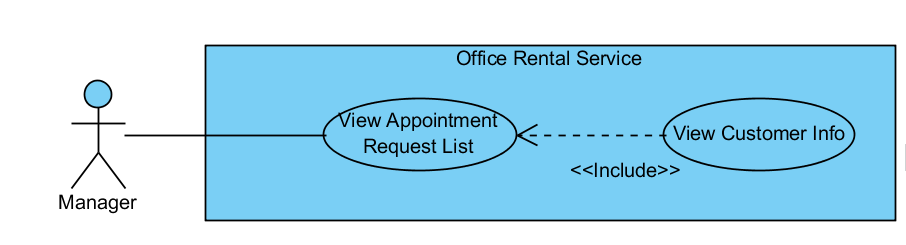


Figure : <Manager> View Customer Info

**Use Case Specification**

|  |  |  |  |
| --- | --- | --- | --- |
| **USE CASE VIEW CUSTOMER INFO** | | | |
| **Use Case No.** | UC044 | **Use Case Version** | 1.0 |
| **Use Case Name** | View Customer Info | | |
| **Author** | Nguyễn Vũ Hoàng Quốc | | |
| **Date** | 31/05/2015 | **Priority** | Normal |
| **Actor:**   * Manager   **Summary:**   * This use case allows manager view customer info from appointment list   **Goal:**   * View customer profile   **Triggers:**   * From the menu bar:   + Select “Appointment” menu.   + Choose appointment   + Click to customer’s name in appointment detail page   **Preconditions:**   * There are request appointment from customer * Requests from customers are valid and send successful   **Post Conditions:**   * **Success:** Show customer profile * **Fail:** Cannot get data of the customer in database.   **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Click “Appointment” button on menu bar of manager role | * Show all request appointment list   [Exception 1] | | 2 | Choose the appointment in appointment list. | * Show detail of this appointment   [Exception 2] | | 3 | Click to name of customer in appointment detail page | * Show customer profile includes:   + Username   + Email   + Phone   + Address   [Exception 3] |   **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | |  |  |  |     **Exceptions:**   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | Cannot load appointment list from database | Display error message: “Cannot get request appointment list. Please try again” | | 2 | Cannot get detail of chosen appointment from database | Display error message: “Cannot get data this appointment. Please try again” | | 3 | Cannot get detail of chosen customer from database | Display error message: “Cannot get data this customer. Please try again” |   **Relationships:** Appointment Request List  **Business Rules:**   * Manager can find customer profile base on appointment request list | | | |

Table : <Manager> View Customer Info

##### <Manager> View Contract List

**Use Case Diagram**

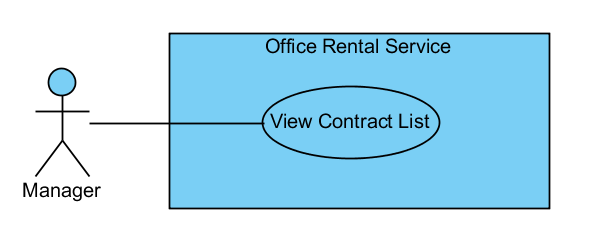


Figure : <Manager> View Contract List

**Use Case Specification**

|  |  |  |  |
| --- | --- | --- | --- |
| **USE CASE VIEW CONTRACT LIST** | | | |
| **Use Case No.** | UC045 | **Use Case Version** | 1.0 |
| **Use Case Name** | View Contract List | | |
| **Author** | Nguyễn Vũ Hoàng Quốc | | |
| **Date** | 31/05/2015 | **Priority** | Normal |
| **Actor:**   * Manager   **Summary:**   * This use case allows manager view contract list   **Goal:**   * Show all contract list   **Triggers:**   * From the menu bar:   + Select “Contract” menu.   **Preconditions:**   * Login as manager role   **Post Conditions:**   * **Success:** Show all contracts in database * **Fail:** Cannot get data of the contract in database.   **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Click “Contract” button on menu bar of manager role | * Show all contract in list   [Exception 1] |   **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | |  |  |  |     **Exceptions:**   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | Cannot load contract list from database | Display error message: “Cannot get contract list. Please try again” |   **Relationships:** Contract  **Business Rules:**   * Only manager can see all contracts in database | | | |

Table : <Manager> View Contract List

##### <Manager> View Contract Detail

**Use Case Diagram**

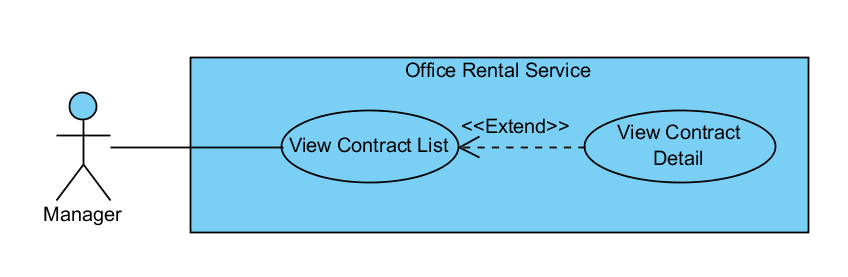


Figure : <Manager> View Contract Detail

**Use Case Specification**

|  |  |  |  |
| --- | --- | --- | --- |
| **USE CASE VIEW CONTRACT DETAIL** | | | |
| **Use Case No.** | UC046 | **Use Case Version** | 1.0 |
| **Use Case Name** | View Contract Detail | | |
| **Author** | Nguyễn Vũ Hoàng Quốc | | |
| **Date** | 31/05/2015 | **Priority** | Normal |
| **Actor:**   * Manager   **Summary:**   * This use case allows manager view contract detail   **Goal:**   * Show contract detail   **Triggers:**   * From the menu bar:   + Select “Contract” menu.   + Choose contract in the contract list   **Preconditions:**   * Contract is not out of date   **Post Conditions:**   * **Success:** Show detail of chosen contract * **Fail:** Cannot get data of the contract in database.   **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Click “Contract” button on menu bar of manager role | * Show all contract in list   [Exception 1] | | 2 | Choose contract in contract list | * Show all detail of the contract includes:   + Customer name   + Office name   + Start date   + End date   + Payment fee   + Payment term   [Exception 2] |   **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | |  |  |  |     **Exceptions:**   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | Cannot load contract list from database | Display error message: “Cannot get contract list. Please try again” | | 2 | Cannot load data of the chosen contract | Display error message: “Cannot get data of this contract. Please try again” |   **Relationships:** Contract  **Business Rules:**   * Manager can see detail of the contract * The contract is still have time if not system will delete contract in database and send notification to customer | | | |

Table : <Manager> View Contract Detail

##### <Manager> Edit Contract

**Use Case Diagram**

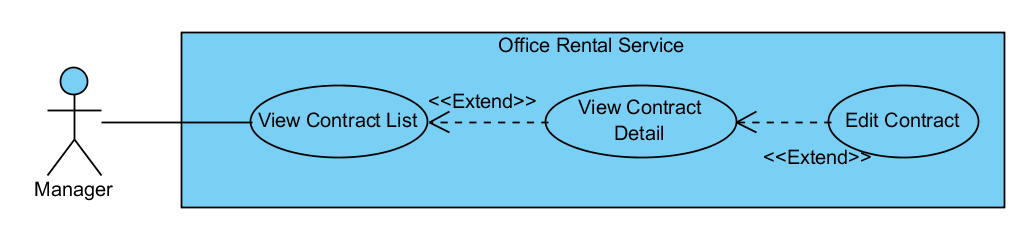


Figure : <Manager> Edit Contract

**Use Case Specification**

|  |  |  |  |
| --- | --- | --- | --- |
| **USE CASE EDIT CONTRACT** | | | |
| **Use Case No.** | UC047 | **Use Case Version** | 1.0 |
| **Use Case Name** | Edit Contract | | |
| **Author** | Nguyễn Vũ Hoàng Quốc | | |
| **Date** | 31/05/2015 | **Priority** | Normal |
| **Actor:**   * Manager   **Summary:**   * This use case allows manager edit contract   **Goal:**   * Contract is edited   **Triggers:**   * From the menu bar:   + Select “Contract” menu.   + Choose contract in the contract list   + Click “Edit” button in contract detail page   **Preconditions:**   * Contract is not out of date * There is request to change detail in contract from customer   **Post Conditions:**   * **Success:** Edit contract successful * **Fail:** Edit error   **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Click “Contract” button on menu bar of manager role | * Show all contract in list   [Exception 1] | | 2 | Choose contract in contract list | * Show all detail of the contract   + Customer name   + Office name   + Start date   + End date   + Payment fee   + Payment term   [Exception 2] | | 3 | Click “Edit” button on contract detail page | * Show input text for edit * Show “save” and “cancel” button | | 4 | Input or edit field on contract detail page | * Validate input show error if data invalid   [Exception 3] | | 5 | Click “Save” button on contract  [Alternative 1] | * Show successful message |   **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | Click “cancel” button | * Show “Edit” button, hide “save” and “cancel” button |     **Exceptions:**   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | Cannot load contract list from database | Display error message: “Cannot get contract list. Please try again” | | 2 | Cannot load data of the chosen contract | Display error message: “Cannot get data of this contract. Please try again” | | 3 | From date > End Date | Display error message: “From date or end date is invalid. Please check again” |   **Relationships:** Contract  **Business Rules:**   * Manager edit contract when customer need to renewal contract before contract is out of date * System will send message to customer before contract is out date 1 month * If customer want to renewal contract, manager will edit | | | |

Table : <Manager> Edit Contract

##### <Manager> Create Contract

**Use Case Diagram**

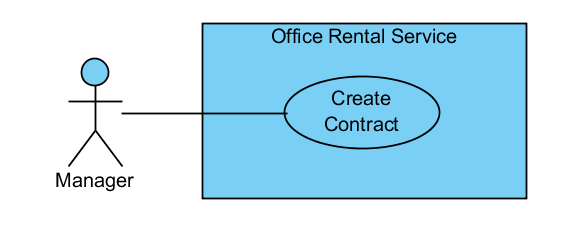


Figure : <Manager> Create Contract

**Use Case Specification**

|  |  |  |  |
| --- | --- | --- | --- |
| **USE CASE CREATE CONTRACT** | | | |
| **Use Case No.** | UC048 | **Use Case Version** | 1.0 |
| **Use Case Name** | Create Contract | | |
| **Author** | Nguyễn Vũ Hoàng Quốc | | |
| **Date** | 31/05/2015 | **Priority** | Normal |
| **Actor:**   * Manager   **Summary:**   * This use case allows manager create contract   **Goal:**   * Contract is create and add to database   **Triggers:**   * From the menu bar:   + Select “Contract” menu.   + Click “New” button on menu bar   + Click “Create” button after input info   **Preconditions:**  **Post Conditions:**   * **Success:** Contract is saved to database * **Fail:** Create fail   **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Click “Contract” button on menu bar of manager role | * Show all contract in list   [Exception 1] | | 2 | Click “New” button on menu bar | * Show input field for detail of the contract   + Customer name: textbox   + Office name: textbox   + Start date: calendar   + End date: calendar   + Payment fee: dropdown list   + Payment term: dropdown list | | 3 | Input info for all field | * Validate input show error if data invalid   [Exception 2] | | 4 | Click “Create” button on contract | * Show successful message |   **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | |  |  |  |     **Exceptions:**   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | Cannot load contract list from database | Display error message: “Cannot get contract list. Please try again” | | 2 | From date > End Date | Display error message: “From date or end date is invalid. Please check again” |   **Relationships:** Contract  **Business Rules:**   * Manager will meet customer after customer decide to rent office * Manager will create contract after the meeting | | | |

Table : <Manager> Create Contract

##### <Manager> Cancel Contract

**Use Case Diagram**

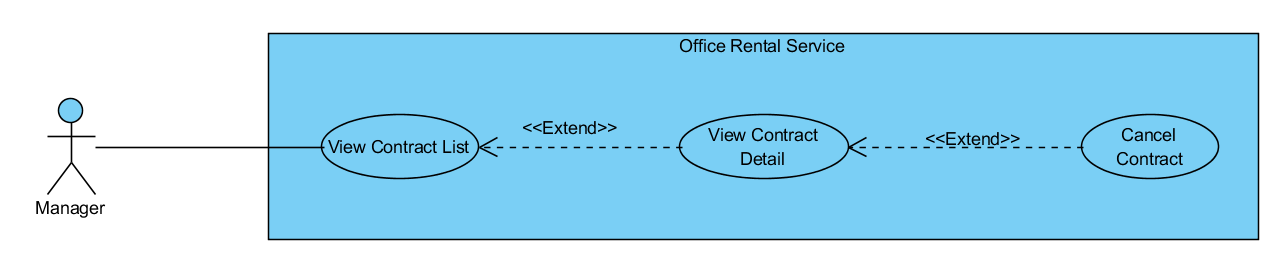


Figure : <Manager> Cancel Contract

**Use Case Specification**

|  |  |  |  |
| --- | --- | --- | --- |
| **USE CASE CANCEL CONTRACT** | | | |
| **Use Case No.** | UC049 | **Use Case Version** | 1.0 |
| **Use Case Name** | Cancel Contract | | |
| **Author** | Nguyễn Vũ Hoàng Quốc | | |
| **Date** | 31/05/2015 | **Priority** | Normal |
| **Actor:**   * Manager   **Summary:**   * This use case allows manager cancel contract   **Goal:**   * Contract is canceled and removed from database   **Triggers:**   * From the menu bar:   + Select “Hợp đồng” on menu.   + Choose a contract from contract list   + Click “Hủy hợp đồng” button on contract page detail   **Preconditions:**   * At least exist one contract in database and not expired * Have request cancel from customer   **Post Conditions:**   * **Success:** Contract is canceled and removed from database * **Fail:** Remove contract fail   **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Click “Hợp đồng” button on menu bar of manager role | * Show all contract in list   [Exception 1] | | 2 | Choose a contract from contract list | * Show detail of chosen contract   [Exception 2] | | 3 | Click “Hủy hợp đồng” button on contract page detail | * Show warning popup: “Bạn chắc chắn muốn huy hợp đồng này chứ?” with “Đồng ý” and “Không đồng ý” button | | 4 | Click “Đồng ý” button on warning popup  [Alternative 1] | * Show successful message: “Đã hủy hợp đồng thành công”   [Exception 3] |   **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | Click “Không đồng ý” button on warning popup | * Return to detail page of the chosen contract |     **Exceptions:**   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | Cannot load contract list from database | Display error message: “Không lấy được dữ liệu hợp đồng. Xin vui lòng thử lại” | | 2 | Cannot get data of the chosen contract | Display error message: “Không lấy được dữ liệu của hợp đồng này. Xin vui lòng thử lại” | | 3 | Cannot delete contract from database | Display error message: “Không thể hủy hợp đồng này. Xin vui lòng thử lại” |   **Relationships:** Contract  **Business Rules:**   * Manager will meet customer after customer decide to rent office * Manager will create contract after the meeting with customer | | | |

Table : <Manager> Cancel Contract

##### <Manager> Filter Contract List

**Use Case Diagram**

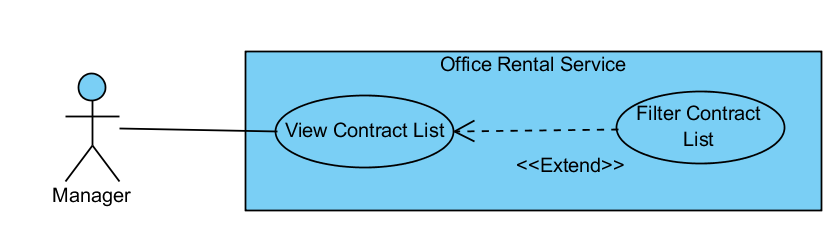


Figure : <Manager> Filter Contract List

**Use Case Specification**

|  |  |  |  |
| --- | --- | --- | --- |
| **USE CASE FILTER CONTRACT LIST** | | | |
| **Use Case No.** | UC140 | **Use Case Version** | 1.0 |
| **Use Case Name** | Filter Contract List | | |
| **Author** | Nguyễn Vũ Hoàng Quốc | | |
| **Date** | 31/05/2015 | **Priority** | Normal |
| **Actor:**   * Manager   **Summary:**   * This use case allows manager filter contract in list   **Goal:**   * Show all contract is suitable with filter   **Triggers:**   * From the menu bar:   + Select “Hợp đồng” on menu.   + Click “Tìm kiếm nâng cao” on menu bar   + Input info for filter   + Click “Tìm” button   **Preconditions:**   * At least exist one contract in database and not expired   **Post Conditions:**   * **Success:** show one or many contracts * **Fail:** Cannot find any contract   **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Click “Hợp đồng” button on menu bar of manager role | * Show all contract in list   [Exception 1] | | 2 | Click “Tìm kiếm nâng cao” on menu bar | * Show input field for filter:   + City: dropdown list   + District: dropdown list   + Office: textbox   [Exception 2] | | 3 | Input info for filter | * Validate info | | 4 | Click “Tìm” button | * Show list of contract which is suitable which filter info   [Exception 3] |   **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | |  |  |  |     **Exceptions:**   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | Cannot load contract list from database | Display error message: “Không lấy được dữ liệu hợp đồng. Xin vui lòng thử lại” | | 2 | Office name not exist in database | Display error message: “Văn phòng này không tồn tại” | | 3 | Cannot filter contract | Display error message: “Không tìm được bất kỳ hợp đồng nào. Xin vui lòng thử lại” |   **Relationships:** Contract  **Business Rules:**   * Manager manages many contracts. So they can filter which contract base on city, district or office to make them easy to manage. | | | |

Table : <Manager> Filter Contract List

##### <Manager> View Repair List

**Use Case Diagram**

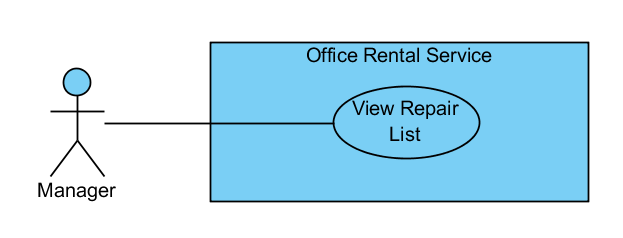


Figure : <Manager> View Repair List

**Use Case Specification**

|  |  |  |  |
| --- | --- | --- | --- |
| **USE CASE VIEW REPAIR LIST** | | | |
| **Use Case No.** | UC141 | **Use Case Version** | 1.0 |
| **Use Case Name** | View Repair List | | |
| **Author** | Nguyễn Vũ Hoàng Quốc | | |
| **Date** | 31/05/2015 | **Priority** | Normal |
| **Actor:**   * Manager   **Summary:**   * This use case allows manager see all repair requests   **Goal:**   * Show all repair request   **Triggers:**   * From the menu bar:   + Select “ Sửa chữa ” on the menu.   **Preconditions:**   * At lease exist one repair request in database   **Post Conditions:**   * **Success:** All request repair are shown * **Fail:** Cannot get repair list from database.   **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Click “Sửa chữa” button on menu bar of manager role | * Show all repair requests list in which includes:   + ContractID: text   + Assigned staff: text   + Type: dropdown list   + Description: text   [Exception 1] | |  |  |  |   **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | |  | . |  |   **Exceptions:**   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | Cannot load repair request list from database | Display error message: “Không lấy được dữ liệu toàn bộ yêu cầu sửa chữa. Xin vui lòng thử lại” |   **Relationships:** Request repair  **Business Rules:**   * Manager can view all request repair for assigning to staff | | | |

Table : <Manager> View Repair List

##### <Manager> Assign Repair

**Use Case Diagram**

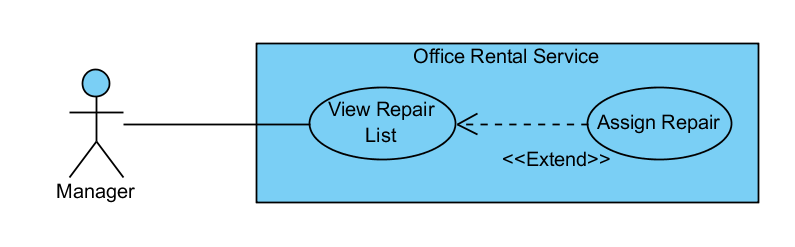


Figure : <Manager> Assign Repair

**Use Case Specification**

|  |  |  |  |
| --- | --- | --- | --- |
| **USE CASE ASSIGN REPAIR** | | | |
| **Use Case No.** | UC142 | **Use Case Version** | 1.0 |
| **Use Case Name** | Assign Repair | | |
| **Author** | Nguyễn Vũ Hoàng Quốc | | |
| **Date** | 31/05/2015 | **Priority** | Normal |
| **Actor:**   * Manager   **Summary:**   * This use case allows manager assign repair request to staff   **Goal:**   * The repair request is assigned to staff.   **Triggers:**   * From the menu bar:   + Select “Sửa chữa” on the menu.   + Select repair request on repair list   + Click  “Giao việc” button on repair request detail page   + Choose staff in staff list   + Click “Giao” button   **Preconditions:**   * At lease exist one repair request in database   **Post Conditions:**   * **Success:** The request has been assigned to staff and added to staff task list * **Fail:** Cannot assign to staff.   **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Click “Sửa chữa” button on menu bar of manager role | * Show all repair requests list in which includes:   + ContractID: text   + Assigned staff: text   + Type: dropdown list   + Description: text   [Exception 1] | | 2 | Select repair request on repair list | * Show detail of the chosen repair request includes:   + ContractID: text   + Assigned staff: text   + Type: dropdown list   + Description: text   + Time: text   [Exception 2] | | 3 | Click  “Giao việc” button on repair request detail page | * Show list of staff includes:   + Staff name: text   + Email: text   + Phone: text   + Address: text   + “Giao” and “Hủy” button   [Exception 3] | | 4 | Choose staff in staff list | * Show staff whom was chosen in textarea | | 5 | Click  “Giao” button  [Alternative 1] | * Show success message: “Yêu cầu sửa chữa đã được giao cho nhân viên”   [Exception 4]   * Add repair request to staff’s task   [Exception 5] |   **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | Click “Hủy” button | -Close staff list and show the chosen repair request detail page |   **Exceptions:**   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | Cannot load repair request list from database | Display error message: “Không lấy được dữ liệu toàn bộ yêu cầu sửa chữa. Xin vui lòng thử lại” | | 2 | Cannot load repair request detail | Display error message: “Không lấy được dữ liệu yêu cầu này. Xin vui lòng thử lại” | | 3 | Cannot load list of staffs | Display error message: “Không lấy được dữ liệu toàn bộ nhân viên. Xin vui lòng thử lại” | | 4 | Cannot assign to staff | Display error message: “Không lấy được giao yêu cầu cho nhân viên. Xin vui lòng thử lại” | | 5 | Cannot add repair request to staff’s task | Display error message: “Lưu yêu cầu sửa chữa không thành công. Xin vui lòng thử lại” |   **Relationships:** Request repair  **Business Rules:**   * Manager can assign repair request to staff and this request save to task list of staff | | | |

Table : <Manager> Assign Repair

#### <Admin> Overview Use Case

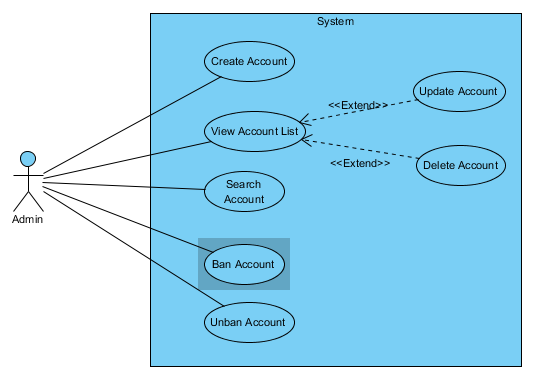


Figure : <Admin> Overview Use Case

##### <Admin> Create Account

**Use Case Diagram**

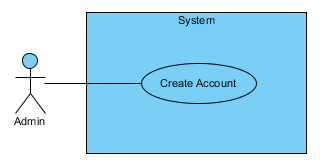


Figure : <Admin> Create Account

**Use Case Specification**

|  |  |  |  |
| --- | --- | --- | --- |
| **USE CASE - CREATE ACCOUNT** | | | |
| **Use Case No.** | UC051 | **Use Case Version** | 1.0 |
| **Use Case Name** | Create Account | | |
| **Author** | Lê Xuân Tiến | | |
| **Date** | 01/06/2015 | **Priority** | Normal |
| **Actor:**   * Admin   **Summary:**   * This use case allows admin create new account   **Goal:**   * New account is created   **Triggers:**   * From the left menu:   + Select “Người dùng” menu.   + In main screen, select “Tạo người dùng mới”   **Preconditions:**   * User must log in as Admin role * An valid email should be existed for each account   **Post Conditions:**   * **Success:** An account is created * **Fail:** Nothing is created   **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Click “Tạo người dùng mới” button on “Quản lí người dùng” page | - Show the create new account with following fields:  + “Username”: text box, username of the account, unique, required, min 6 characters, max 25 characters  + “Password”: text box, password of the account, required, min 6 characters, max 25 characters  + “Email”: text box, valid email of the account, required, unique  + “Role”: drop down box, include role: “Manager”, “Staff”, “Customer”  + “Lưu”: button  + “Hủy”: button | | 2 | Enter information | Validate information [Exception 1, 2, 3, 4] | | 3 | Click “Lưu” | Display success message [Exception 5] |   **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | Click “Hủy” | Go back to “Quản lí người dùng” page |   **Exceptions:**   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | The field “Username”, “Password”, “Email” is null | Display error message: “Không được để trống trường này” | | 2 | The field “Username”, “Password” length not match | Display error message: “Yêu cầu từ 6-25 kí tự” | | 3 | The field “Email” is not a valid email | Display error message: “Email không hợp lệ” | | 4 | The field “Username”, “Email” is existed | Display error message: “Username đã tồn tại” or “Email đã tồn tại” | | 5 | Cannot load save due to database connection error | Display error message: “Có lỗi xảy ra, xin thử lại” |   **Relationships:** View account list  **Business Rules:**   * The “Manager” and “Staff” role only can be created by this function * The Account must go to their email to confirm before can log in to website | | | |

Table : <Admin> Create Account

##### <Admin> View Account List

**Use Case Diagram**

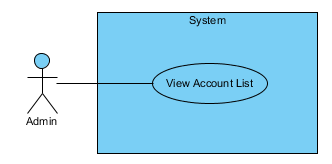


Figure : <Admin> View Account List

**Use Case Specification**

|  |  |  |  |
| --- | --- | --- | --- |
| **USE CASE – VIEW ACCOUNT LIST** | | | |
| **Use Case No.** | UC052 | **Use Case Version** | 1.0 |
| **Use Case Name** | View Account List | | |
| **Author** | Lê Xuân Tiến | | |
| **Date** | 01/06/2015 | **Priority** | Normal |
| **Actor:**   * Admin   **Summary:**   * This use case allows admin view account list   **Goal:**   * The list of account of system is displayed   **Triggers:**   * From the left menu:   + Select “Người dùng” menu.   **Preconditions:**   * User must log in as Admin role   **Post Conditions:**   * **Success:** The list of account is displayed * **Fail:** An error message is displayed   **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Click “Người dùng” from the menu | - Show the table of account, each page of 20 user, each line include information  + “Username”  + “Email”  + “Role” [Exception 1]  + “Xóa”: button  + “Sửa”: button  - “Tạo mới người dùng” button |   **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | |  |  |  |   **Exceptions:**   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | Cannot load load due to database connection error | Display error message: “Có lỗi xảy ra, xin thử lại” |   **Relationships:** Delete account, Update account  **Business Rules:**   * The accounts is sort by role, and then by username | | | |

Table : <Admin> View Account List

##### <Admin> Delete Account

**Use Case Diagram**

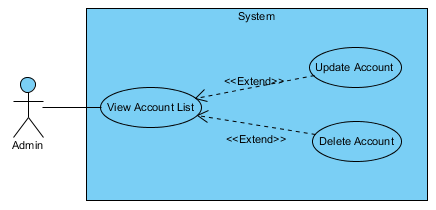


Figure : <Admin> Delete Account

**Use Case Specification**

|  |  |  |  |
| --- | --- | --- | --- |
| **USE CASE – VIEW ACCOUNT LIST** | | | |
| **Use Case No.** | UC053 | **Use Case Version** | 1.0 |
| **Use Case Name** | Delete Account | | |
| **Author** | Lê Xuân Tiến | | |
| **Date** | 01/06/2015 | **Priority** | Normal |
| **Actor:**   * Admin   **Summary:**   * This use case allows admin delete an account   **Goal:**   * The list of account of system is displayed   **Triggers:**   * From the left “Quản lí người dùng” page:   + Click “Xóa” on an account   **Preconditions:**   * User must log in as Admin role * There is accounts existed on the system   **Post Conditions:**   * **Success:** The account status is deleted * **Fail:** An error message is displayed   **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Click “Người dùng” from the menu | - Show the table of account, each page of 20 user, each line include information  + “Username”  + “Email”  + “Role” [Exception 1]  - “Tạo mới người dùng” button |   **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | |  |  |  |   **Exceptions:**   |  |  |  | | --- | --- | --- | | No | Actor Action | System Response | | 1 | Cannot load load due to database connection error | Display error message: “Có lỗi xảy ra, xin thử lại” |   **Relationships:** Delete account, Update account  **Business Rules:**   * The accounts is sort by role, and then by username | | | |

Table : <Admin> View Account List

## Software System Attribute

### Usability

* Staff should need less than one training week to interact with system.

### Reliability

* Information should be updated every day.

### Availability

* N/A

### Security

* All input data should be validated before saving to database.
* All privacy information, such as password, should be encrypted to ensure security.
* User should be authenticated and authorized when accessing to the system.

### Maintainability

* The system should be divided into modules and code. It would be easy to maintain and upgrade.

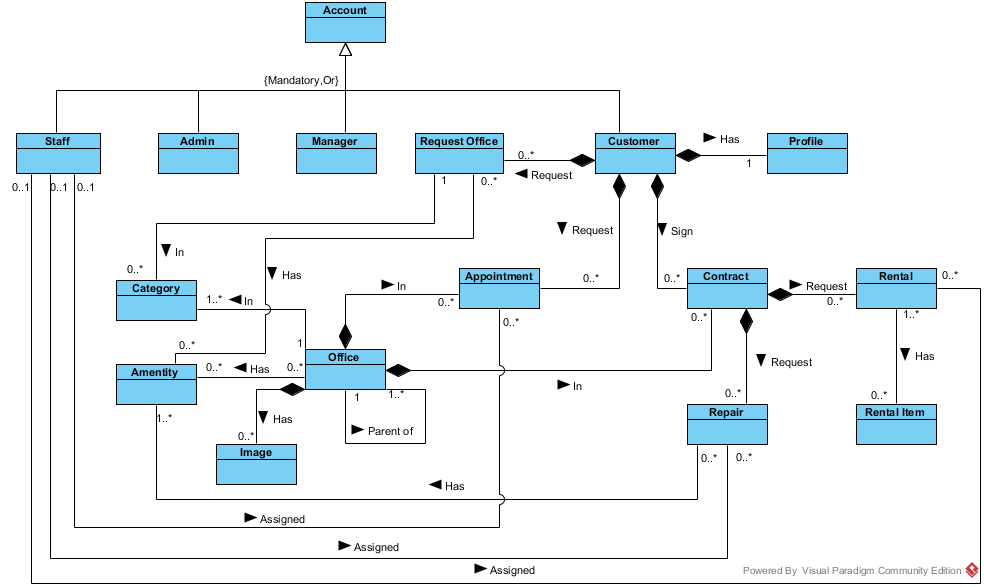
### Portability

* N/A

### Performance

* All requests should be response in no more than 1 minute.

## Conceptual Diagram



**Data dictionary:**

|  |  |
| --- | --- |
| **Entity Data dictionary: describe content of all entities** | |
| **Entity Name** | **Description** |
| Account | Describe account of user of system. |
| Staff | Describe account type staff |
| Admin | Describe account type admin |
| Manager | Describe account type manager |
| Customer | Describe account type customer |
| Profile | Describe the contact information for customer |
| Office | Describe information of the office |
| Category | Describe the category of the office |
| Amenity | Describe the amenities of the office |
| Image | List of images of the office |
| Appointment | Describe the information of the appointment of customer for the office |
| Contract | Describe the information of contract between customer and office |
| Request Office | Describe the stored office request of customer |
| Repair | Describe the repair request for each contract |
| Rental | Describe the rental request for contract |
| Rental Item | Describe the rental items which available for rental request |