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| --- |
| **E:\My Documents\Desktop\Logo_FPT_University_doc.jpg** |
| Software Requirement Specification |
|  |
|  |
| **Rental House Finding System Team | FPT University** |
| **Hanoi, 4th Mar 2013** |

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|  |

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# User Requirement Specification

There are 3 main actors which system supports:

* **Visitors**: don’t have account on system. In general, they should be people who need to search house for lease.

However, they could also people who have few properties and want a fast post method, in short time, a limitation of steps and without registration.

* **Registered Users**: have account on system. In general, they should be house owners or people who have a large number of properties and need a workspace to control all their posts, messages, favorites, payments.
* **Administrator**: The full power user of the system who has all functions of normal user and has an admin control panel to manage all configuration of system.

## Visitor Requirements

* Visitors can create accounts to become a registered user. Email address, mobile phone and password are required to register. Each email can only register once.
* Visitors can also use Open ID to login into website such as Yahoo, Google, and Facebook.
* Visitor can post new house for lease with less functions comparing to registered users (they don’t have user workspace to control all their account activities easily).
* Visitors can view detail info of all houses for lease posts, which match their search and need.
* Visitors can add and delete a post they like to their favorite list.
* Visitors can compare two or three information of house for lease after adding them to favorite list.
* Visitors can search house for lease by using Quick Search and Advanced Search (with many options for users who know well about their needs.)
* Visitor can share their favorite post to others using many popular social networks.
* Visitor can send question to the owner of a post

## Registered user requirements

* Registered users have full functions of Visitor.
* Registered users can post new house for lease.
* Registered users can view; edit and delete their posts, which were posted by themself.
* Registered users can renew their post when their post was hidden. (After amount of time).
* Registered users can edit individual information such as: name, telephone, address….
* Register users can report if topic as spam to administrator.

## Administration requirements

* Admin has full power in the system.
* Admin can view a list of all nearby places in the system, add locations and delete locations.
* Admin can view a list post on the website, add, edit or delete post, expired date
* Admin can view a list of report topics, decide they are spam or not to remove or edit.
* Admin can view all payments from users in system
* Admin can manage all categories of houses, flats for lease.
* Admin can add, edit, delete and list all locations (city, district, and province).

## System Requirement

* System will auto hide the topic post after amount of time posted.
* System will auto send active require SMS to poster’s mobile phone and/or email in order to approve the post to the website.
* System will auto immediately active the post after poster send payment SMS successfully.
* System will auto filter all post with bad words to blacklist before sending active require SMS to posters and waiting for manual check from admin. After getting approve from admin, system auto send active SMS as normal.

## Post Requirement

* Title: subject of the post. (Required)
* Type: type of house for lease. There are 4 types: house for lease, rental room, finding other to rent together, room remise(Required)
* City: the city of house. (Required)
* District: the district of house. (Required)
* Detail address: the detail address of house.
* Price: price to rent. (Required)
* Area: total area. (Required)
* Contact telephone: the phone number of person, who have house for lease. (Required)
* Contact email
* Instant Message: IM, Skype
* Water fee: fee for water service.
* Electricity fee: fee for electricity service.
* Private toilet: available or not.
* Internet: available or not.
* Motor parking: available or not.
* Garage for car: available or not.
* Air conditioner: available or not.
* Bedroom with beds: available or not.
* Cable TV: available or not.
* Kitchen: private cooking allow or not.
* Security: protected by guard or not.
* Time of door closing: 22h, 22h30, 23h, 23h30, 24h or not regulation.
* Image: pictures of house.
* Location in map: the location of house on map.
* View: the number of visitor and user view this post.
* Description: more description of house for lease.

## Ranking Requirement

**Main objective**: This ranking function will help system order the result list from user’s search processes.

We have the followings information fields of a house or flat: (\*)

* Category (type of house or flat)
* Provinces
* District
* Street
* Detail address number
* Title of post
* General description
* Nearby places

Firstly, depending on each specific demand, user must choose at least house category and province where they want to find.

The district field is optional which user can choose finding in all districts or each individual district.

Secondly, with the remaining criteria, we define a specific point for each corresponding field (score) and their working method is as follows:

- When the user does not enter a keyword to search, then the point will not be used, and the system will find all posts which satisfy the condition of province & district fields.

- However, if the user enters any keyword on search textbox, the system will use the Fulltext Search feature in Microsoft SQL Server to find in all above fields (\*). Especially, the Freetextable ranking method (based on Okapi BM25 formula) of Fulltext Search is applied into system to calculate the corresponding rank for each field. After having the rank of each corresponding point, system will use these to multiply with field scores that have been specified before in order to form the final score.

🡺 The returned results will be sorted by descending order of final score.

Finally, an administrator can arbitrarily change the score of each field to fit the needs of each period.

*Ref: Fulltext search ranking calculated system of MS SQL:* [*http://msdn.microsoft.com/en-us/library/ms345119*](http://msdn.microsoft.com/en-us/library/ms345119)*(SQL.90).aspx*

## Search Requirement

There are 2 kinds of search in the website: Quick Search and Advanced Search:

## Quick Search

This is a main region on the home page and is displayed as a bar and is accessible from every page. The users will choose the category of house for lease they want to search and the area they want to find places in. The search area fields will automatic title suggestion.

## Advanced Search

This function provides users more options to make search result become more precise. It is extremely effective for users who know well their needs. These options are:

+ specific location: province, city, and streets.

+ specific price and area.

+ specific interior utility with need evaluation for user. They can define the priority of each item.

**The main objective**: Find all the posts satisfying all above options and arrange them in order from highest to lowest based on the criteria set by users themselves.

There are four levels of user’s interest in each criterion:

- Do not care: x points

- Low: y points

- Medium: z points

- High: w points

Users will choose their level of interest corresponding to each criterion, and then the system will return 1 list of posts which have points calculated based on their interest level.

The algorithm here should find all satisfied post with fast speed but still remain precise handling.

**Algorithm description**:

The formula:

Macintosh HD:Users:Nambaby:Downloads:CodeCogsEqn.gif

P: final point of a post in result list

Si: 1 if criterion selected

0 if otherwise

Wi: Weighted points of each criterion (configurable)

# System Requirement Specification (Specific Requirements)

## External Interface Requirements

## User Interfaces

Interface needs to attract the attention of users to the product image. Website should have the background simple, less color, less attention but that also shows clear boundaries between each section. The look and feel of this website should be based on user requirements. Page layout and navigation should be as intuitive and easy as possible.

The overuse of product images should not increase the time in which a page downloads, which has a negative impact on usability.

## Hardware Interfaces

RHF website needs to run are the peripheral devices mouse and keyboard with internet connection.

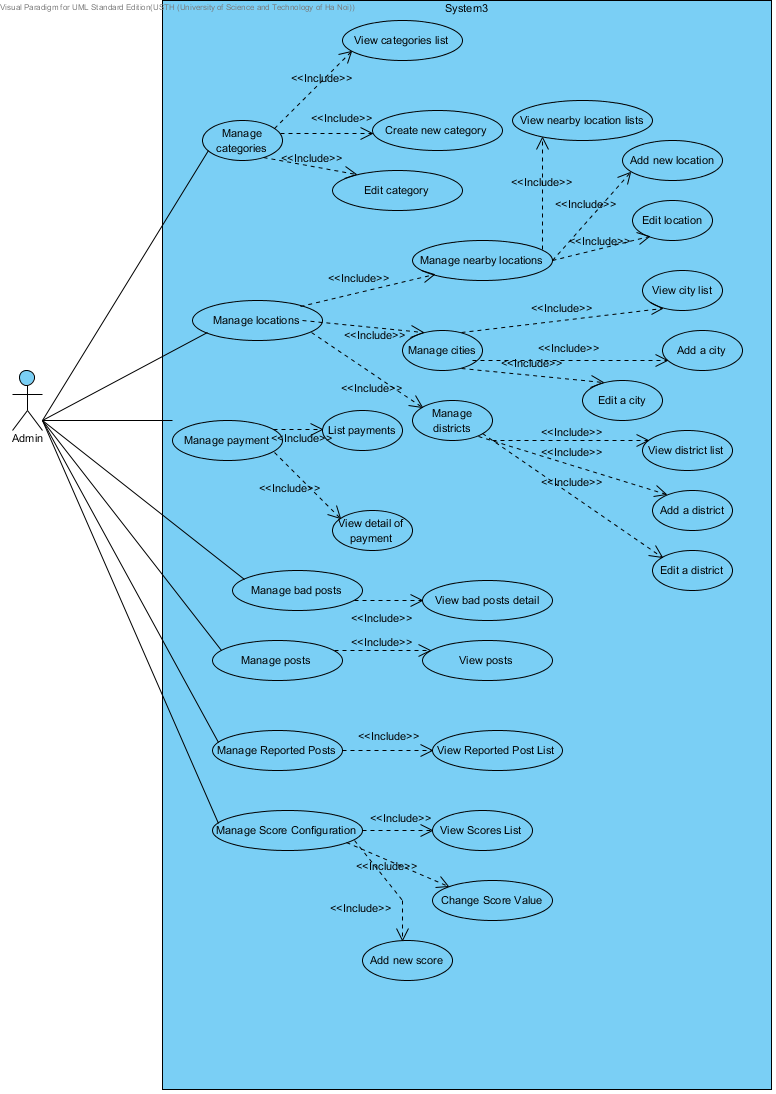
## Software Interfaces

|  |  |  |
| --- | --- | --- |
| Software name | Version | Source |
| .NET Framework | 4.0 | Microsoft |
| SQL Server | 2008 R2 | Microsoft |
| Visual Studio | 2010 | Microsoft |
| MVC | 3.0 | Microsoft |
| Firefox | 3.6 or higher | Mozilla |
| Internet Explorer | 9.0 or higher | Microsoft |
| Chrome | 20 or higher | Google |

## System Features

This section will describe the system being built through a list of Use cases. First, we will have an over-view of the whole system and what it will do through a use case diagram. There’re 3 main actors: User (consist of Visitor & Registered User) and Administrator.





|  |  |  |  |
| --- | --- | --- | --- |
| **Id** | **Name** | **Use-case No** | **Page** |
| **1** | Search | UC001 |  |
| **2** | Advanced Search | UC002 |  |
| **3** | Register | UC003 |  |
| **4** | Delete Post | UC004 |  |
| **5** | Edit Post | UC005 |  |
| **6** | Renew post | UC006 |  |
| **7** | Add post | UC007 |  |
| **8** | <Registered User> Edit User Profile | UC008 |  |
| **9** | <Registered User> Remove house from favorite list | UC009 |  |
| **10** | <Registered User> Add house to favorite list | UC010 |  |
| **11** | <Registered User> Compare house | UC011 |  |
| **12** | <Registered User> View detail of post | UC012 |  |
| **13** | <Registered User> Answer Question | UC013 |  |
| **14** | <Registered User> View Payment | UC014 |  |
| **15** | <Registered User> View Favorite list | UC015 |  |
| **16** | <Registered User> Reset Password | UC016 |  |
| **17** | <Registered User> Delete post | UC017 |  |
| **18** | <Registered User> Edit post | UC018 |  |
| **19** | <Registered User> Log Out | UC019 |  |
| **20** | <Registered User> Login | UC020 |  |
| **21** | <Registered User> Change Password | UC021 |  |
| **22** | <Admin> Add new score | UC022 |  |
| **23** | <Admin> Change score value | UC023 |  |
| **24** | <Admin> View scores list | UC024 |  |
| **25** | <Admin> View reported post list | UC025 |  |
| **26** | <Admin> Edit location | UC026 |  |
| **27** | <Admin> Add new location | UC027 |  |
| **28** | <Admin> View nearby location lists | UC028 |  |
| **29** | <Admin> View posts with filter | UC029 |  |
| **30** | <Admin> Manage posts | UC030 |  |
| **31** | <Admin> View detail of payment | UC031 |  |
| **32** | <Admin> List payments | UC032 |  |
| **33** | <Admin> Manage bad posts | UC033 |  |
| **34** | <Admin> Edit category | UC034 |  |
| **35** | <Admin> Create new category | UC035 |  |
| **36** | <Admin> View categories list | UC036 |  |
| **37** | <Admin> Manage categories | UC037 |  |
| **38** | <Admin> View bad post detail | UC038 |  |
| **39** | <Admin> Edit a district | UC039 |  |
| **40** | <Admin> Add a district | UC040 |  |
| **41** | <Admin> View district list | UC041 |  |
| **42** | <Admin> Edit city | UC042 |  |
| **43** | <Admin> Add a city | UC043 |  |
| **44** | <Admin> View city list | UC044 |  |

### UC001: Search

#### Use Case Descriptions

|  |  |
| --- | --- |
| Search | |
| Use Case ID | UC001 |
| Primary Actor | Visitor, Registered User, Administrator |
| Brief Description | This is one of the main functions of the system. User only needs to input some keywords in order to find the best house suitable for their need. The search result will be filtered and marked on the map to support visitor, user find the right flat as quick as possible. |
| Goal | Search for suitable houses with input keyword. |
| Triggers | N/A |
| Preconditions | User have selected type of house they want to find. |
| Main success scenario | |  |  |  | | --- | --- | --- | |  | Actor Input | System Response | | 1 | User selects type of house which they want to search & enters any keyword to the search text box and click "Tìm kiếm" button or press "Enter". |  | | 2 |  | Display search result. | |
| Alternative Scenario - Suggestion | |  |  |  | | --- | --- | --- | |  | Actor Inpu | System Response | | 1 | Enter keywordinto search text box. |  | | 2 |  | The system displays instantly suggestions of matching posts | | 3 | Choose one of the suggestions in list. |  | | 4 |  | Display search result in paging. | |
| Author | Vietvh |
| Date | 28/1/2013 |

### UC002: Advanced Search

#### Use Case Descriptions

|  |  |
| --- | --- |
| Advanced Search | |
| Use Case ID | UC002 |
| Primary Actor | Visitor, Registered User, Administrator |
| Brief Description | This is one of the main functions of the system. User who knows their needs clearly and want to do a detail search with exact return result. |
| Goal | Search for suitable houses with detail information |
| Triggers | N/A |
| Preconditions | User click on Advanced Search button |
| Main success scenario | |  |  |  | | --- | --- | --- | |  | Actor Input | System Response | | 1 | User click "Tìm kiếm nâng cao" button or link |  | | 2 |  | Displa advanced search page. | | 3 | User fill all necessary information |  | | 4 |  | Display result in paging. | |
| Alternative Scenario - Suggestion | |  |  |  | | --- | --- | --- | |  | Actor Input | System Response | | 1 | User click "Tìm kiếm nâng cao" button or link. |  | | 2 |  | Display advanced searchpage. | | 3 | User fill all necessary information and click other link or click "Hủy" |  | | 4 |  | Close advanced search page. | |
| Post-conditions | Redirect user to result page |
| Author | Vietvh |
| Date | 28/1/2013 |

### UC003: Register

#### Use Case Descriptions

|  |  |
| --- | --- |
| Register | |
| Use Case ID | UC003 |
| Primary Actor | Visitor |
| Brief Description | Visitor can create new account to use more functions as a registered user. |
| Goal | Registered new account for visitor. |
| Triggers | User click on Register button. |
| Preconditions |  |
| Main success scenario | |  |  |  | | --- | --- | --- | |  | Actor Input | System Response | | 1 | click "Đăng ký" |  | | 2 |  | Display form register. | | 3 | Enter necessary and mandatory information & click "Đăng kí" button |  | | 4 |  | Redirect to previous page and logged user into system | |
| Alternative Scenario - Suggestion | |  |  |  | | --- | --- | --- | |  | Actor Input | System Response | | 1 | click "Đăng ký" |  | | 2 |  | Display form register. | | 3 | Enter necessary and mandatory information & click other link |  | | 4 |  | Close form and redirect to target page | |
| Post-conditions | Redirect user to previous page |
| Exceptions | |  |  |  | | --- | --- | --- | |  | Actor Input | System Response | | 1 | click "Đăng ký" |  | | 2 |  | Display form register. | | 3 | Enter any information incorrect or missing mandatory fields |  | | 4 | Click "Đăng ký" button |  | | 5 |  | Display error mesage beside wrong fields. | |
| Author | Vietvh |
| Date |  |

### UC004: Delete post

#### Use Case Descriptions

|  |  |
| --- | --- |
| Delete Post | |
| **Use Case ID** | UC004 |
| **Primary Actor** | Visitor |
| **Brief Description** | This use case allows user to delete their post |
| **Goal** | Visitor delete a specific post successfully. |
| **Triggers** | Visitor access to link page edit post and enter correct code. |
| **Preconditions** | Visitor has it own private code to access edit page |
| **Main success scenario** | |  |  |  | | --- | --- | --- | |  | Actor Input | System Response | | 1 | Click "Xóa" button |  | | 2 |  | Display confirmation popup window | | 3 | Click "Xác nhận" |  | | 4 |  | Delete post from system and display "Xóa bài đăng thành công" message | |
| **Alternative Scenario** | |  |  |  | | --- | --- | --- | |  | Actor Input | System Response | | 1 | Click "Xóa" button |  | | 2 |  | Display confirmation popup window | | 3 | Click "Hủy" button |  | | 4 |  | Close confirmation popup window | |
| **Post Conditions** | Redirect user to main manage page. |
| **Date** | 28/1/2013 |

### UC005: Edit Post

#### Use Case Descriptions

|  |  |
| --- | --- |
| Edit Post | |
| **Use Case ID** | UC005 |
| **Primary Actor** | Visitor |
| **Brief Description** | When visitor wants to edit his/her posts |
| **Goal** | Visitor change post detail successfully. |
| **Triggers** | Visitor access edit page and enter right code |
| **Preconditions** | N/A |
| **Main success scenario** | |  |  |  | | --- | --- | --- | |  | Actor Input | System Response | | 1 | Visitor accesses edit page and enter right code |  | | 2 |  | Display detail post editing page | | 3 | Edit post information |  | | 4 |  | Validate and save new information into system | |
| **Alternative Scenario** | |  |  |  | | --- | --- | --- | |  | Actor Input | System Response | | 1 | Visitor accesses edit page and enter right code |  | | 2 |  | Display detail post editing window | | 3 | Edit post information and click "Hủy" |  | | 4 |  | Close detail post editing window | |
| **Exceptions** | |  |  |  | | --- | --- | --- | |  | Actor Input | System Response | | 1 | Visitor accesses edit page and enter right code |  | | 2 |  | Display detail post editing window | | 3 | Fill in wrong post information or missing mandatory fields |  | | 4 |  | Validate & display error messages | |
| **Post Conditions** | Redirect user to home page. |
| **Author** | NamNV |
| **Date** | 28/1/2013 |

### UC006: Renew post

#### Use Case Descriptions

|  |  |
| --- | --- |
| Renew post | |
| Use Case ID | UC006 |
| Primary Actor | Visitor, Registered User, Administrator |
| Brief Description | This use case allow user to renew a post which they had posted before the post is expired. |
| Goal | Allow user renewing a post |
| Triggers | User receive SMS or email which describes how to renew their post |
| Preconditions | N/A |
| Main success scenario | |  |  |  | | --- | --- | --- | |  | Actor Input | System Response | | 1 | Visitor sends SMS to payment portal following guide in SMS from system |  | | 2 |  | Send SMS to user to inform about payment success and active post | |
| Exceptions | |  |  |  | | --- | --- | --- | |  | Actor Input | System Response | | 1 | Visitor sends wrong SMS to payment portal following guide in SMS from system |  | | 2 |  | Send SMS to user to inform about error | |
| Post Conditions | Visitors can renew a post |
| Author | Vietvh |
| Date | 28/1/2013 |

### UC007: Add Post

#### Use Case Descriptions

|  |  |
| --- | --- |
| Add Post | |
| **Use Case ID** | UC007 |
| **Primary Actor** | Visitor, Registered User, Administrator |
| **Brief Description** | This use case allows user to add new post of their rental house |
| **Goal** | User adds new post successfully. |
| **Triggers** | N/A |
| **Preconditions** | N/A |
| **Main success scenario** | |  |  |  | | --- | --- | --- | |  | Actor Input | System Response | | 1 | Click "Đăng bài mới" button |  | | 2 |  | Display adding new post page | | 3 | Fill in new post information and click "Đăng tin ngay" |  | | 4 |  | Validate, save into system and send SMS notify user | |
| **Alternative scenario** | |  |  |  | | --- | --- | --- | |  | Actor Input | System Response | | 1 | Logged into system and click "Tạo bài mới" |  | | 2 |  | Display adding new post form | | 3 | Fill in right information and click"Hủy" button |  | | 4 |  | Close new post page and redirect user to previous page | | 5 |  |  | |
| **Alternative Scenario** | |  |  |  | | --- | --- | --- | |  | Actor Input | System Response | | 1 | User logged into system successfully |  | | 2 | Click "Đăng bài mới" button |  | | 3 |  | Display adding new post form | | 4 | Fill in new post information and click "Đăng bài ngay!" |  | | 5 |  | Validate and save into system and send SMS notify user. | |
| **Exceptions** | |  |  |  | | --- | --- | --- | |  | Actor Input | System Response | | 1 | Click "Đăng bài mới" button |  | | 2 |  | Display adding new post form | | 3 | Fill in wrong information or missing mandatory fields |  | | 4 |  | Validate & display error messages | |
| **Post Conditions** | Redirect user to new post page. |
| **Author** | NamNV |
| **Date** | 28/1/2013 |

### UC008: <Registered User> Edit User Profile

#### Use Case Descriptions

|  |  |
| --- | --- |
| Edit User Profile | |
| **Use Case ID** | UC008 |
| **Primary Actor** | Registered User, Administrator |
| **Brief Description** | When user wants to edit his/her account information. |
| **Goal** | User changes account information successfully. |
| **Triggers** | User clicks on their account link button on top of any page. |
| **Preconditions** | User had logged into system. |
| **Main success scenario** | |  |  |  | | --- | --- | --- | |  | Actor Input | System Response | | 1 | Click "Thông tin tài khoản" link & click "Thay đổi thông tin" button |  | | 2 |  | Display detail account editing window | | 3 | Edit account informtion |  | | 4 |  | Validate and save new information into system | |
| **Alternative Scenario** | |  |  |  | | --- | --- | --- | |  | Actor Input | System Response | | 1 | Click "Thông tin tài khoản" link & click "Thay đổi thông tin" button |  | | 2 |  | Display detail account editing window | | 3 | Edit account information and click "Hủy" |  | | 4 |  | Close detail account editing window | |
| **Exceptions** | |  |  |  | | --- | --- | --- | |  | Actor Input | System Response | | 1 | Click "Thông tin tài khoản" link & click "Thay đổi thông tin" button |  | | 2 |  | Display detail account editing window | | 3 | Fill in wrong account informationor missing mandatory fields |  | | 4 |  | Validate & display error messages | |
| **Post Conditions** | Redirect user to main user workspace. |
| **Author** | NamNV |
| **Date** | 28/1/2013 |

### UC009: <Registered User> Remove house from favorite list

#### Use Case Descriptions

|  |  |
| --- | --- |
| Remove house from favourite list | |
| Use Case ID | UC009 |
| Primary Actor | Registered User |
| Brief Description | This use case allows user to remove a house from their favorite list which they don't want to follow anymore. |
| Goal | Allow user removing house from favorite list |
| Triggers | N/A |
| Preconditions | User logged into system successfully and user had added at least 1 post to favorite list |
| Main success scenario | |  |  |  | | --- | --- | --- | |  | Actor Input | System Response | | 1 | Select an item in favorite list and click "Xóa" button |  | | 2 |  | Display message "Bạn có chắc chắn muốn xóa bài đang quân tâm này?" | | 3 | User click "Đồng ý" |  | | 4 |  | Delete that item which user had chosen | |
| Alternative Scenario - Suggestion | |  |  |  | | --- | --- | --- | |  | Actor Input | System Response | | 1 | Select an item in favorite list and click "Xóa" button |  | | 2 |  | Display message "Bạn có chắc chắn muốn xóa bài đang quân tâm này?" | | 3 | User click "Hủy" |  | | 4 |  | Delete that item which user had chosen | |
| Post-conditions | Reload the favourite list |
| Author | Vietvh |
| Date | 28/1/2013 |

### UC010: <Registered User> Add house to favorite list

#### Use Case Descriptions

|  |  |
| --- | --- |
| Add house to favourite list | |
| Use Case ID | UC010 |
| Primary Actor | Registered User |
| Brief Description | This use case allow user to add a post to favorite list in order to view later or compare between many posts to define the pros and cons of candidates. |
| Goal | Allow user to add a post to favorite list |
| Triggers | N/A |
| Preconditions | User had logged into system succesfully, done a search process with result and in a post detail page |
| Main success scenario | |  |  |  | | --- | --- | --- | |  | Actor Input | System Response | | 1 | Click "Quan tâm" button on top of a post |  | | 2 |  | Add that post to favorite list and display message "Tin đăng đã được cho vào khu vực quan tâm". | |
| Author | Vietvh |
| Date | 28/1/2013 |

### UC011: <Registered User> Compare house

#### Use Case Descriptions

|  |  |
| --- | --- |
| Compare House | |
| Use Case ID | UC011 |
| Primary Actor | Registered User |
| Brief Description | This use case allows user to compare 2 - 3 house posts which they are considering the pros and cons of them. |
| Goal | User can compare 2 - 3 house posts |
| Triggers | N/A |
| Preconditions | Favourite list has at least 2 items |
| Main success scenario | |  |  |  | | --- | --- | --- | |  | Actor Input | System Response | | 1 | Choose 2 - 3 items on favorite list and click "So sánh" button |  | | 2 |  | Display detail compare page for user | |
| Post-conditions | Display compare page |
| Exceptions | |  |  |  | | --- | --- | --- | |  | Actor Input | System Response | | 1 | Choose one item and click "So sánh" button |  | | 2 |  | Display error message "Bạn vui lòng chọn ít nhất 2 bài đăng để bắt đầu so sánh." | |
| **Exceptions** | |  |  |  | | --- | --- | --- | |  | Actor Input | System Response | | 1 | Choose over 3 items and click "So sán" button |  | | 2 |  | Display error message "Bạn vui lòng chọn từ 2 - 3 bài đăng để bắt đầu so sánh." | |
| Author | Vietvh |
| Date | 28/1/2013 |

### UC012: <Registered User> View detail of post

#### Use Case Descriptions

|  |  |
| --- | --- |
| View detail of post | |
| Use Case ID | UC012 |
| Primary Actor | Visitor, Registered User, Administrator |
| Brief Description | This use case allow user to view detail of a post |
| Goal | Allow user view detail of a post |
| Triggers | N/A |
| Preconditions | User had done a search with return result |
| Main success scenario | |  |  |  | | --- | --- | --- | |  | Actor Input | System Response | | 1 | User clicks on hyperlink of a post in search result list |  | |
| Alternative Scenario | |  |  |  | | --- | --- | --- | |  | Actor Input | System Response | | 1 | User click on a markers on map |  | | 2 |  | Open the basic detail popup | | 3 | User click on "Chi tiết" button on basic detail popup |  | | 4 |  | Open detail page of specific post | |
| **Alternative Scenario** | |  |  |  | | --- | --- | --- | |  | Actor Input | System Response | | 1 | User click on favorite bar with favorite posts and click on a specific post |  | | 2 |  | Display detail page of above post | |
| Exceptions | |  |  |  | | --- | --- | --- | |  | Actor Input | System Response | | 1 |  |  | |
| Post Conditions | User can view a specific post |
| Author | Vietvh |
| Date | 28/1/2013 |

### UC013: <Registered User> Answer Question

#### Use Case Descriptions

|  |  |
| --- | --- |
| Answer Question | |
| **Use Case ID** | UC013 |
| **Primary Actor** | Registered User, Administrator |
| **Brief Description** | When user wants to answer an question from other user about their post |
| **Goal** | User answer question from others successfully |
| **Triggers** | User clicks on account link button on top of any page |
| **Preconditions** | User had logged into system. |
| **Main success scenario** | |  |  |  | | --- | --- | --- | |  | Actor Input | System Response | | 1 | Click "Tin nhắn" button |  | | 2 |  | Display message page | | 3 | select a conversation in the list & type answer and click "Gửi" |  | | 4 |  | Send email, notification to question owner | |
| **Alternative Scenario** | |  |  |  | | --- | --- | --- | |  | Actor Input | System Response | | 1 | Click "Tin nhắn" button |  | | 2 |  | Display message page | | 3 | select a conversation in the list & type answer and click any other link |  | | 4 |  | Close question page and redirect to clicked link | |
| **Post Conditions** | Redirect user to user workspace. |
| **Author** | NamNV |
| **Date** | 28/1/2013 |

### UC014: <Registered User> View Payment

#### Use Case Descriptions

|  |  |
| --- | --- |
| View Payment | |
| **Use Case ID** | UC014 |
| **Primary Actor** | Registered User, Administrator |
| **Brief Description** | When user wants view all his/her payment transaction. |
| **Goal** | User can view all payment transaction |
| **Triggers** | User clicks on account button link |
| **Preconditions** | User had logged into system. |
| **Main success scenario** | |  |  |  | | --- | --- | --- | |  | Actor Input | System Response | | 1 | Click "Lịch sử giao dịch" button |  | | 2 |  | Display payment history page | | 3 | Click any title of field |  | | 4 |  | Sort result table follow clicked field | |
| **Post Conditions** | Redirect user to main user workspace. |
| **Author** | NamNV |
| **Date** | 28/1/2013 |

### UC015: <Registered User> View Favorite list

#### Use Case Descriptions

|  |  |
| --- | --- |
| View Favorite List | |
| **Use Case ID** | UC015 |
| **Primary Actor** | Registered User, Administrator |
| **Brief Description** | When user wants view his/her favorite list |
| **Goal** | User can view all favorite list |
| **Triggers** |  |
| **Preconditions** | User had logged into system. |
| **Main success scenario** | |  |  |  | | --- | --- | --- | |  | Actor Input | System Response | | 1 | Click "Danh sách quan tâm" button |  | | 2 |  | Display favorite list popup | | 3 | Click X button on the right-top of popup |  | | 4 |  | Close favorite popup | |
| **Alternative Scenario** | |  |  |  | | --- | --- | --- | |  | Actor Input | System Response | | 1 | Click account link button |  | | 2 |  | Display user workspace | | 3 | Click "Danh sách quan tâm" tab |  | | 4 |  | Display favourite list | |
| **Post Conditions** | Redirect user to main workspace. |
| **Author** | NamNV |
| **Date** | 28/1/2013 |

### UC016: <Registered User> Reset Password

#### Use Case Descriptions

|  |  |
| --- | --- |
| Reset Password | |
| **Use Case ID** | UC016 |
| **Primary Actor** | Registered User, Administrator |
| **Brief Description** | When user forgot his/her password and want to get it back |
| **Goal** | User reset password and getting new one. |
| **Triggers** | User clicks on reset password link in Login/Register page |
| **Preconditions** | User had registered account information. |
| **Main success scenario** | |  |  |  | | --- | --- | --- | |  | Actor Input | System Response | | 1 | Click reset password button |  | | 2 |  | Display reset password page | | 3 | Fill in account information |  | | 4 |  | Validate information, reset password and send email notification to user email. | |
| **Alternative Scenario** | |  |  |  | | --- | --- | --- | |  | Actor Input | System Response | | 1 | Click reset password button |  | | 2 |  | Display reset password page | | 3 | Fill in account information and click any other link |  | | 4 |  | Validate information, reset password and send email notification to user email. | |
| **Exceptions** | |  |  |  | | --- | --- | --- | |  | Actor Input | System Response | | 1 | Click reset password button |  | | 2 |  | Display reset password page | | 3 | Fill in wrong account information |  | | 4 |  | Validate & display error message | |
| **Post Conditions** | Redirect user to previous page. |
| **Author** | NamNV |
| **Date** | 28/1/2013 |

### UC017: <Registered User> Delete post

#### Use Case Descriptions

|  |  |
| --- | --- |
| Delete Post | |
| **Use Case ID** | UC017 |
| **Primary Actor** | Registered User, Administrator |
| **Brief Description** | This use case allows user to delete their post |
| **Goal** | User deletes a specific post successfully. |
| **Triggers** | User logged into system and clicked account link |
| **Preconditions** |  |
| **Main success scenario** | |  |  |  | | --- | --- | --- | |  | Actor Input | System Response | | 1 | Click "Quản lý bài đăng" button |  | | 2 |  | Display list of posts | | 3 | Click on any title of post |  | | 4 |  | Display detail inforation of a post | | 5 | Click on "Xóa" |  | | 6 |  | Display confirmation popup | | 7 | Click "OK" |  | | 8 |  | Delete post from system and display "Xóa bài đăng thành công" message | |
| **Alternative Scenario** | |  |  |  | | --- | --- | --- | |  | Actor Input | System Response | | 1 | Click "Quản lý bài đăng" button |  | | 2 |  | Diplay list of posts | | 3 | Click on any title of post |  | | 4 |  | Display detail information of a post | | 5 | Click on "Xóa" |  | | 6 |  | Display confirmation popup | | 7 | Click "Hủy" button |  | | 8 |  | Close confirmation popup window | |
| **Post Conditions** | Redirect user to main manage page. |
| **Date** | 28/1/2013 |

### UC018: <Registered User> Edit Post

#### Use Case Descriptions

|  |  |
| --- | --- |
| Edit Post | |
| **Use Case ID** | UC019 |
| **Primary Actor** | Registered User, Administrator |
| **Brief Description** | When user want to edit his/her posts |
| **Goal** | User change post detail successfully. |
| **Triggers** | User accessed user workspace |
| **Preconditions** | User logged into system |
| **Main success scenario** | |  |  |  | | --- | --- | --- | |  | Actor Input | System Response | | 1 | Click on "Quản lý bài đăng" button |  | | 2 |  | Display list of all posts | | 3 | Click on title of post user wants to edit |  | | 4 |  | Open Edit Post page | | 5 | Changes information |  | | 6 |  | Validate, save into system and notify user | |
| **Alternative Scenario** | |  |  |  | | --- | --- | --- | |  | Actor Input | System Response | | 1 | Click on "Quản lý bài đăng" button |  | | 2 |  | Display list of all posts | | 3 | Edit post information and click "Hủy" |  | | 4 |  | Close detail post editing page | |
| **Post Conditions** | Redirect user to user work space. |
| **Author** | NamNV |
| **Date** | 28/1/2013 |

### UC0019: <Registered User> Log out

#### Use Case Descriptions

|  |  |
| --- | --- |
| Log Out | |
| **Use Case ID** | UC019 |
| **Primary Actor** | Registered User, Administrator |
| **Brief Description** | When user wants to log out from system to shut down current working session. |
| **Goal** | User logged out from system successfully. |
| **Triggers** | User clicks on "Đăng xuất" button |
| **Preconditions** | User had already logged into system |
| **Main success scenario** | |  |  |  | | --- | --- | --- | |  | Actor Input | System Response | | 1 | Click "Đăng xuất" button |  | | 2 |  | Logged user out from system | |
| **Post Conditions** | Redirect user to homepage |
| **Author** | NamNV |
| **Date** | 28/1/2013 |

### UC020: <Registered User> Login

#### Use Case Descriptions

|  |  |
| --- | --- |
| Login | |
| **Use Case ID** | UC020 |
| **Primary Actor** | Registered User, Administrator |
| **Brief Description** | When user wants to login into system to use advance functions. |
| **Goal** | User logged into system successfully. |
| **Triggers** | User clicks on "Đăng nhập" button |
| **Preconditions** | User had registered account information. |
| **Main success scenario** | |  |  |  | | --- | --- | --- | |  | Actor Input | System Response | | 1 | Click "Đăng nhập" button |  | | 2 |  | Display login page | | 3 | Fill in account information |  | | 4 |  | Validate information an log user into system | |
| **Alternative Scenario** | |  |  |  | | --- | --- | --- | |  | Actor Input | SystemResponse | | 1 | Click "Đăng nhập" button |  | | 2 |  | Display login page | | 3 | Fill in account information and click any other link |  | | 4 |  | Close login/register popup window and redirect to page link user licked | |
| **Exceptions** | |  |  |  | | --- | --- | --- | |  | Actor Input | System Response | | 1 | Click "Đăng nhập" butto |  | | 2 |  | Display login page | | 3 | Fill in wrong account information |  | | 4 |  | Validate & display error message | |
| **Post Conditions** | Redirect user to current page. |
| **Author** | NamNV |
| **Date** | 28/1/2013 |

### UC021: <Registered User> Change Password

#### Use Case Descriptions

|  |  |
| --- | --- |
| Change Password | |
| **Use Case ID** | UC021 |
| **Primary Actor** | Registered User, Administrator |
| **Brief Description** | When user want to change his/her password. |
| **Goal** | User changes account password successfully. |
| **Triggers** | User clicks on account link button. |
| **Preconditions** | User had logged into system. |
| **Main success scenario** | |  |  |  | | --- | --- | --- | |  | Actor Input | System Response | | 1 | Click "Thay đổi mật khẩu" button |  | | 2 |  | Display detail account password changing page | | 3 | Edit account password information |  | | 4 |  | Validate and save new password into system | |
| **Alternative Scenario** | |  |  |  | | --- | --- | --- | |  | Actor Input | System Response | | 1 | Click "Thay đổi mật khẩu" buttn |  | | 2 |  | Display detail account password changing page | | 3 | Edit account information and/or click "Hủy" |  | | 4 |  | Close detail account editing window | |
| **Exceptions** | |  |  |  | | --- | --- | --- | |  | Actor Input | System Response | | 1 | Click "Thay đổi mật khẩu" button |  | | 2 |  | Display detail accoun password editing window | | 3 | Fill in wrong account information or missing mandatory fields |  | | 4 |  | Validate & display error messages | |
| **Post Conditions** | Redirect user to main user work space. |
| **Author** | NamNV |
| **Date** | 28/1/2013 |

### UC022: <Admin> Add new score

#### Use Case Descriptions

|  |  |
| --- | --- |
| Add new Score | |
| Use Case ID | UC022 |
| Primary Actor | Administrator |
| Brief Description | This usecase allow admin to add new score point for extra options |
| Goal | Add new score to database |
| Triggers | Click "Tạo mới" on "Trọng số các tiêu chí phụ" page |
| Preconditions | Logged successfully into the system as Administrator |
| Main success scenario | |  |  |  | | --- | --- | --- | |  | Actor Input | System Response | | 1 | Click "Tạo mới" button |  | | 2 |  | Display Add new score page | | 3 | Enter details, click "Tạo mới" |  | | 4 |  | Save changes to database, redirect to "Trọng số các tiêu chí phụ" page | |
| Alternative success scenario | |  |  |  | | --- | --- | --- | |  | Actor Input | System Response | | 1 | Click "Tạo mới" button |  | | 2 |  | Display Add new score page | | 3 | Click "Quay lại" button |  | | 4 |  | Redirect to "Trọng số các tiêu chí phụ" page | |
| Post-conditions |  |
| Author | ChungNT |
| Date |  |

### UC023: <Admin> Change Score Value

#### Use Case Descriptions

|  |  |
| --- | --- |
| Change Score Value | |
| Use Case ID | UC023 |
| Primary Actor | Administrator |
| Brief Description | This usecase allows admin change score point for extra options |
| Goal | Modify scores value |
| Triggers | Go to "Trọng số các tiêu chí phụ" tab in Admin Control Panel |
| Preconditions | Logged successfully into the system as Administrator |
| Main success scenario | |  |  |  | | --- | --- | --- | |  | Actor Input | System Response | | 1 | Go to "Trọng số các tiêu chí phụ" tab |  | | 2 |  | Display a list of score values | | 3 | Modify values and click "Lưu thay đổi" |  | | 4 |  | Save changes to database | |
| Post-conditions |  |
| Author | ChungNT |
| Date |  |

### UC024: <Admin> View Scores List

#### Use Case Descriptions

|  |  |
| --- | --- |
| View Score List | |
| Use Case ID | UC024 |
| Primary Actor | Administrator |
| Brief Description | This usecase allows admin to view all list of score configuration |
| Goal | View a list of score configuration |
| Triggers | Click on "Trọng số các tiêu chí phụ" tab in Admin Control Panel |
| Preconditions | Logged successfully into the system as Administrator |
| Main success scenario | |  |  |  | | --- | --- | --- | |  | Actor Input | System Response | | 1 | Click on "Trọng số các tiêu chí phụ" tab in Admin Control Panel |  | | 2 |  | Display a list of scores configuration | |
| Post-conditions |  |
| Author | ChungNT |
| Date |  |

### UC025: <Admin> View Reported Post List

#### Use Case Descriptions

|  |  |
| --- | --- |
| View reported post List | |
| Use Case ID | UC025 |
| Primary Actor | Administrator |
| Brief Description | This usecase allows admin to view all reported posts |
| Goal | Display a list of all posts which were reported by user |
| Triggers | Click on "Bài bị report" tab on Admin Control Panel |
| Preconditions |  |
| Main success scenario | |  |  |  | | --- | --- | --- | |  | Actor Input | System Response | | 1 | Click on "Bài bị report" tab |  | | 2 |  | Display a list of reported post | | 3 |  |  | | 4 |  |  | |
| Author | ChungNT |
| Date |  |

### UC026: <Admin> Edit location

#### Use Case Descriptions

|  |  |
| --- | --- |
| Edit location | |
| Use Case ID | UC026 |
| Primary Actor | Administrator |
| Brief Description | This usecase allows admin to add nearby locations |
| Goal | Modify an existing location's detail |
| Triggers | Click on an item's name in the location list on "Địa điểm phụ" page |
| Preconditions | Logged successfully into the system as Administrator |
| Main success scenario | |  |  |  | | --- | --- | --- | |  | Actor Input | System Response | | 1 | Click on an item's name on "Địa điểm phụ" page |  | | 2 |  | Display editing page | | 3 | Modify location's details, click "Lưu" |  | | 4 |  | Save change to database | |
| Post-conditions |  |
| Author | ChungNT |
| Date |  |

### UC027: <Admin> Add new location

#### Use Case Descriptions

|  |  |
| --- | --- |
| Add new location | |
| Use Case ID | UC027 |
| Primary Actor | Administrator |
| Brief Description | This usecase allows admin to add new nearby locations |
| Goal | Add new location into database |
| Triggers | Click on "Tạo mới" button on "Địa điểm phụ" tab in Admin Control Panel |
| Preconditions | Logged successfully into the system as Administrator |
| Main success scenario | |  |  |  | | --- | --- | --- | |  | Actor Input | System Response | | 1 | Click to "Tạo mới" button |  | | 2 |  | Display Add new Location page | | 3 | Enter new location details and click "Tạo mới" button |  | | 4 |  | Add new location to data base and redirect to "Địa điểm phụ" page | | 5 |  |  | |
| Alternative success scenario | |  |  |  | | --- | --- | --- | |  | Actor Input | System Response | | 1 | Click to "Tạo mới" button |  | | 2 |  | Display Add new Location page | | 3 | Click on "Quay lại" button |  | | 4 |  | Redirect to "Địa điểm phụ" page | |
| Post-conditions |  |
| Author | ChungNT |
| Date |  |

### UC028: <Admin> View nearby location list

#### Use Case Descriptions

|  |  |
| --- | --- |
| View nearby location list | |
| Use Case ID | UC028 |
| Primary Actor | Administrator |
| Brief Description | This usecase allows admin to view all nearby locations |
| Goal | View a list of nearby locations which are currently existing in the database |
| Triggers | User go to the "Địa điểm phụ" tab in Admin Control Panel |
| Preconditions | User logged successfully into the system as Admin |
| Main success scenario | |  |  |  | | --- | --- | --- | |  | Actor Input | System Response | | 1 | Go to "Địa điểm phụ" tab in Admin Control Panel |  | | 2 |  | Display a list of all locations | |
| Post-conditions |  |
| Author | ChungNT |
| Date |  |

### UC029:<Admin> View posts

#### Use Case Descriptions

|  |  |
| --- | --- |
| View Posts | |
| Use Case ID | UC029 |
| Primary Actor | Administrator |
| Goal | View list of post with filter |
| Trigger | Admin logged into admin page |
| Brief Description | This usecase allows admin to view list of all post on systems. |
| Alternative scenario | |  |  |  | | --- | --- | --- | |  | Actor Input | System Response | | 1 | Click to “Manage Post" button |  | | 2 |  | Redirect to Manage post detail page | | 3 | Select filter& click Search |  | | 4 |  | Show result posts | |
| Post-conditions |  |
| Business rules | Each page display 10 records |
| Author | ChungNT |
| Date |  |

### UC030: <Admin> Manage posts

#### Use Case Descriptions

|  |  |
| --- | --- |
| Manage Posts | |
| Use Case ID | UC030 |
| Primary Actor | Administrator |
| Goal | View bad posts and help administrator or moderator review it |
| Trigger | Click to “Manage posts" menu and click to "Manage bad posts" submenu |
| Brief Description | Filter bad post function help administrator or moderator can view the post which contains some specified bad words and they can delete, edit or accept this posts |
| Preconditions | Successfully logged into the system with Admin role or Moderator role and accessed to Admin page and Manage bad posts page |
| Main success scenarios | |  |  |  | | --- | --- | --- | |  | Actor Input | System Response | | 1 | Click to “Manage posts" menu and click to "Manage bad posts" submenu |  | | 2 |  | Redirect to manage bad posts detail page | |
| Business rules | Each page display 10 records |
| Author | ChungNT |
| Date |  |

### UC031: <Admin> View detail of payment

#### Use Case Descriptions

|  |  |
| --- | --- |
| View detail of Payment | |
| **Use Case ID** | UC031 |
| **Primary Actor** | Administrator |
| **Brief Description** | This usecase allow admin to view detail of SMS payment |
| **Preconditions** | Admin logged in to Admin Control Panel |
| **Main success scenario** | |  |  |  | | --- | --- | --- | |  | Actor Input | System Response | | 1 | Click on a hyperlink of a payment on payment list |  | | 2 |  | Open payment detail page of that specific payment | |
| Author | ChungNT |

### UC032: <Admin> List payments

#### Use Case Descriptions

|  |  |
| --- | --- |
| List payments | |
| **Use Case ID** | UC032 |
| **Primary Actor** | Administrator |
| **Brief Description** | This usecase allow admin to view all SMS payment of all user |
| **Preconditions** | Admin logged in to Admin Control Panel |
| **Main success scenario** | |  |  |  | | --- | --- | --- | |  | Actor Input | System Response | | 1 | Click on Payment Management button |  | | 2 |  | Open payment management page with list of recent payments from user | |
| **Post Conditions** |  |
| **Author** | ChungNT |
| **Date** |  |

### UC033: <Admin> Manage bad posts

#### Use Case Descriptions

|  |  |
| --- | --- |
| Manage bad posts | |
| Use Case ID | UC033 |
| Primary Actor | Administrator |
| Goal | View bad posts and help administrator or moderator review it |
| Trigger | Click to “Manage posts" menu and click to "Manage bad posts" submenu |
| Brief Description | Filter bad post function help administrator or moderator can view the post which contains some specified bad words and they can delete, edit or accept this posts |
| Preconditions | Successfully logged into the system with Admin role or Moderator role and accessed to Admin page and Manage bad posts page |
| Main success scenarios | |  |  |  | | --- | --- | --- | |  | Actor Input | System Response | | 1 | Click to “Manage posts" menu and click to "Manage bad posts" submenu |  | | 2 |  | Redirect to manage bad posts detail page | |
| Business rules | Each page display 10 records |
| Author | ChungNT |
| Date |  |

### UC034: <Admin> Edit category

#### Use Case Descriptions

|  |  |
| --- | --- |
| Edit category | |
| Use Case ID | UC034 |
| Primary Actor | Administrator |
| Goal | Administrator can edit existing category |
| Trigger | Click to "Sửa" button |
| Brief Description | Administrator can update category information |
| Preconditions | Logged into the system with admin role and open Category Detail page |
| Main success scenarios | |  |  |  | | --- | --- | --- | |  | Actor Input | System Response | | 1 | Click to "Sửa" button |  | | 2 |  | Redirect to Edit category page | | 3 | Change some category information and click "Lưu" button |  | | 4 |  | Redirect to Manage Category page and display message “Sửa thành công” | |
| Exception | |  |  |  | | --- | --- | --- | |  | Actor Input | System Response | | 1 | Click to "Sửa" button |  | | 2 |  | Redirect to Edit category page | | 3 | Leave required fields blank and click "Lưu" button |  | | 4 |  | Displayed error message inform admin can’t leave required fields blank | |
| Relationship | View category information use case |
| Post-conditions | Redirect to manage category page |
| Author | NamNV |
| Date |  |

### UC035: <Admin> Create new category

#### Use Case Descriptions

|  |  |
| --- | --- |
| Create new category | |
| Use Case ID | UC035 |
| Primary Actor | Administrator |
| Goal | Administrator can create new category |
| Trigger | Click to “Thể loại” menu then click to “Thêm mới” sub menu |
| Brief Description | Administrator can create new category |
| Preconditions | Logged into the system with admin role and go to ManageCategories page |
| Main success scenarios | |  |  |  | | --- | --- | --- | |  | Actor Input | System Response | | 1 | Click to “Thêm mới” |  | | 2 |  | Redirect to create new category page | | 3 | Enter needed information then click "Thêm" |  | | 4 |  | Display message" Thêm thành công" and redirect to manage category page. | |
| Alternative scenario | |  |  |  | | --- | --- | --- | |  | Actor Input | System Response | | 1 | Click to “Thêm mới” |  | | 2 |  | Redirect to create new category page | | 3 | Lack required information then click "Lưu" or click "Quay lại danh sách" |  | | 4 |  | Display error message or redirect to manage category page | |
| Post-conditions | Open create new category page |
| Author | HungCQ |
| Date | Jan 21, 2013 |

### UC036: <Admin> View categories list

#### Use Case Descriptions

|  |  |
| --- | --- |
| View categories list | |
| Use Case ID | UC036 |
| Primary Actor | Administrator |
| Goal | Administrator view detail information of categories by click to "Thể loại " menu on Admin page. |
| Trigger | Click to "Thể loại" menu on admin page |
| Brief Description | Administrator view detail information of categories by click to "Thể loại " on admin page |
| Preconditions | Logged into the system with admin role. |
| Main success scenarios | |  |  |  | | --- | --- | --- | |  | Actor Input | System Response | | 1 | Click to "Thể loại " menu on Admin page. |  | | 2 |  | Redirect to Category detail page | |
| Post-conditions | Display Category detail page |
| Relationship | List all categories use case |
| Author | HungCQ |
| Date | Jan 21, 2013 |

### UC037: <Admin> Manage categories

#### Use Case Descriptions

|  |  |
| --- | --- |
| Manage categories | |
| Use Case ID | UC037 |
| Primary Actor | Administrator |
| Goal | Allow administrator list all categories in website |
| Trigger | Click to “Category” menu then click to “View all categories” sub menu |
| Brief Description | Display View all categories page with all categories in the system |
| Preconditions | Logged into the system with admin role and go to Admin page |
| Main success scenarios | |  |  |  | | --- | --- | --- | |  | Actor Input | System Response | | 1 | Click to “Category” menu then click to “View all categories” sub menu |  | | 2 |  | Display View all categories page with all categories in the system | |
| Post-conditions | Open View all categories page |
| Business rules | Each page display 10 records |
| Author | HungCQ |
| Date | Jan 21, 2013 9:29:17 PM |

### UC038: <Admin> View bad posts detail

#### Use Case Descriptions

|  |  |
| --- | --- |
| View bad posts detail | |
| Use Case ID | UC038 |
| Primary Actor | Administrator |
| Goal | View bad posts and help administrator review it |
| Trigger | Click to title of post link in manage bad post |
| Brief Description | Filter bad post function help administrator or moderator can view the post which contains some specified bad words and they can delete, edit or accept this posts |
| Preconditions | Successfully logged into the system with Admin role and accessed to Manage bad post page |
| Main success scenarios | |  |  |  | | --- | --- | --- | |  | Actor Input | System Response | | 1 | Click to title link |  | | 2 |  | Redirect to View post detail page | | 3 | Edit some information invalid |  | | 4 | Click to “Cho phép” button |  | | 5 |  | Bad post will be removed from the list, and system display message “Bài đã được đăng thành công" | |
| Alternative scenario | |  |  |  | | --- | --- | --- | |  | Actor Input | System Response | | 1 | Click to title link |  | | 2 |  | Redirect to View post detail page | | 3 | Click to “Xóa” button |  | | 4 |  | Popup confirm | | 5 | Click to “OK” button |  | |
| Alternative scenario | |  |  |  | | --- | --- | --- | |  | Actor Input | System Response | | 1 | Click to “View" button |  | | 2 |  | Redirect to View post detail page | | 3 | Click to “Delete” button |  | | 4 |  | Popup confirm | | 5 | Click to "Cancel" button |  | | 6 |  | Popup close | |
| Post-conditions |  |
| Business rules | Each page display 10 records |
| Author |  |
| Date |  |

### UC039: <Admin> Edit a district

#### Use Case Descriptions

|  |  |
| --- | --- |
| Edit a district | |
| Use Case ID | UC039 |
| Primary Actor | Administrator |
| Brief Description | Administrator can edit a district |
| Goal | Edit a district |
| Triggers | Click to "Sửa" button |
| Preconditions | Successfully logged into the system with Admin role and go to Manage District page |
| Main success scenario | |  |  |  | | --- | --- | --- | |  | Actor Input | System Response | | 1 | Click to "Sửa" button |  | | 2 |  | Redirect to Edit district page | | 3 | Enter needed information |  | | 4 | Click to "Lưu" button |  | | 5 |  | Display message "District has been updated successfully" and redirect to Manage cities page with new city was added | |
| Alternative Scenario - Suggestion | |  |  |  | | --- | --- | --- | |  | Actor Input | System Response | | 1 | Click to "Sửa" button |  | | 2 |  | Redirect to Edit district page | | 3 | Enter needed information |  | | 4 | Click to "Quay lại danh sách" button |  | | 5 |  | Redirect to Manage District page | |
| Post-conditions | Redirect back to Manage District page |
| Exceptions | |  |  |  | | --- | --- | --- | |  | Actor Input | System Response | | 1 | Click to "Sửa" button |  | | 2 |  | Redirect to Edit district page | | 3 | Leave District name blank |  | | 4 | Click to "Lưu" button |  | | 5 |  | Display message "Bạn hãy điền tên quận huyện." | |
| Author | Vietvh |
| Date | Jan 21, 2013 |

### UC040: <Admin> Add a district

#### Use Case Descriptions

|  |  |
| --- | --- |
| Add a district | |
| Use Case ID | UC040 |
| Primary Actor | Administrator |
| Brief Description | Administrator can add new district |
| Goal | Add a new district in database |
| Triggers | Click to "Quận huyện" menu then click to "Thêm mới" button |
| Preconditions | Successfully logged into the system with Admin role and go to manage district page |
| Main success scenario | |  |  |  | | --- | --- | --- | |  | Actor Input | System Response | | 1 | Click to "Thêm" button |  | | 2 |  | Redirect to Add new district page | | 3 | Enter needed information |  | | 4 | Click to "Lưu" button |  | | 5 |  | Display message "Thêm thành công" and redirect to Manage cities page with new city was added | |
| Alternative Scenario - Suggestion | |  |  |  | | --- | --- | --- | |  | Actor Input | System Response | | 1 | Click to "Thêm" button |  | | 2 |  | Redirect to Add new district page | | 3 | Enter needed information |  | | 4 | Click to "Quay lại danh sách" button |  | | 5 |  | Redirect to Manage district page | |
| Post-conditions | New district will be added to database and displayed in Manage District page |
| Exceptions | |  |  |  | | --- | --- | --- | |  | Actor Input | System Response | | 1 | Click to "Districts" menu then click to "Add a new district" sub menu |  | | 2 |  | Redirect to Add new district page | | 3 | Leave District name blank |  | | 4 | Click to "Save" button |  | | 5 |  | Display message "Name is required." | |
| Source |  |
| Author | Vietvh |
| Date | Jan 21, 2013 |

### UC041: <Admin> View district list

#### Use Case Descriptions

|  |  |
| --- | --- |
| View district list | |
| Use Case ID | UC041 |
| Primary Actor | Administrator |
| Brief Description | This usecase allows admin to view district list |
| Goal | Admin can view existed district list. |
| Triggers | Click to "Quận huyện" menu |
| Preconditions | Successfully logged into the system with Admin role and go to admin page |
| Main success scenario | |  |  |  | | --- | --- | --- | |  | Actor Input | System Response | | 1 | Click to "Quận huyện" menu |  | | 2 |  | Display District list | |
| Post-conditions | Districts List page will be displayed with all existed districts |
| Exceptions |  |
| Author | Vietvh |
| Date | Jan 21, 2013 |

### UC042: <Admin> Edit a city

#### Use Case Descriptions

|  |  |
| --- | --- |
| Edit a city | |
| Use Case ID | UC042 |
| Primary Actor | Administrator |
| Brief Description | Administrator can edit a city |
| Goal | Edit a city |
| Triggers | Click to "Sửa" button |
| Preconditions | Successfully logged into the system with Admin role and go to Manage City page |
| Main success scenario | |  |  |  | | --- | --- | --- | |  | Actor Input | System Response | | 1 | Click to "Sửa" |  | | 2 |  | Redirect to Edit city page | | 3 | Enter needed information |  | | 4 | Click to "Lưu" button |  | | 5 |  | Redirect to Manage cities page with new city was added and display message "Sửa thành công" | |
| Alternative Scenario - Suggestion | |  |  |  | | --- | --- | --- | |  | Actor Input | System Response | | 1 | Click to "Sửa" button |  | | 2 |  | Redirect to Edit city page | | 3 | Enter needed information |  | | 4 | Click to "Quay lại danh sách" button |  | | 5 |  | Redirect to Manage City page | |
| Post-conditions | Redirect back to Manage City page |
| Exceptions | |  |  |  | | --- | --- | --- | |  | Actor Input | System Response | | 1 | Click to "Sửa" button |  | | 2 |  | Redirect to Edit city page | | 3 | Leave City name blank |  | | 4 | Click to "Lưu" button |  | | 5 |  | Display message "Hãy điền tên tỉnh thành." | |
| Author | Vietvh |
| Date | Jan 21, 2013 |

### UC043: <Admin> Add a city

#### Use Case Descriptions

|  |  |
| --- | --- |
| Add a city | |
| Use Case ID | UC043 |
| Primary Actor | Administrator |
| Brief Description | Administrator can add new city |
| Goal | Add a new city in database |
| Triggers | Click to "Tỉnh/Thành" menu then click to "Thêm mới" button |
| Preconditions | Successfully logged into the system with Admin role and go to manage cities page |
| Main success scenario | |  |  |  | | --- | --- | --- | |  | Actor Input | System Response | | 1 | Click to "Tạo mới"button |  | | 2 |  | Redirect to Add new city page | | 3 | Enter needed information |  | | 4 | Click to "Tạo mới" button |  | | 5 |  | Add new city to database and redirect to "Tỉnh/Thành" page | |
| Alternative Scenario - Suggestion | |  |  |  | | --- | --- | --- | |  | Actor Input | System Response | | 1 | Click to "Thêm" button |  | | 2 |  | Redirect to Add new city page | | 3 | Enter needed information |  | | 4 | Click to "Quay lại danh sách" button |  | | 5 |  | Redirect to Manage City page | |
| Post-conditions | New city will be added to database and displayed in Manage City page |
| Exceptions | |  |  |  | | --- | --- | --- | |  | Actor Input | System Response | | 1 | Click to "Thêm" button |  | | 2 |  | Redirect to Add new city page | | 3 | Leave City name blank |  | | 4 | Click to "Lưu" button |  | | 5 |  | Display message "Hãy điền tên tỉnh thành." | |
| Author | Vietvh |
| Date | Jan 21, 2013 |

### UC044: <Admin> View city list

#### Use Case Descriptions

|  |  |
| --- | --- |
| View city list | |
| Use Case ID | UC044 |
| Primary Actor | Administrator |
| Brief Description | This usecase allows admin to view all city list |
| Goal | Administrator view detail information of city by click to "Thể loại " menu on Admin page. |
| Triggers | Click to "Tỉnh thành" menu |
| Preconditions | Successfully logged into the system with Admin role and go to admin page |
| Main success scenario | |  |  |  | | --- | --- | --- | |  | Actor Input | System Response | | 1 | Click to "Tỉnh thành" menu |  | | 2 |  | Display City list | |
| Post-conditions | Cities List page will be displayed with all existed cities |
| Relationship | List all categories use case |
| Author | Vietvh |
| Date | Jan 21, 2013 |

## Software System Attributes

### Usability

**GUI**

* All the text, image text and help documents should be in Vietnamese.
* The interface should be elegant, simple and out-standing.

**Usability for end-users**

* Searching tool should be easy to use.
* The website should provide a help page to support novice users.
* Users can use almost main functionality of the system without logging in to the system.
* The system should remember information (but not confidential) that users have to provide regularly. For example: name, address…

**Usability for admin and staff**

* Website admin should need no more than one day of training to be productive with the system.
* Detailed help should be available for the admin in separate documentations.

**Installation**

* The system must be easy to deploy. Customer can deploy successfully and learn to configure, maintain the system within one day of training.
* The documentation for installation must be included. It describes detailed steps for installing or deploying the system. The customer can follow the steps without direct help from the developing team.

### Reliability

* Initial data must be collected carefully and correctly
* The database must be backed up regularly and can be recovered if necessary
* Have a good spam filter
* Not conflict with other software
* Mean Time To Repair (MTTR): immediately when admin finds out problem or website is attacked by someone. Average 1 day.
* Maximum Bugs or Defect Rate: should be 5 bugs / KLOC.
* Bugs or Defect Rate
  + Minor bugs: bugs related to GUI
  + Significant bugs: bugs related to minor business logic
  + Critical *bugs: function can’t execute correctly, completely loss of data, disconnect to the server*

### Availability

* Systems should run 24 hours 7 days
* Can be temporarily turned off when upgrading and must display an alternative maintenance page in such occasions
* Percentage of up time available is should be 97 – 99% base on hosting provider, client infrastructure..

### Security

* Privacy: the system should provide protection method for protecting user information from outside or from other users. All the information of users must not be available for anyone or software that is not part of the system.
* User password is also invisible for the system administrator with MD5 encryption.
* The system must provide methods to prevent common security attacks. E.g. SQL injection, D-Dos…
* The system must provide secure methods for users to recovery their password.
* Secure information of customers should not be stored on customer’s machine.
* Utilize certain cryptographic techniques for database

### Maintainability

**Coding standards and naming conventions**

* Output of the project must include coding standards and naming conventions documentations. Implementation code must be easy to maintain.
* All code must be clearly commented, including class, method documentations.

**Design**

* The design of the system must be loosely coupled that chances on some module will not affect others.

**Logging**

* All the errors should be logged, supporting for bug fixing and maintenance.
* All strange or sensitive situations should also be logged.

### Portability

* Any people can use Website with a browser and an Internet connection.

### Performance

**Load time**

* Every page should be completely displayed within: average 1.5 second and maximum 5 seconds.
* Searching should return and display the result within 2 seconds.
* Frequently accessed data must be cached

**Mailing system**

* Mail server should send emails within 1 minute after associated events happen.

**Capacity**

* The system should serve correctly and reasonably with at least 1000 online users at a moment.
* The system can store at least 100000 houses and 10000 users without affecting the loading speed.
* If the system is busy, it should to inform users about that.

**Compatibility**

* The system should provide elegant responses for nowadays common screen resolutions: 1024\*768, 1280\*800.
* The output must be compatible with all common browsers with recent build: Mozilla Firefox, Internet Explorer, Google Chrome, Apple Safari, and Opera.