# System Implementation & Test (SIT)

## Introduction

### System Overview

This section provides in detail all necessary information about test plans, test cases, test result, test environments, pass/fail criteria and risks estimations as well as a checklist to cover all possible cases of ORS system.

### Test Approach

Goal: Check all the features in ORS system and record remain bug to fix.

Type: White box testing, Black-box testing.

Size: System Component.

Technique: Check list.

## Database Relationship Diagram

### Physical Diagram

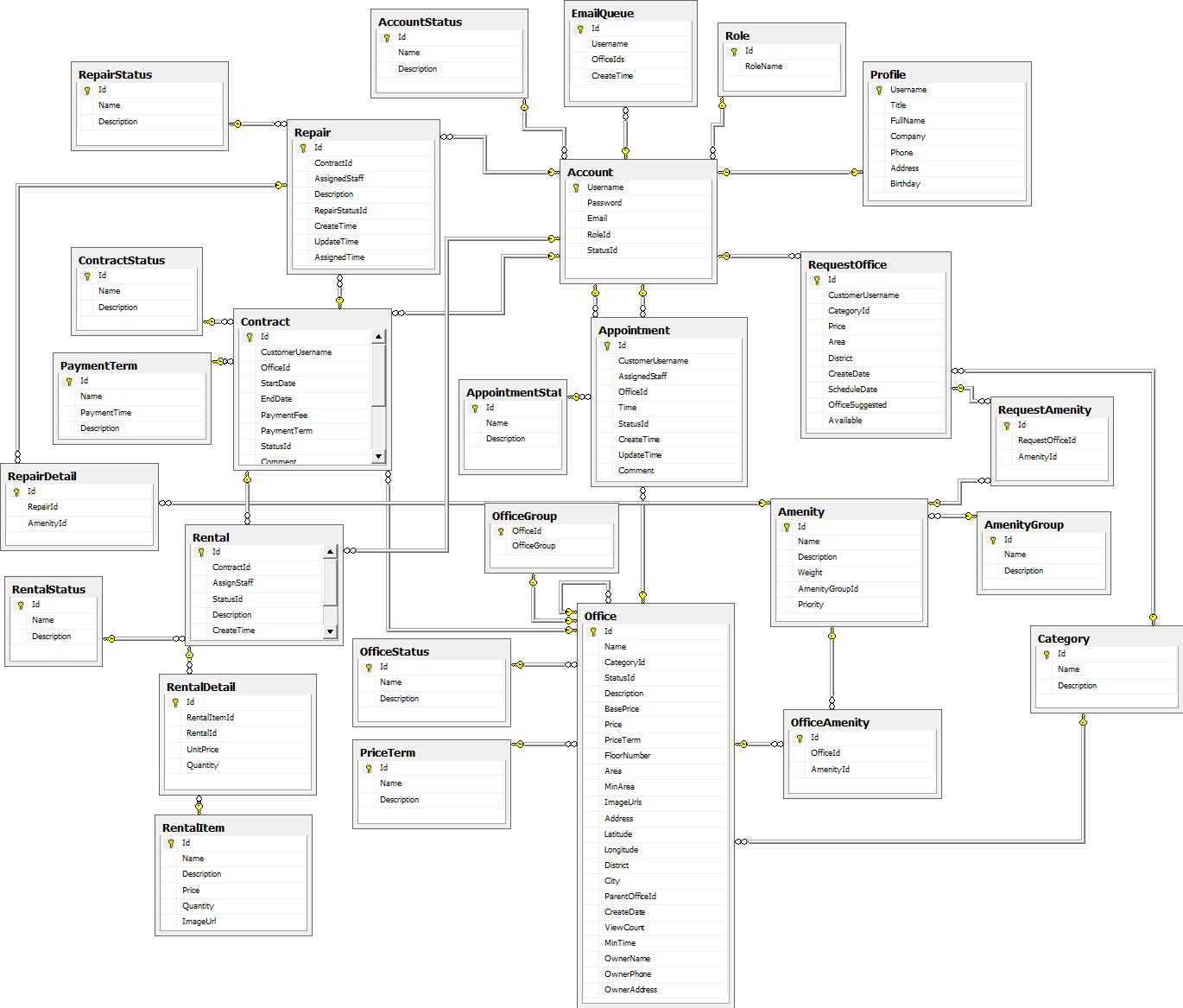


Figure 1: Physical Database Diagram

### Data Dictionary

## Performance Measures

### Clustering Performance

* Clustering is performed by running K Mean Algorithm which has complexity of : O(n \* k \* i \* d)
  + n : number of points
  + k : number of cluster ()
  + i : number of iteration
  + d : number of attributes (3)
* Clustering take almost the time of process that we can ignore the time needed to load data from database, digitalize data. With current sample data of 30 offices, the average run time is about 1 second
* The speed of clustering will vary and increase dramatically when n increase. However, we will improve the performance by do the clustering periodically after create new office

### Matching Performance

* Matching is performed by running K Nearest Neighbor Algorithm which has complexity of O(n)
  + n : number of points
* Matching is performed each time user search for offices. With sample data of 30 offices, the average run time is less than 1 second

## Test Plan

The purpose of this section is to verify and ensure that ORS system will ensure the design specification and other requirements. The following part will describe which features to be tested and which will not.

### Features to be tested

We will carry out test based on core workflow of system. All main functions will be tested carefully and clearly following phases.

* Guest: Search office
* Customer: View office detail, Make appointment, Request repair/rental, Request return/extend contract, Request office
* Manager: Create/Edit office, Assign appointment/repair/rental, Cancel appointment/repair/rental, Create/edit contract, Extend/return contract, Create rental item, Statistics, Calendar
* Staff: Confirm appointment/rental/repair, Accept rental/repair
* System: Send email, Check expire contract, Check send SMS, Check request office

### Features not to be tested

* Login, Logout, Manage rental, Manage amenity, Manage user, View profile, Edit profile, Change password

## System Testing Test Case



HomePage

Office detail

Request

Search

1.1 View home page

1.2b Search office

1.2c View office detail

2.3b Request appointment



2.1 View home page

1.3b View office detail

ContractPage

3.1 View contract page

Request office

2.2a Send request office

Contract detail

3.2a View contract detail

Request repair

Request rental

View rental cart

3.3a-a Send request rental

3.3a-b Send

request repair

3.4a-a Add item

ResultRequestOffice page

4.1 View list requestOffice

Figure 2: Guest and Customer main flow

Figure 3: Manager main flow



SystemPage

List contract

List office

New office

3.2b View office list

3.3b-a Add office

Repair list

Assign/Cancel repair

3.3c View repair detail

3.2c View repair list

Rental list

3.2d View rental list

3.3d View rental detail

Appointment list

3.2e View appointment list

Assign/Cancel Appointment

3.3e-b View appointment detail

Rental item list

3.2f View rental item list

New rental item

3.3f-b Add rental item

Request return contract list

Return contract

3.3g View request return contract detail

3.2g View request return contract

Request extend contract list

Extend contract

3.2h View request extend contract

3.3h View request extend contract detail

New Contract

3.3e-a New contract

Assign/Cancel rental

3.2b View contract list

View calendar

View income statistic

View staff statistic

3.2i View calendar

3.2j View calendar

3.2k View calendar

3.2 Login

Mobile

Repair list

Assign/Cancel repair

3.3c View repair detail

3.2c View repair list

Rental list

3.2d View rental list

3.3d View rental detail

Appointment list

3.2e View appointment list

Confirm Appointment

3.3e-b View appointment detail

Accept/Reject rental



Confirm repair

Confirm rental

Figure 4: Staff main flow

Schedule

1.1 Run schedule

1.1a Check contract

Send email

Check send SMS



Check expire contract

Check request office

System

1.1b Check appointment

1.1c Check request office

1.1c-a Send email

Figure 5: System main flow

### Guest Test Case

#### Search office

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **ID** | **Test Case Description** | **Test Case Procedure** | **Expected output** | **Inter-test Case Dependence** | **Result** | **Test Date** | **Note** |
| S01 | Search office information with valid information | 1. Go to home page  2. Enter information  - Địa chỉ: Quận 12, then select “Quận 12, Hồ Chí Minh, Việt Nam” from drop down  - Khoảng giá: 200000  - Danh sách tiện nghi: Select “Bãi giữ xe, Cáp quang”  3. Click “Tìm kiếm” | When enter address into Địa chỉ textbox, should display exact address information where user can select.  Display search result page with office which have the information relate to the enter information. | N/A | Passed | 07-10-15 |  |
| S02 | Search office information with invalid information | 1. Go to home page  2. Enter information  - Địa chỉ: “abc”  - Khoảng giá: NaN  - Danh sách tiện nghi: select “Cáp quang”  - Click tìm kiếm | Display error: “Mời nhập vào địa chỉ chính xác” and “Khoảng giá không hợp lệ” . | N/A | Passed | 07-10-15 |  |

Table 1: Search office Test Case

### Customer Test Case

#### Make appointment

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **ID** | **Test Case Description** | **Test Case Procedure** | **Expected output** | **Inter-test Case Dependence** | **Result** | **Test Date** | **Note** |
| S01 | Make valid appointment | 1. Login as customer role  2. Go to an office detail page  3. Click “Đặt lịch hẹn xem văn phòng”  4. Enter date: 13/07/2015 10:07 AM  5. Click “Đặt lịch hẹn” | Cannot select date before today, not on Sunday and from 7AM to 6PM  Display message “Đặt lịch hẹn thành công” then go to home page. | N/A | Passed | 07-10-15 |  |
| S02 | Make no time appointment | 1. Login as customer role  2. Go to an office detail page  3. Click “Đặt lịch hẹn xem văn phòng”  4. Click “Đặt lịch hẹn” | Display error: “Thời gian không hợp lệ” . | N/A | Passed | 07-10-15 |  |
| S02 | Make invalid time appointment | 1. Login as customer role  2. Go to an office detail page  3. Click “Đặt lịch hẹn xem văn phòng”  4. Enter “aaa”  5. Click “Đặt lịch hẹn” | Auto correct to valid date, default 1 hour from current time | N/A | Passed | 07-10-15 |  |

Table 2: Make appointment Test Case

#### Request Return Contract

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **ID** | **Test Case Description** | **Test Case Procedure** | **Expected output** | **Inter-test Case Dependence** | **Result** | **Test Date** | **Note** |
| RRC01 | Custom request return contract | 1 – On home page, click “**Hợp đồng của bạn**”  2 – Click “**Chi tiết**” on the screen  3 – Click “**Hủy hợp đồng trước hạn**” button  4 – Click “**Đồng ý**” button | - After step 1, go to list contract page  - After step 2, go to contract detail page  - After step 4, show message “**Đã gửi yêu cầu hủy hợp đồng trước hạn**” |  | Passed | 24/07/2015 |  |
| RRC02 | Custom can’t request return contract when contract expire | 1 – On home page, click “**Hợp đồng của bạn**” | - After step 1, go to list contract page  - The contract has expired will not appear in the list |  | Passed | 24/07/2015 |  |
| RRC03 | Custom can’t request return contract when contract is in the condition of being requested for return | 1 – On home page, click “**Hợp đồng của bạn**”  2 – Click “**Chi tiết**” on the screen | - After step 1, go to list contract page  - After step 2, go to contract detail page  - The screen show info “**Đang yêu cầu hủy hợp đồng trước hạn”** |  | Passed | 24/07/2015 |  |

Table 3: Request Return Contract Test Case

#### Request Extend Contract

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **ID** | **Test Case Description** | **Test Case Procedure** | **Expected output** | **Inter-test Case Dependence** | **Result** | **Test Date** | **Note** |
| REC01 | Custom request extend contract | 1 – On home page, click “**Hợp đồng của bạn**”  2 – Click “**Chi tiết**” on the screen  3 – Click “**Gia hạn hợp đồng**” button  4 – Click “**Đồng ý**” button | - After step 1, go to list contract page  - After step 2, go to contract detail page  - After step 4, show message “**Đã gửi yêu cầu gia hạn hợp đồng**” |  | Passed | 24/07/2015 |  |
| REC02 | Custom can’t request extend contract when contract expire | 1 – On home page, click “**Hợp đồng của bạn**” | - After step 1, go to list contract page  - The contract has expired will not appear in the list |  | Passed | 24/07/2015 |  |
| REC03 | Custom can’t request extend contract when contract is in the condition of being requested for extend | 1 – On home page, click “**Hợp đồng của bạn**”  2 – Click “**Chi tiết**” on the screen | - After step 1, go to list contract page  - After step 2, go to contract detail page  - The screen show info “**Đang yêu cầu gia hạn hợp đồng”** |  | Passed | 24/07/2015 |  |

Table 4: Request Extend Contract Test Case

#### Request Repair

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **ID** | **Test Case Description** | **Test Case Procedure** | **Expected output** | **Inter-test Case Dependence** | **Result** | **Test Date** | **Note** |
| RRP01 | Custom request repair | 1 – On home page, click “**Hợp đồng của bạn**”  2 – Click “**Chi tiết**” on the screen  3 – Click “**Yêu cầu sửa chữa**” button  4 – Fill in infomartion:   * Sửa chữa * Mô tả yêu cầu sửa chữa   5 – Click “**Gửi yêu cầu**” button | - After step 1, go to list contract page  - After step 2, go to contract detail page  - After step 3, go to request repair page  - After step 5, show message “**Đã gửi yêu cầu sửa chữa**” and return to contract detail page |  | Passed | 24/07/2015 |  |
| RRP02 | Custom can’t request repair when contract expire | 1 – On home page, click “**Hợp đồng của bạn**” | - After step 1, go to list contract page  - The contract has expired will not appear in the list |  | Passed | 24/07/2015 |  |
| RRP03 | Custom can’t request repair when contract is in the condition of being requested for return | 1 – On home page, click “**Hợp đồng của bạn**”  2 – Click “**Chi tiết**” on the screen | - After step 1, go to list contract page  - After step 2, go to contract detail page  - The screen doesn’t show “**Yêu cầu sửa chữa”** button. |  | Passed | 24/07/2015 |  |

Table 5: Request Repair Test Case

#### Request Rental

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **ID** | **Test Case Description** | **Test Case Procedure** | **Expected output** | **Inter-test Case Dependence** | **Result** | **Test Date** | **Note** |
| RRT01 | Custom request rental | 1 – On home page, click “**Hợp đồng của bạn**”  2 – Click “**Chi tiết**” on the screen  3 – Click “**Yêu cầu thuê thiết bị**” button  4 – Input the number  5 – Click “**Thuê**” button  6 – Click “**Xem giỏ hàng**” button  7 – Input request in “**Yêu cầu của khách hàng**”  8 – Click “**Gửi yêu cầu**” button | - After step 1, go to list contract page  - After step 2, go to contract detail page  - After step 3, go to rental item page  - After step 5, box “**Giỏ hàng**” will show information  - After step 6, go to request rental page  - After step 8, show message “**Gửi yêu cầu thành công**” and return to home page |  | Passed | 24/07/2015 |  |
| RRT02 | Custom can’t request rental when contract expire | 1 – On home page, click “**Hợp đồng của bạn**” | - After step 1, go to list contract page  - The contract has expired will not appear in the list |  | Passed | 24/07/2015 |  |
| RRT03 | Custom can’t request rental when contract is in the condition of being requested for return | 1 – On home page, click “**Hợp đồng của bạn**”  2 – Click “**Chi tiết**” on the screen | - After step 1, go to list contract page  - After step 2, go to contract detail page  - The screen doesn’t show “**Yêu cầu thuê thiết bị”** button. |  | Passed | 24/07/2015 |  |

Table 6: Request Rental Test Case

#### Request Office

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **ID** | **Test Case Description** | **Test Case Procedure** | **Expected output** | **Inter-test Case Dependence** | **Result** | **Test Date** | **Note** |
| RO01 | Send request office | 1. Choose “Đặt yêu cầu văn phòng” on home page. 2. Login as role customer. 3. Select “Loại văn phòng” is: “Tòa nhà văn phòng”. 4. Input “Giá” “310000” 5. Input “Diện tích”: 12 6. Input “Quận”: Quận 4 7. Input “Danh sách tiện nghi”: Thang máy 8. Click “Đặt văn phòng” button | * Show successful message ” 'Đặt yêu cầu thành công” * Transform to home page * Click to “Yêu cầu văn phòng của bạn” and request has been shown | * N/A | Passed | 8/8/2015 |  |

Table 7: Request Office Test Case

### Manager Test Case

#### Create office

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **ID** | **Test Case Description** | **Test Case Procedure** | **Expected output** | **Inter-test Case Dependence** | **Result** | **Test Date** | **Note** |
| 01 | Create office with valid inputted | 1- On admin page. Click ‘’văn phòng‘’  2- On ‘’Văn phòng’’ page. Click ‘Thêm mới văn phòng’’ icon  3- On “Thêm mới văn phòng” page, input valid data in the fields. | After step 3: office was created and display dialog message “Thêm văn phòng mới thành công” | N/A | Passed | 11/08/2015 |  |
| 02 | Create office with wrong inputted | 1- On admin page. Click ‘’văn phòng‘’  2- On ‘’Văn phòng’’ page. Click ‘Thêm mới văn phòng’’ icon  3- On “Thêm mới văn phòng” page, input wrong data in the fields. | After step 3: office was not created and display warning dialog message in wrong fields | N/A | Not Pass | 11/08/2015 |  |
| 03 | Create office with empty inputted | 1- On admin page. Click ‘’văn phòng‘’  2- On ‘’Văn phòng’’ page. Click ‘Thêm mới văn phòng’’ icon  3- On “Thêm mới văn phòng” page, do not input data in the fields. | After step 3: office was not created and display warning dialog message in wrong fields | N/A | Passed | 11/08/2015 |  |

Table 8: Create Office Test Case

#### Edit office

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **ID** | **Test Case Description** | **Test Case Procedure** | **Expected output** | **Inter-test Case Dependence** | **Result** | **Test Date** | **Note** |
| 01 | Manager edits office when office has existed in database | 1- On admin page. Click ‘’văn phòng‘’  2- On ‘’Văn phòng’’ page. Click ‘’Chi tiết’’ icon  3- On ‘’Chi tiết văn phòng’’ page. Click ‘’Chỉnh sửa’’  4- On “Chỉnh sửa’’ page, manager edit information about office  5- Manager clicks ‘’Cập nhật’’ button | After step 5: office was updated and display dialog message “Cập nhật thành công” | Create office test case | Passed | 11/08/2015 |  |
| 02 | Staff edits office when office has existed in database | 1- On admin page. Click ‘’văn phòng‘’  2- On ‘’Văn phòng’’ page. Click ‘’Chi tiết’’ icon  3- On ‘’Chi tiết văn phòng’’ page. Click ‘’Chỉnh sửa’’  4- On “Chỉnh sửa’’ page, manager edit information about office  5- Staff clicks ‘’Cập nhật’’ button | After step 5: office was updated and display dialog message “Cập nhật thành công” | Create office test case | Passed | 11/08/2015 |  |

Table 9: Edit Office Test Case

#### Create Contract

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **ID** | **Test Case Description** | **Test Case Procedure** | **Expected output** | **Inter-test Case Dependence** | **Result** | **Test Date** | **Note** |
| 01 | Create contract | 1. Login as manager role 2. Click to “Lịch hẹn mới” on home page 3. Click to tab “chấp nhận” on tab bar 4. Click button “Đến ký/ Hủy hợp đồng” 5. Click “Tạo hợp đồng” button 6. Input “Ngày bắt đầu”: 08-08-2015 7. Input “Thời gian thuê”: 6 8. Select “Kỳ hạn thanh toán”: 3 tháng 9. Input “Giá thuê”: 250000 10. Input “Tiền đặt cọc”: 5000000 11. Click “Tạo mới” button | After step 4: Show detail appointment.  Transform to contract list page.  New contract has been shown in contract list page. | Confirm appointment | Passed | 8/8/2015 |  |

Table 10: Create contract

#### Edit Contract

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **ID** | **Test Case Description** | **Test Case Procedure** | **Expected output** | **Inter-test Case Dependence** | **Result** | **Test Date** | **Note** |
| 01 | Edit Contract | 1. Login as manager role 2. Click to “Tổng hợp đồng” on home page 3. Click to button “chi tiết” 4. Click “Chỉnh sửa” button 5. Click to tab “chấp nhận” on tab bar 6. Click button “Đến ký/ Hủy hợp đồng” 7. Click “Tạo hợp đồng” button 8. Input “Ngày bắt đầu”: 09-09-2015 9. Input “Thời gian thuê”: 12 10. Select “Kỳ hạn thanh toán”: 3 tháng 11. Input “Giá thuê”: 250000 12. Input “Tiền đặt cọc”: 7500000 13. Click “Tạo mới” button | * After step 3: show detail of the contract * Transform to contract list page * The contract has been update | * Create contract | Passed | 8/8/2015 |  |

Table 11: Edit contract

#### Assign Appointment

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **ID** | **Test Case Description** | **Test Case Procedure** | **Expected output** | **Inter-test Case Dependence** | **Result** | **Test Date** | **Note** |
| AA01 | Manager assign task appointment for staff (system suggest staff) | 1 – On admin page, click “**Lịch hẹn**”  2 – Click icon “**Giao việc**” on first task | - After step 1, go to appointment page  - After step 2, the page reload and that first task doesn’t appear in tab “**Cần giao việc**” and customer receive message “Lich hen cua ban da duoc chap nhan. Hen ban vao thoi gian: “ |  | Passed | 24/07/2015 |  |
| AA02 | Manager assign task appointment for staff (manger choose staff) | 1 – On admin page, click “**Lịch hẹn**”  2 – Click icon “**Chi tiết**” on first task  3 – Choose staff  4 – Choose date and time  5 – Click “**Giao việc**” button | - After step 1, go to appointment page  - After step 2, go to appointment detail page  - After step 5, go to appointment page and that first task doesn’t appear in tab “**Cần giao việc**” and customer receive message “Lich hen cua ban da duoc chap nhan. Hen ban vao thoi gian: “ |  | Passed | 24/07/2015 |  |
| AA03 | Manager reassign task appointment for staff | 1 – On admin page, click “**Lịch hẹn**”  2 – Click tab “**Đã giao**”  2 – Click icon “**Chi tiết**” on first task  3 – Choose staff  4 – Choose date and time  5 – Click “**Giao việc lại**” button | - After step 1, go to appointment page  - After step 2, show list assigned task  - After step 3, go to appointment detail page  - After step 5, go to appointment page, tab “**Đã giao**” and that task was updated time or staff and customer receive message “Lich hen cua ban da duoc chap nhan. Hen ban vao thoi gian: “ |  | Passed | 24/07/2015 |  |
| AA04 | Manager reassign task appointment for staff by view calendar | 1 – On home page, click “**Quản lý thời gian nhân viên**”  2 – Click “**Xem văn phòng**” on screen  3 – Choose staff  4 – Choose date and time  5 – Click “**Giao việc lại**” button | - After step 1, go to list calendar page  - After step 2, go to contract detail page  - After step 5, go to appointment page, tab “**Đã giao**” and that task was updated time or staff and customer receive message “Lich hen cua ban da duoc chap nhan. Hen ban vao thoi gian: “ |  | Passed | 24/07/2015 |  |

Table 12: Assign Appointment Test Case

#### Cancel Appointment

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **ID** | **Test Case Description** | **Test Case Procedure** | **Expected output** | **Inter-test Case Dependence** | **Result** | **Test Date** | **Note** |
| CA01 | Manager cancel task appointment | 1 – On admin page, click “**Lịch hẹn**”  2 – Click icon “**Chi tiết**” on first task  3 – Click “**Hủy lịch hẹn**” button  4 – Fill in “**Nhập lý do hủy**”  5 – Click “**Xác nhận hủy”** button | - After step 1, go to appointment page  - After step 2, go to appointment detail page  - After step 5, go to appointment page and that task appointment in tab “**Hủy**” and customer receive message “Lich hen cua ban khong duoc chap nhan. Ly do: " |  | Passed | 24/07/2015 |  |

Table 13: Cancel Appointment Test Case

#### Assign Repair

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **ID** | **Test Case Description** | **Test Case Procedure** | **Expected output** | **Inter-test Case Dependence** | **Result** | **Test Date** | **Note** |
| ARP01 | Manager assign task repair for staff (system suggest staff and time) | 1 – On admin page, click “**Sửa chữa**”  2 – Click icon “**Giao việc**” on first task | - After step 1, go to repair page  - After step 2, the page reload and that first task doesn’t appear in tab “**Cần giao việc**” |  | Passed | 24/07/2015 |  |
| ARP02 | Manager assign task repair for staff (manger choose staff and time) | 1 – On admin page, click “**Sửa chữa**”  2 – Click icon “**Chi tiết**” on first task  3 – Choose staff  4 – Choose date to repair  5 – Click “**Giao việc**” button | - After step 1, go to repair page  - After step 2, go to repair detail page  - After step 5, go to repair page and that first task doesn’t appear in tab “**Cần giao việc**” and customer receive message "Yeu cau sua chua cua ban da duoc chap nhan. Thoi gian du kien:” |  | Passed | 24/07/2015 |  |
| ARP03 | Manager reassign task repair for staff | 1 – On admin page, click “**Sửa chữa**”  2 – Click tab “**Đã giao**”  2 – Click icon “**Chi tiết**” on first task  3 – Choose staff  4 – Choose date to repair  5 – Click “**Giao việc lại**” button | - After step 1, go to repair page  - After step 2, show list assigned task  - After step 3, go to repair detail page  - After step 5, go to repair page, tab “**Đã giao**” updated time or staff and customer receive message "Yeu cau sua chua cua ban da duoc chap nhan. Thoi gian du kien:” |  | Passed | 24/07/2015 |  |
| ARP04 | Manager reassign task repair for staff by view calendar | 1 – On home page, click “**Quản lý thời gian nhân viên**”  2 – Click “**Sửa chữa**” on screen  3 – Choose staff  4 – Choose date to repair  5 – Click “**Giao việc lại**” button | - After step 1, go to list calendar page  - After step 2, go to contract detail page  - After step 5, go to repair page, tab “**Đã giao**” updated time or staff, and customer receive message "Yeu cau sua chua cua ban da duoc chap nhan. Thoi gian du kien:” |  | Passed | 24/07/2015 |  |

Table 14: Assign Repair Test Case

#### Cancel Repair

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **ID** | **Test Case Description** | **Test Case Procedure** | **Expected output** | **Inter-test Case Dependence** | **Result** | **Test Date** | **Note** |
| CRP01 | Manager cancel task repair | 1 – On admin page, click “**Sửa chữa**”  2 – Click icon “**Chi tiết**” on first task  3 – Click “**Từ chối sửa chữa**” button | - After step 1, go to repair page  - After step 2, go to repair detail page  - After step 3, go to repair page and that task repair in tab “**Hủy**” and customer receive message "Yeu cau sua chua cua ban khong duoc chap nhan” |  | Passed | 24/07/2015 |  |

Table 15: Cancel Repair Test Case

#### Assign Rental

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **ID** | **Test Case Description** | **Test Case Procedure** | **Expected output** | **Inter-test Case Dependence** | **Result** | **Test Date** | **Note** |
| ART01 | Manager assign task rental for staff (system suggest staff and time) | 1 – On admin page, click “**Thuê thiết bị**”  2 – Click icon “**Giao việc**” on first task | - After step 1, go to rental page  - After step 2, the page reload and that first task doesn’t appear in tab “**Cần giao việc**” and customer receive message "Yeu cau thue vat dung cua ban da duoc chap nhan. Thoi gian du kien: " |  | Passed | 24/07/2015 |  |
| ART02 | Manager assign task rental for staff (manger choose staff and time) | 1 – On admin page, click “**Thuê thiết bị**”  2 – Click icon “**Chi tiết**” on first task  3 – Choose staff  4 – Choose date  5 – Click “**Giao việc**” button | - After step 1, go to rental page  - After step 2, go to rental detail page  - After step 5, go to rental page and that first task doesn’t appear in tab “**Cần giao việc**” and customer receive message "Yeu cau thue vat dung cua ban da duoc chap nhan. Thoi gian du kien: " |  | Passed | 24/07/2015 |  |
| ART03 | Manager reassign task rental for staff | 1 – On admin page, click “**Thuê thiết bị**”  2 – Click tab “**Việc đã giao**”  2 – Click icon “**Chi tiết**” on first task  3 – Choose staff  4 – Choose date  5 – Click “**Giao việc lại**” button | - After step 1, go to rental page  - After step 2, show list assigned task  - After step 3, go to rental detail page  - After step 5, go to rental page, tab “**Việc đã giao**”, updated time or staff and customer receive message "Yeu cau thue vat dung cua ban da duoc chap nhan. Thoi gian du kien: " |  | Passed | 24/07/2015 |  |
| ART04 | Manager reassign task rental for staff by view calendar | 1 – On home page, click “**Quản lý thời gian nhân viên**”  2 – Click “**Thuê thiết bị**” on screen  3 – Choose staff  4 – Choose date to rental  5 – Click “**Giao việc lại**” button | - After step 1, go to list calendar page  - After step 2, go to contract detail page  - After step 5, go to rental page, tab “**Việc đã giao**”, updated time or staff and customer receive message "Yeu cau thue vat dung cua ban da duoc chap nhan. Thoi gian du kien: " |  | Passed | 24/07/2015 |  |

Table 16: Assign Rental Test Case

#### Cancel Rental

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **ID** | **Test Case Description** | **Test Case Procedure** | **Expected output** | **Inter-test Case Dependence** | **Result** | **Test Date** | **Note** |
| CRT01 | Manager cancel task rental | 1 – On admin page, click “**Thuê thiết bị**”  2 – Click icon “**Chi tiết**” on first task  3 – Click “**Từ chối**” button | - After step 1, go to rental page  - After step 2, go to rental detail page  - After step 3, go to rental page and that task rental in tab “**Hủy**” and customer receive message "Yeu cau thue vat dungcua ban khong duoc chap nhan” |  | Passed | 24/07/2015 |  |

Table 17: Cancel Rental Test Case

#### Extend contract

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **ID** | **Test Case Description** | **Test Case Procedure** | **Expected output** | **Inter-test Case Dependence** | **Result** | **Test Date** | **Note** |
| 01 | Extend rent time of office | 1- On “Hợp đồng” page, customer click contract that want to extend rent time  2- Customer click “gia hạn hợp đồng” button  3- Customer click “đồng ý” popup | -After step 3: Display dialog message “Đang yêu cầu gia hạn hợp đồng” | Crate contract test case | Passed | 11/08/2015 |  |

Table 18: Extend Contract Test Case

#### Return contract

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **ID** | **Test Case Description** | **Test Case Procedure** | **Expected output** | **Inter-test Case Dependence** | **Result** | **Test Date** | **Note** |
| 01 | Return contract of office | 1- On “Hợp đồng” page, customer click contract that want to extend rent time  2- Customer click “Huỷ hợp hợp đồng trước hạn” button  3- Customer click “đồng ý” popup | -After step 3: Display dialog message “Đang yêu cầu huỷ hợp đồng” | Crate contract test case | Passed | 11/08/2015 |  |

Table 19: Return Contract Test Case

#### Create rental item

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **ID** | **Test Case Description** | **Test Case Procedure** | **Expected output** | **Inter-test Case Dependence** | **Result** | **Test Date** | **Note** |
| 01 | Create rental item with valid inputted | 1- On admin page. Click ‘Quản lí thiết bị‘’  2- On ‘Quản lí thiết bị” page. Click ‘Thêm mới thiết bị’’ icon  3- On “Thêm mới thiết bị” page, input valid data in the fields. | After step 3: rental item was created and display dialog message “Thêm thiết bị mới thành công” | N/A | Passed | 11/08/2015 |  |
| 02 | Create rental item with wrong inputted | 1- On admin page. Click ‘Quản lí thiết bị‘’  2- On ‘Quản lí thiết bị” page. Click ‘Thêm mới thiết bị’’ icon  3- On “Thêm mới thiết bị” page, input wrong data in the fields. | After step 3: rental item was not created and display warning dialog message in wrong fields | N/A | Not Pass | 11/08/2015 |  |
| 03 | Create retal item with empty inputted | 1- On admin page. Click ‘Quản lí thiết bị‘’  2- On ‘Quản lí thiết bị” page. Click ‘Thêm mới thiết bị’’ icon  3- On “Thêm mới thiết bị” page, do not input data in the fields. | After step 3: rental item was not created and display warning dialog message in wrong fields | N/A | Passed | 11/08/2015 |  |

Table 20: Create Rental Item Test Case

#### Income statistic

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **ID** | **Test Case Description** | **Test Case Procedure** | **Expected output** | **Inter-test Case Dependence** | **Result** | **Test Date** | **Note** |
| 01 | Make income statistic with all district | 1- On admin page. Click ‘Thống kê‘’  2- On ‘Thống kê” submenu. Click “Doanh thu” icon  3- On “Thống kê doanh thu” page, choose make statistic income with all district | After step 3: display income statistic chart follow all district | N/A | Passed | 11/08/2015 |  |
| 02 | Make income statistic with random district | 1- On admin page. Click ‘Thống kê‘’  2- On ‘Thống kê” submenu. Click “Doanh thu” icon  3- On “Thống kê doanh thu” page, choose make statistic income with random district | After step 3: display income statistic chart follow random district | N/A | Passed | 11/08/2015 |  |

Table 21: Income Statistic Test Case

#### Staff statistic

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **ID** | **Test Case Description** | **Test Case Procedure** | **Expected output** | **Inter-test Case Dependence** | **Result** | **Test Date** | **Note** |
| 01 | Make staff statistic with all staff | 1- On admin page. Click ‘Thống kê‘’  2- On ‘Thống kê” submenu. Click “Doanh thu” icon  3- On “Thống kê công việc nhân viên” page, choose make statistic staff with all staff | After step 3: display staff statistic chart follow works of staff | N/A | Passed | 11/08/2015 |  |

Table 22: Staff Statistic Test Case

#### Calendar

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **ID** | **Test Case Description** | **Test Case Procedure** | **Expected output** | **Inter-test Case Dependence** | **Result** | **Test Date** | **Note** |
| 01 | Make calendar follow day | 1- On admin page. Click ‘Quản lí thời gian nhân viên‘’  2- On ‘Quản lí thời gian nhân viên” page. Click “Ngày” icon | After step 2: display calendar follow number of works of staff | Assigned staff test case | Passed | 11/08/2015 |  |
| 02 | Make calendar follow week | 1- On admin page. Click ‘Quản lí thời gian nhân viên‘’  2- On ‘Quản lí thời gian nhân viên” page. Click “Tuần” icon | After step 2: display calendar follow number of works of staff | Assigned staff test case | Passed | 11/08/2015 |  |
| 03 | Make calendar follow month | 1- On admin page. Click ‘Quản lí thời gian nhân viên‘’  2- On ‘Quản lí thời gian nhân viên” page. Click “Tháng” icon | After step 2: display calendar follow number of works of staff | Assigned staff test case | Passed | 11/08/2015 |  |

Table 23: Calendar Test Case

### System

#### Check request office

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **ID** | **Test Case Description** | **Test Case Procedure** | **Expected output** | **Inter-test Case Dependence** | **Result** | **Test Date** | **Note** |
| 01 | Check request office | 1. Create request office on customer role 2. Login as customer role 3. Select “Tòa nhà văn phòng” on “Loại văn phòng” 4. Input “Giá”: 350000 5. Input “Diện tích”: 150 6. Input “Quận”: Quận 10 7. Input “Danh sách tiện nghi”: Phòng vệ sinh 8. Click “Đặt văn phòng” | After one day, click to “Yêu cầu văn phòng của bạn”. The request has been shown and the office “RIVER VIEW TOWER” will be list at the bottom page | Create request office | Passed | 8/8/2015 |  |

Table 24: Check request office

#### Check contract due date

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **ID** | **Test Case Description** | **Test Case Procedure** | **Expected output** | **Inter-test Case Dependence** | **Result** | **Test Date** | **Note** |
| 01 | Check contract due date | 1. Change time of window to 01/05/2015 2. Create contract with “thời gian thuê”: 3 tháng 3. Click ”Tạo mới” button in new contract page 4. Change time of window to now | * After step 3: new contract has been created. * After one day, mail has been sent and contract has change status | * Create contract | Passed | 8/8/2015 |  |

Table 25: Check contract due date

#### Check send SMS

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **ID** | **Test Case Description** | **Test Case Procedure** | **Expected output** | **Inter-test Case Dependence** | **Result** | **Test Date** | **Note** |
| 01 | Check send SMS | 1. Change time of window to 04/08/2015 2. Create appointment with time: 10/08/2015 3. Click ”Gửi yệu cầu” button 4. Login admin page with manager role 5. Click “Lịch hẹn” on menu 6. Select “staff1” and assign to staff1 7. Change time of window to now | * After step 3: new appointment has been created. * After step 6: appointment request has change status and assign to staff1 * Customer will receive SMS about the appointment request | * Create appointment or rental or repair request | Passed | 8/8/2015 |  |

Table 26: Check send SMS