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| |  |  | | --- | --- | | **Logo_FPT_University_doc** | **MINISTRY OF EDUCATION AND TRAINING** |   **FPT UNIVERSITY**   |  | | --- | | Capstone Project | |
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| Metro calendar  Report 3: Software Requirements Specifications |
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|  |

- Hanoi, 6/2012 -

**Record of Changes**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Date** | **Change Item** | **Description** | **By** | **Version** |
| 10/06/2012 | All | Create the document | ToanDX | 0.1 |
| 16/06/2012 | All | Add content, edit format document | ToanDX | 0.2 |
| 20/06/2012 | All | Update description, use case diagram | ToanDX | 0.3 |
| 24/06/2011 | All | Add software system attributes | ToanDX | 1.0 |

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# User Requirement Specification

## Personal User Requirements

* User can create accounts on the website. Email address and password are required for registering an account on the website. 1 email address can only be used once for registering.
* User can edit his/her account information: Display Name, Avatar, and Password. But he/she can’t change his/her email address which was used for registering.
* User can change password which was registered in case he/she forgot it. Change Password link will be in content of email sent to user. This link will open Change Password page for user.
* User can change his/her password through his/her User Profile page.
* User can see his/her account information and other’s.
* User can see other user’s statistic like: Display Name, Registered Date, number of created recipes, number of posted comments, questions and answers.
* User can search for contents by using Search functiơn.
* User can view information of recipes, rate the recipes, add it to favorites list, share it on social networks (Twitter and Facebook) or report it as spam.
* User can upload images for recipes.
* User can view information tips, rate the tips, add it to favorites list, share it on social networks (Twitter and Facebook) or report it as spam.
* User can upload images for tips.
* User can view information of news, rate the news, add it to favorites list, share it on social networks (Twitter and Facebook) or report it as spam.
* User can upload images for news.
* User can view his/her favorites list and remove recipes from the list at his/her profile page.
* User can see list of questions, recipes, tips, news he/she posted at his/her profile page.
* User can write comments for recipes, tips, news or delete it.
* User can thumb up, thumb down or report comments of other users but his/her comments
* User can create recipes, tips, news and edit his/her them.
* User can approve and edit recipes, tips, news of other users when they rank up in ranking system their account will be more prestige.
* User can view and post questions on Question & Answer page.
* User can answer to questions, thumb up, thumb down or report as it as spam.
* User can vote up, vote down or report other user’s answers.
* User can delete his/her answers.
* User can view words from dictionary function.
* User can create or contribute meaning of word.

## Project manager Requirements

* Admin can view a list of all categories in the system, add new categories, edit categories and delete categories.
* Admin can view a list of all users in the system, view and edit user information, active users on the system or delete users.
* Admin can view a list of spam reports, decide they are spam or not. Spam reports include reports about recipes, tips and news, reports about comments, reports about questions, reports about answers and reports about recipes, tips and news.
* Admin can use all functions in the system.
* Admin can view a list of all recipes, tips, news, questions in the system, edit or delete these them.
* Admin can see statistics on the whole system: Registered User number, Activated User number, Comment number, Question number, Answer number, All the Time Visitor number, Today Visitor number, Online Visitor number, Recipe number, Tip number, Question number,…
* Admin users can approve a recipe is editor choice’s recipe.
* Admin users can remove approved recipe
* Admin users can approve word, update word.
* Admin can remove unapproved word from waiting list.
* Admin can delete word from dictionary.

## Task arrangements requirements

* User Point will be used in user ranking system of the website
* User Point is calculated as follow:
  + - * Starter point for every user is 10
      * Create a recipes: +30
      * Create a tip: +20
      * Create a news: +15
      * Max point per day: < 120
      * 1 time spam (any kind): - 25
* CP will be used to set rank for user:
* Phụ bếp: 0
* Đầu bếp tập sự: >100
* Đầu bếp chính thức: >500
* Đầu bếp trứ danh: >1000
* Bếp phó: >2000
* Bếp trưởng >3500
* Siêu đầu bếp >6000
* Vua đầu bếp: >10000
* 10 user who post most answers will be in on Most Contributors list in Q&A page
* There is a list for 20 Newest Questions at Q&A page and Home page.
* A list of 5 newest recipes, news and tips is displayed at home page by default.
* Every list is updated each 10 minutes.

## Weather requirements

* A comment/answer can’t be blank and must be less than 4000 characters.
* When the number of comments/answers is big, the comments/replies will be displayed each time 10 comments/answers. To see more comments/answers users need click to “Xem thêm”.
* 2 most voted up comments/answers will be highlighted and put on top of Comment Area/Answer Area. These highlighted comments/answers still can be treated as normal comments/answers.
* Each user can only post 1 comment for a recipe or 1 answer for a question each 3 minutes.

## Timeline day view Requirements

A cooking tip has following information:

* Name (required)
* Method (required)
* Description
* Number of view
* Rating
* Images: images for tip
* Suggestion List: 5 highest popularity tips in the same category, 10 latest tips

## Week view Requirements

A cooking news has following information:

* Name (required)
* Description
* Number of view
* Rating
* Images: images for news
* Suggestion List: 10 latest news

## Month view Requirements

There is a kind of search in the website:

This function provides users more options search. These options are:

* Search by keyword
* Search by category

## Search Requirements

There is a kind of search in the website:

This function provides users more options search. These options are:

* Search by keyword
* Search by category

# System Requirement Specification

## External Interface Requirements

### User Interfaces

* Interface need to attract the attention of users to the product image. Products are things having a lot of colors and diversity combination in order to attract users. Website should have the background simple, less color, less attention but that also shows clear boundaries between each section: photos with text, photos with photos, and photos with the background…So color choices should be pleasing to the eye and should stimulate the user's interest.
* 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

Our website needs to run are the peripheral devices mouse and keyboard. System can display many image formats, such as: jpg, jpeg.

### Software Interfaces

* Products run on web application, it requires the use of programming languages supported on the browser.
* Outside, the system should use the program to manage resources data, this program can be combined with the system, can change and update from the system. Data products will be exchanged between systems and external data through data management software

|  |  |  |
| --- | --- | --- |
| Software name | Version | Source |
| .NET Framework | 4.0 | Microsoft |
| SQL Server | R2 | Microsoft |
| Visual Studio | 2010 | Microsoft |
| MVC | 3.0 | Microsoft |
| Enterprise Library |  | Microsoft |

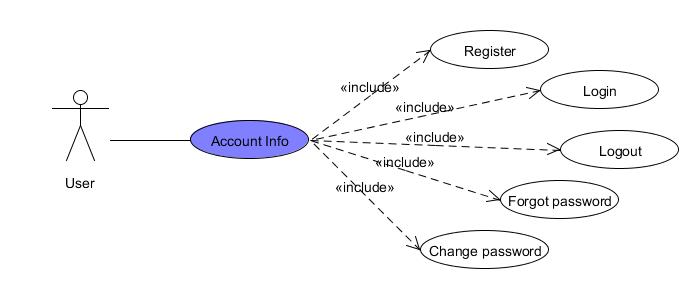
### Communications Protocol

* The system uses the protocol http, https to call service from third parties such as: Google, Face book, Yahoo to authenticate users or share contents.
* System implemented on the browser, using standard protocols to communicate between users and server.
* In the process of communication, some important information of the user system will use the protocol https to transfer data.
* The system should produce nicely formatted HTML that popular social network such as Face book, Google+ can share information.

## System Features

### Front – end

#### Account Information



* + - 1. Register Account

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **USE CASE – Register Account SPECIFICATION** | | | | |
| Use-case No. | UC019 | Use-case Version | | 1.0 |
| Use-case Name | Register account | | | |
| Author | KienBT | | | |
| Date | 02/06/2012 | Priority | High | |
| **Actor:**  Anonymous user  **Summary:**  Anonymous user can register with real personal information to become an authenticated user.  **Goal:**  Anonymous user became authenticated user  **Triggers**  Click to “Đăng kí thành viên” button on log in area at top right corner of the website  **Preconditions:**  Access to the website  **Post Conditions:**  Navigate the user back to home page.  **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Click to “Đăng kí” button on log in area at top right corner of the website | Website navigate the user to register page | | 2 | Enter value in required textboxes correctly |  | | 6 | Click to “Đăng kí” button | Send activation email to registered email address and redirect to Success page with some information about user |   **Alternative Scenario:**  N/A  **Exceptions:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Click to “Đăng kí” button on log in area at top right corner of the website | Website navigate the user to register page | | 2 | Enter wrong value in required textboxes |  | | 3 | Click to “Đăng kí” button | Display error message”Bạn hãy sửa những lỗi bên dưới và thử lại.” |   **Relationships:**  N/A  **Business Rules:**   |  |  |  | | --- | --- | --- | | No | Rule Description | Error Message | | 1 | In order to register a new account, email address, password and confirm password is required. |  | | 2 | One email address can only be used for registering once |  | | | | | |

* + - 1. Login

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **USE CASE - Login SPECIFICATION** | | | | |
| Use-case No. | UC020 | Use-case Version | | 1.0 |
| Use-case Name | Login | | | |
| Author | KienBT | | | |
| Date | 02/06/2012 | Priority | High | |
| **Actor:**  Authenticated User  **Summary:**  Authenticated user and manager must be login to website to be able do their function such as post, comment.  **Goal**  Logged in to system  **Triggers**  Click to “Đăng nhập” button  **Preconditions:**  N/A  **Post Conditions:**  N/A  **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Enter account and password | Redirect user to log in page | | 2 | Click to “Đăng nhập” button | Navigate the user back to previous page |   **Alternative Scenario:**  N/A  **Exceptions:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Click to “Đăng nhập” at log in area on top right corner of the website | Redirect user to log in page | | 2 | Enter wrong user name, password |  | | 3 | Click to “Đăng nhập” button | Show error message “Bạn hãy sửa những lỗi bên dưới và thử lại. |   **Relationships:**  N/A  **Business Rules:**  Authenticated users enter account and password correctly. | | | | |

* + - 1. Logout

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **USE CASE - Logout SPECIFICATION** | | | | |
| Use-case No. | UC021 | Use-case Version | | 1.0 |
| Use-case Name | Logout | | | |
| Author | KienBT | | | |
| Date | 02/06/2012 | Priority | High | |
| **Actor:**  Authenticated User  **Summary:**  Authenticated user logout from website  **Goal**  Logged out from system  **Triggers**  N/A  **Preconditions:**  Logged into website  **Post Conditions:**  N/A  **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Click to “Thoát” button at top right corner of the website | Redirect to current page and view website as anonymous user. |   **Alternative Scenario:**  N/A  **Exceptions:**  N/A  **Relationships:**  Login function  **Business Rules:**  N/A | | | | |

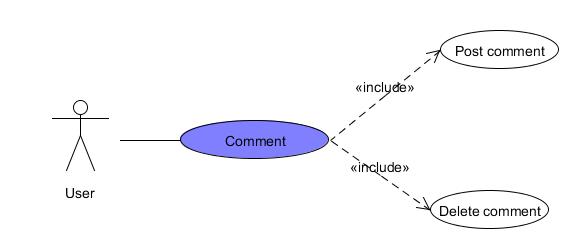
* + - 1. Forgot password

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **USE CASE – Forgot password SPECIFICATION** | | | | |
| Use-case No. | UC022 | Use-case Version | | 1.0 |
| Use-case Name | Forgot password | | | |
| Author | KienBT | | | |
| Date | 02/06/2012 | Priority | High | |
| **Actor:**  Authenticated User  **Summary:**  System will send the forgotten password to email.  **Goal**  User receives forgotten password from system.  **Triggers**  Click “Quên mật khẩu” button  **Preconditions:**  N/A  **Post Conditions:**  Password will be sent to user’s email.  **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Enter user email |  | | 2 | Click “Quên mật khẩu” button | Display a message “Mật khẩu của bạn đã được gửi vào email” |   **Alternative Scenario:**  N/A  **Exceptions:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Enter invalid email |  | | 2 | Click “Quên mật khẩu” button | Display a message “Email là bắt buộc” |   **Relationships:**  N/A  **Business Rules:**  User must enter correct email and captcha | | | | |

* + - 1. Change password

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **USE CASE – Change password SPECIFICATION** | | | | |
| Use-case No. | UC023 | Use-case Version | | 1.0 |
| Use-case Name | Change password | | | |
| Author | KienBT | | | |
| Date | 02/06/2012 | Priority | Normal | |
| **Actor:**  Authenticated User  **Summary:**  For security, many users often change their account password each 2-3 months. User can change their password by go to their user profile and click to “Đổi mật khẩu” hyperlink  **Goal**  Change password successfully  **Triggers**  Click to “Đổi mật khẩu” hyperlink  **Preconditions:**  Logged into website successfully.  **Post Conditions:**  Stay remains at forgot pass page  **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Click to “Đổi mật khẩu” button | Navigate user to change password page | | 2 | Enter required fields |  | | 3 | Click to “Lưu” button | Display message “Đổi mật khẩu thành công” |   **Alternative Scenario:**  N/A  **Exceptions:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Click to “Lưu” button | Display message “Bạn hãy sửa những lỗi bên dưới và thử lại.” |   **Relationships:**  N/A  **Business Rules:**  Old password, new password and confirm password are required to change password | | | | |

#### Manage Tasks



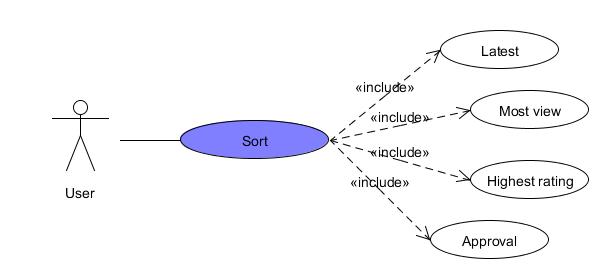
* + - 1. Post comment

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **USE CASE – Post comment SPECIFICATION** | | | | |
| Use-case No. | UC024 | Use-case Version | | 1.0 |
| Use-case Name | Post comment | | | |
| Author | KienBT | | | |
| Date | 02/06/2012 | Priority | High | |
| **Actor:**  Authenticated User  **Summary:**  When users want to express his/her opinion about recipes or tips.  **Goal**  User post comment successfully.  **Triggers**  Click “bình luận” textbox  **Preconditions:**  Logged into website successfully.  **Post Conditions:**  Stay remain at current recipe page with a comment was added.  **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Click to “bình luận” textbox and type comment |  | | 2 | Click “Bình luận” button | Stay remains current page with new comment is posted |   **Alternative Scenario:**  N/A  **Exceptions:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Click to “bình luận” textbox and type comment |  | | 2 | Click “Bình luận” button | Display a message “Bình luận không hợp lệ.” |   **Relationships:**  N/A  **Business Rules:**  Comment must be greater than 0 characters. | | | | |

* + - 1. Delete comment

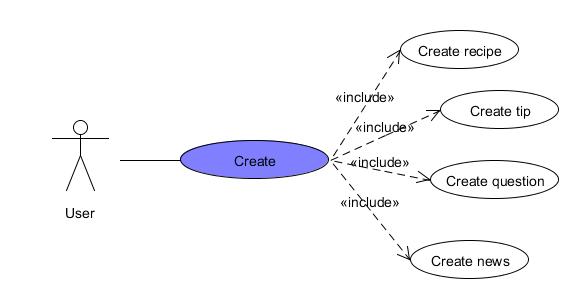
|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **USE CASE – Delete comment SPECIFICATION** | | | | |
| Use-case No. | UC025 | Use-case Version | | 1.0 |
| Use-case Name | Delete comment | | | |
| Author | KienBT | | | |
| Date | 02/06/2012 | Priority | Normal | |
| **Actor:**  Authenticated User  **Summary:**  When users want to delete his/her comments.  **Goal**  User deletes comments.  **Triggers**  Click to posted comments.  **Preconditions:**  Logged into website successfully.  **Post Conditions:**  Stay remain at current recipe page with a comment was deleted.  **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Click “X” on comment textbox | Stay remains current page with comment was deleted. |   **Alternative Scenario:**  N/A  **Exceptions:**  N/A  **Relationships:**  N/A  **Business Rules:**  Must be your comments. | | | | |

#### Manage Project Tasks



|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **USE CASE – Sort Content SPECIFICATION** | | | | |
| **Use-case No.** | UC044 | **Use-case Version** | | 1.0 |
| **Use-case Name** | Sort Content | | | |
| **Author** | ToanDX | | | |
| **Date** | 02/06/2012 | **Priority** | Normal | |
| **Actor:**  User  **Summary:**  Users will have the options to sort recipes by rating, number of comments and number of page views. Default will be “rating descending”.  **Goal:**  Sort a content base on user’s desired.  **Triggers**  Click to views/rating/new/approved hyperlink.  **Preconditions:**  Access the website  **Post Conditions:**  Stay remains at current page with contents sorted.  **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Click to new/views/comment/approved hyperlink. | Contents is sorted by new/views/comments descending and displayed. |   **Alternative Scenario:**  N/A  **Exceptions:**  N/A  **Relationships:**  N/A  **Business Rules:**  N/A | | | | |

#### Filter Tasks



* + - 1. Create recipe

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **USE CASE – Create Recipe SPECIFICATION** | | | | |
| Use-case No. | UC026 | Use-case Version | | 1.0 |
| Use-case Name | Create recipe | | | |
| Author | KienBT | | | |
| Date | 02/06/2012 | Priority | Normal | |
| **Actor:**  Authenticated User  **Summary:**  When user wants to post a recipe to sharing with other people.  **Goal**  User follows the form to post recipes easily and rapidly  **Triggers**  Move mouse to “Gửi bài” and click to “Gửi công thức” hyperlink  **Preconditions:**  Logged into website successfully.  **Post Conditions:**  Stay remain at current recipe page with a new recipe was posted.  **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Click to “ Gửi công thức” hyperlink | Navigate user to the page has form to user fills. | | 2 | Enter required fields |  | | 3 | Click to “ Chọn ảnh” button | Dialog opens to choose picture | | 4 | Click to “Lưu” button | Navigate user to page includes the recipe what has just posted. |   **Alternative Scenario:**  N/A  **Exceptions:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Click to “ Gửi công thức” hyperlink | Navigate user to the page has form to user fills. | | 2 | Leave required fields blank |  | | 3 | Click to “ Gửi” button | Display a message “Bạn hãy sửa những lỗi bên dưới và thử lại”. |   **Relationships:**  Login function  **Business Rules:**  Must have main picture and description about dish | | | | |

* + - 1. Create tip

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **USE CASE – Create tip SPECIFICATION** | | | | |
| Use-case No. | UC027 | Use-case Version | | 1.0 |
| Use-case Name | Create tip | | | |
| Author | KienBT | | | |
| Date | 02/06/2012 | Priority | Normal | |
| **Actor:**  Authenticated User  **Summary:**  When user wants to post a tip for collecting better ingredients or cooking more delicious.  **Goal**  User creates tip successfully  **Triggers**  Click to “Mẹo vặt” hyperlink  **Preconditions:**  Logged into website successfully.  **Post Conditions:**  Stay remain at current recipe page with a new tip was posted.  **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Click to “Gửi” button | Navigate user to the page has form to user fills. | | 2 | Enter required fields |  | | 3 | Click to “Chọn ảnh” button | Dialog opens to choose picture | | 4 | Click to “Gửi” button | Navigate user to page includes the tip what has just posted. |   **Alternative Scenario:**  N/A  **Exceptions:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Click to “Gửi” button | Navigate user to the page has form to user fills. | | 2 | Leave required fields blank |  | | 3 | Click to “Gửi” button | Show error message “Bạn hãy sửa những lỗi bên dưới và thử lại.” |   **Relationships:**  Login function  **Business Rules:**  Description must be greater than 10 characters. | | | | |

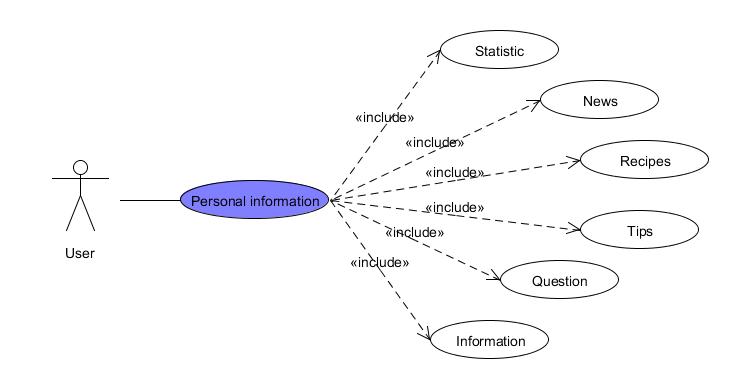
* + - 1. Create news

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **USE CASE – Create news SPECIFICATION** | | | | |
| Use-case No. | UC028 | Use-case Version | | 1.0 |
| Use-case Name | Create news | | | |
| Author | KienBT | | | |
| Date | 02/06/2012 | Priority | Normal | |
| **Actor:**  Authenticated User  **Summary:**  When user wants to post news related to cooking.  **Goal**  User posts news such as ingredients price or health news…  **Triggers**  Click to “Tin tức” hyperlink  **Preconditions:**  Logged into website successfully.  **Post Conditions:**  Stay remain at current recipe page with new news was posted.  **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Click to “ Gửi” button | Navigate user to the page has form to user fills. | | 2 | Enter required fields |  | | 3 | Click to “Chọn ảnh” button | Dialog opens to choose picture | | 4 | Click to “Gửi” button | Navigate user to page includes the tip what has just posted. |   **Alternative Scenario:**  N/A  **Exceptions:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Click to “Gửi” button | Navigate user to the page has form to user fills. | | 2 | Leave required fields blank |  | | 3 | Click to “Chọn ảnh” button | Dialog opens to choose picture | | 4 | Click to “ Gửi” button | Show error message “Bạn hãy sửa những lỗi bên dưới và thử lại.” |   **Relationships:**  Login function  **Business Rules:**  Description must be greater than 10 characters. | | | | |

* + - 1. Create question

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| **USE CASE – Create question SPECIFICATION** | | | | |
| Use-case No. | UC029 | Use-case Version | | 1.0 |
| Use-case Name | Create question | | | |
| Author | KienBT | | | |
| Date | 02/06/2012 | Priority | Normal | |
| **Actor:**  Authenticated User  **Summary:**  When users want to ask something related to cooking.  **Goal**  User creates question for other users when he/she wants to ask something.  **Triggers**  Click to “Hỏi đáp” hyperlink  **Preconditions:**  Logged into website successfully.  **Post Conditions:**  Stay remain at current recipe page with new question was asked.  **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Click to “Gửi câu hỏi” hyperlink |  | | 2 | Enter required fields |  | | 3 | Click “Gửi” button | Stay remains current page with new question was posted |   **Alternative Scenario:**  N/A  **Exceptions:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Click to “Gửi câu hỏi” hyperlink |  | | 2 | Click “Gửi” button | Display message “Câu hỏi phải ít nhất 10 ký tự” |   **Relationships:**  Login function  **Business Rules:**  Description must be greater than 10 characters. | | | | |

#### Arrange Tasks



* + - 1. Edit personal information

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| **USE CASE – Edit personal information SPECIFICATION** | | | | |
| Use-case No. | UC030 | Use-case Version | | 1.0 |
| Use-case Name | Edit personal information | | | |
| Author | KienBT | | | |
| Date | 02/06/2012 | Priority | High | |
| **Actor:**  Authenticated User  **Summary:**  When user sees something wrong in his/her information, user can edit personal information.  **Goal**  Edit account information  **Triggers**  Click to “Trang cá nhân” hyperlink  **Preconditions:**  Logged into website successfully.  **Post Conditions:**  N/A  **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Click to “Sửa thông tin” hyperlink | Navigate user to his/her information to edit | | 2 | Edit information |  | | 3 | Click “Đổi ảnh đại diện” and choose another picture |  | | 4 | Click “Lưu” button | Display user information |   **Alternative Scenario:**  N/A  **Exceptions:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Click to “Lưu” button | Display message “Bạn hãy sửa những lỗi bên dưới và sửa lại” |   **Relationships:**  View user’s profile  **Business Rules:**  N/A | | | | |

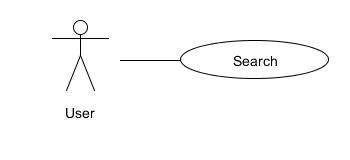
* + - 1. View Detail Personal Information

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| **USE CASE – View Detail Personal Information SPECIFICATION** | | | | |
| Use-case No. | UC031 | Use-case Version | | 1.0 |
| Use-case Name | View Detail Personal Information | | | |
| Author | KienBT | | | |
| Date | 02/06/2012 | Priority | Normal | |
| **Actor:**  Authenticated User  **Summary:**  User can view their or other user’s detailed personal information  **Goal**  View detail any user’s detailed account information  **Triggers**  User clicks on username hyperlink to navigate to their personal page.  **Preconditions:**  Logged into website successfully.  **Post Conditions:**  Redirect the user to profile page  **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Click to other user’s name hyperlink | navigate user to correspond user information |   **Alternative Scenario:**  N/A  **Exceptions:**  N/A  **Relationships:**  Login use case  **Business Rules:**  User Profile page will be opened as user click to a user link on anywhere on the website. This page contains all information about a user. | | | | |

* + - 1. Change Email

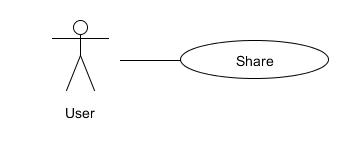
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| **USE CASE – Change Email SPECIFICATION** | | | | |
| Use-case No. | UC032 | Use-case Version | | 1.0 |
| Use-case Name | Change Email | | | |
| Author | KienBT | | | |
| Date | 02/06/2012 | Priority | Normal | |
| **Actor:**  Authenticated User  **Summary:**  For security or change email usage habit, many users want to change their email to manage and protect their account.  **Goal**  Change email to easy to manage account.  **Triggers**  Click to “Đổi Email” hyperlink  **Preconditions:**  Logged into website successfully.  **Post Conditions:**  N/A  **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | **Step** | **Actor Action** | **System Response** | | 1 | Click to “Đổi email” hyperlink | navigate user to change email page | | 2 | Enter new email |  | | 3 | Click to “Lưu” button | Display message “Đổi email thành công” |   **Alternative Scenario:**  N/A  **Exceptions:**   |  |  |  | | --- | --- | --- | | **Step** | **Actor Action** | **System Response** | | 1 | Click to “Đổi email” hyperlink | navigate user to change email page | | 2 | Enter wrong required information |  | | 3 | Click to “Lưu” button | Display message “Bạn hãy sửa những lõi bên dưới và thử lại.” |   **Relationships:**  N/A  **Business Rules:**  N/A | | | | |

#### Search



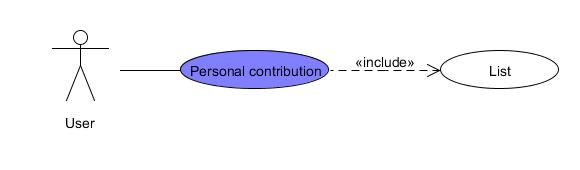
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| --- | --- | --- | --- | --- |
| **USE CASE – Search Contents SPECIFICATION** | | | | |
| **Use-case No.** | UC042 | **Use-case Version** | | 1.0 |
| **Use-case Name** | Search Contents | | | |
| **Author** | ToanDX | | | |
| **Date** | 03/06/2012 | **Priority** | High | |
| **Actor:**  User  **Summary:**  Users can search for contents by some criteria in order to find contents suitable for their need. The search result will be filtered to support users find the right contents as quick as possible.  **Goal:**  Search for contents.  **Triggers**  Users enter search criteria and click search button  **Preconditions:**  Access the website  **Post Conditions:**  The page navigates to search result screen with the result displayed  **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Enter keyword to search text box |  | | 2 | Click to “Chọn danh mục” dropdown list | Show categories for user to choose | | 3 | Click to search icon | Display search result |   **Alternative Scenario:**  N/A  **Alternative Scenario – No result**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Enter keyword which no content has |  | | 2 | Clicks “Tìm kiếm” button | Display “Không tìm kết quả nào.” |   **Exceptions:**  N/A  **Relationships:**  N/A  **Business Rules:**  N/A | | | | |

#### Share Tasks



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| **USE CASE – Share Contents SPECIFICATION** | | | | |
| **Use-case No.** | UC043 | **Use-case Version** | | 1.0 |
| **Use-case Name** | Share Contents | | | |
| **Author** | ToanDX | | | |
| **Date** | 02/06/2012 | **Priority** | Normal | |
| **Actor:**  User  **Summary:**  When the user wants to share content, he/she can do it by share that content over other social networks: Facebook, Twitter, Google+. The user can click social icon button below each contents to share it.  **Goal:**  Share contents over other social networks.  **Triggers**  Click to “Chia sẻ” hyperlink.  **Preconditions:**  Successfully logged into the system and go to detail content page.  **Post Conditions:**  Stay remains at current contents detail page.  **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | Step | Action | System Response | | 1 | Click to “Chia sẻ” hyperlink. | Popup new window: login page or home page (if user login) of Social network they want to share to. | | 2 | Click to social network icon to share (at new popup window). | Close the popup window and content is shared. |   **Exceptions:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Click to “Chia sẻ” hyperlink. | Popup new window: login page or home page (if user login) of Social network they want to share to. | | 2 | Click to “x” icon (at new popup window). | Close the popup window and content is not shared. |   **Relationships:**  Login use case, View Content Detail use case.  **Business Rules:**  N/A | | | | |

#### Import/Export Tasks



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| --- | --- | --- | --- | --- |
| **USE CASE – Personal Contribution SPECIFICATION** | | | | |
| Use-case No. | UC045 | Use-case Version | | 1.0 |
| Use-case Name | List contribution | | | |
| Author | KienBT | | | |
| Date | 02/06/2012 | Priority | Normal | |
| **Actor:**  Authenticated User  **Summary:**  User can list his/her contribution for website  **Goal**  List all contributed post by user.  **Triggers**  Click to “Trang cá nhân” hyperlink  **Preconditions:**  Logged into website successfully.  **Post Conditions:**  N/A  **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | Step | Actor Action | System Response | | 1 | Click to “Trang cá nhân” hyperlink | Show list contributed post (news, recipes and tips) of user |   **Alternative Scenario:**  N/A  **Exceptions:**  N/A  **Relationships:**  View user’s profile  **Business Rules:**  List of contributed post is sorted by date/time. | | | | |

## **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.
* All images must also provide alt attribute.

Usability for end-users

* Searching tool should be easy to use.
* The website must provide a help page to support novice users.
* Users can use 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 and shop’s staff should need no more than one day of training to be productive with the system.
* Detailed help must be available for the admin and staff, both in web pages and 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.
* Rating system must be reliable.
* Not conflict with other software.
* Rate of fault occurrence (ROFO): a number of 0.005 is acceptable. It means that it is acceptable to have 5 failures happen in each 1000 operational time units (e.g. 5 failures per 1000 hours of operation).
* Mean Time Between Failures (MTBF): 1 month.
* Mean Time To Repair (MTTR): immediately when admin finds out problem or website is attacked by someone. Average 1 day.
* Accuracy: precision of floating number should be rounded to 0.01. All currency units must be displayed (e.g. $, VND…)
* Maximum Bugs or Defect Rate: 5 bugs / KLOC.
* Bugs or Defect Rate
* Minor bugs: bugs related to GUI
* Significant bugs: bugs related to minor business logic
* Criticalbugs: function can’t execute correctly, completely loss of data, disconnect to the server

### Availability

* Systems have to run 24 hours 7 days
* Can be turned off when upgrading and must display an alternative maintenance page in such occasions
* Percentage of time available is about 95-97%. Because the system uses client/server protocol through Internet network, we cannot control cases of force majeure such as power failure, disconnected network…

### 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.
* The system must provide methods to prevent common security attacks. E.g. SQL injection, D-Dos…
* Transformation of confidential information must be encrypted.
* The system must provide secure methods for users to recovery their password, including the interference of system’s admin.
* Secure information of customers should not be stored on customer’s machine.
* Utilize certain cryptographic techniques for database.
* Provide options for users to choose whether to share private information.
* Restrict communications between some areas of the program.
* Check data integrity for critical variables.
* Must use secure connection (SSL) for transferring sensitive data.

### 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.
* If some components are reused, the documentations of those components must also be included.

Design

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

Logging

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

Email

* The system must provide an email address to receive customer feedback or send emails.

### Portability

Website can be used by any people 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.
* Comments and rating and the like should affect immediately, without reloading the web page.
* Frequently accessed data must be cached.
* Reference 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 recipes and 10000 users without affecting the loading speed.
* If the system is busy, it has 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: Mozilla Firefox, Internet Explorer, Google Chrome, Apple Safari, and Opera.
* Information of the system can be accessed by searching bots.

# References

1. [1] Wikipedia, 2011, 'Use case'
2. <<http://en.wikipedia.org/wiki/Use_case>>
3. [2] Jeff Atwood,  2011, 'Suggested Edits and Edit Review' blog <<http://blog.stackoverflow.com/2011/02/suggested-edits-and-edit-review>>