

BUS USERS INTERACTIVE NETWORK

SOFTWARE REQUIREMENT SPECIFICATION

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## Introduction

### Purposes

This document is created for better undestanding about our Capstone project – Bus User Interactive Network. In this document, we will provide an overview of all the functions and use cases of our system, and a brief description of our solution for designing the system. This document is based on thorough analysis of user requirements and other requirements.

### Definition and Acronyms

This section describes the definitions, terms, and acronyms that are used in software requirements specification.

|  |  |
| --- | --- |
| Acronym & Abbreviation | Definition |
| BUIN | Bus User Interaction Network |
| FU | FPT University |
| BU | Bus User |
| IN | Interactive Network |
| Q&A | Question and Answer |
|  |  |

**Table 1-1: Definition and Acronyms**

## System Purpose

The system is developed to make using buses easier and more convenient. It is hoped to create a habit of using public transportation in young people by making it more interesting and fun.

## Scope

This project will consist of creating an usable Android appliaction that is connected to an .NET web service and runs smoothly on Android 4.4 and above devices. The project will be completed by August 21st, 2015. Main modules of the app will include Bus-Searching, Path-Finding, Schedule-Reminding and Interacting-Contents.

## Overall Description

### System overview

Nowadays, there are quite many apps and websites which support finding and making use of buses. All of them have been created for the purpose of making users easier to catch a bus or to travel from places to places using buses. However, we found disadvantages while trying each of them. Some have confusing UI, some are better yet only not functionally focused on bus services and have not much to offer to users. Therefore, our project BUIN offers almost everything a bus user in Vietnam, especially “everyday-bus-users” would need. Not only support users finding buses, setting routes, notifying upcoming trips,… BUIN also renders a world of interactions with bus, makes each bus trip more interesting and meaning than just transportation. BUIN also support connecting and sharing on social network like Facebook, as well as ranking user base on their achievements. All of this would be done through a smartphone application which synchronized to the cloud service. Completely free of charge.

### Product Features

|  |  |  |  |
| --- | --- | --- | --- |
| **Use Case No.** | **Group of functions** | **Functions** | **Glossary** |
| **BUIN USER MODULES** | | | |
| **Common Module** | | | |
|  |  | Turn on/off snooze mode | Bật/tắt chế độ im lặng |
|  | View notification | Xem thông báo |
|  | Turn on/off notification | Bật/tắt thông báo |
|  | Change app settings | Thay đổi thiết đặt |
|  | View dashboard | Xem bảng tin |
| **Account Management Module** | | | |
|  |  | Login | Đăng nhập |
|  | Log out | Đăng xuất |
|  | View account profile | Xem thông tin tài khoản |
|  |  | Change account info | Chỉnh sửa thông tin cá nhân |
|  |  | Forgot Password | Quên mật khẩu |
| **Bus List Module** | | | |
|  |  | View bus list | Xem danh sách buýt |
|  | Search bus in list | Tìm kiếm trong danh sách buýt |
|  | View bus info | Xem thông tin của xe buýt |
|  | View bus route | Xem lộ trình của xe buýt |
|  | View nearest bus | Xem xe buýt gần nhất thuộc tuyến đã chọn |
|  | View bus map | Xem đường đi của xe buýt trên bản đồ |
|  | View bus near me | Xem tất cả các xe buýt ở gần |
| **Path Finder Module** | | | |
|  |  | Find path | Tìm đường |
|  |  | View paths found | Xem kết quả tìm được |
|  | View path detail | Xem chi tiết đường đi |
|  | View direction | Nghe hội thoại |
| **Reminder module** | | | |
|  |  | View bus reminder | Xem tất cả nhắc nhở |
|  | Add reminder | Thêm nhắc nhở |
|  | Edit reminder | Sửa nhắc nhở |
|  | Delete reminder | Xoá nhắc nhở |
|  | Suspend/Unsuspend all reminder | Hoãn/Ngừng hoãn tất cả nhắc nhở |
|  | Suspend/Unsuspend a chosen reminder | Hoãn/Ngừng hoãn một nhắc nhở đã chọn |
| **Track module** | | | |
|  |  | Set tracker | Đặt theo dõi |
|  | Cancel tracker | Ngừng theo dõi |
| **Favorite Module** | | | |
|  |  | View favorite places | Xem địa điểm yêu thích |
|  | Add favorite place | Thêm địa điểm yêu thích |
|  | Edit favorite place | Sửa địa điểm yêu thích |
|  | Delete favorite place | Xoá địa điểm yêu thích |
|  | Search favorite places | Tìm kiếm địa điểm yêu thích |
|  | View favorite buses | Xem xe buýt yêu thích |
|  | Add favorite bus | Thêm xe buýt yêu thích |
|  | Edit favorite bus | Sửa xe buýt yêu thích |
|  | Delete favorite bus | Xoá xe buýt yêu thích |
|  | Search favorite buses | Tìm kiếm xe buýt yêu thích |
| **Interactive module** | | | |
|  |  | Connect Facebook | Kết nối với Facebook |
|  |  | View Achievement | Xem Thành tích |
|  |  | Share Achievement | Chia sẻ Thành tích |
|  |  | View Collection | Xem Bộ sưu tập |
|  |  | Share Collection | Chia sẻ Bộ sưu tập |
|  |  | View Missions | Xem Nhiệm vụ |
|  |  | Share Title | Chia sẻ Danh hiệu |
|  |  | View Statistics | Xem Thống kê |
|  |  | Scan QR code | Quét mã QR |

### User Characteristics

This application is developed towards young people who are using bus everyday or have the need to use bus as their main trasportation vehicle. The system requires users to have an Android smartphone with an active internet connection and GPS enabled. Users can freely use all functions without any limitation but to save their usage data and interactive progress, they must log in – which requires only a minimum number of information and steps.

### User Documentation

List of document when delivering this application is in the table below:

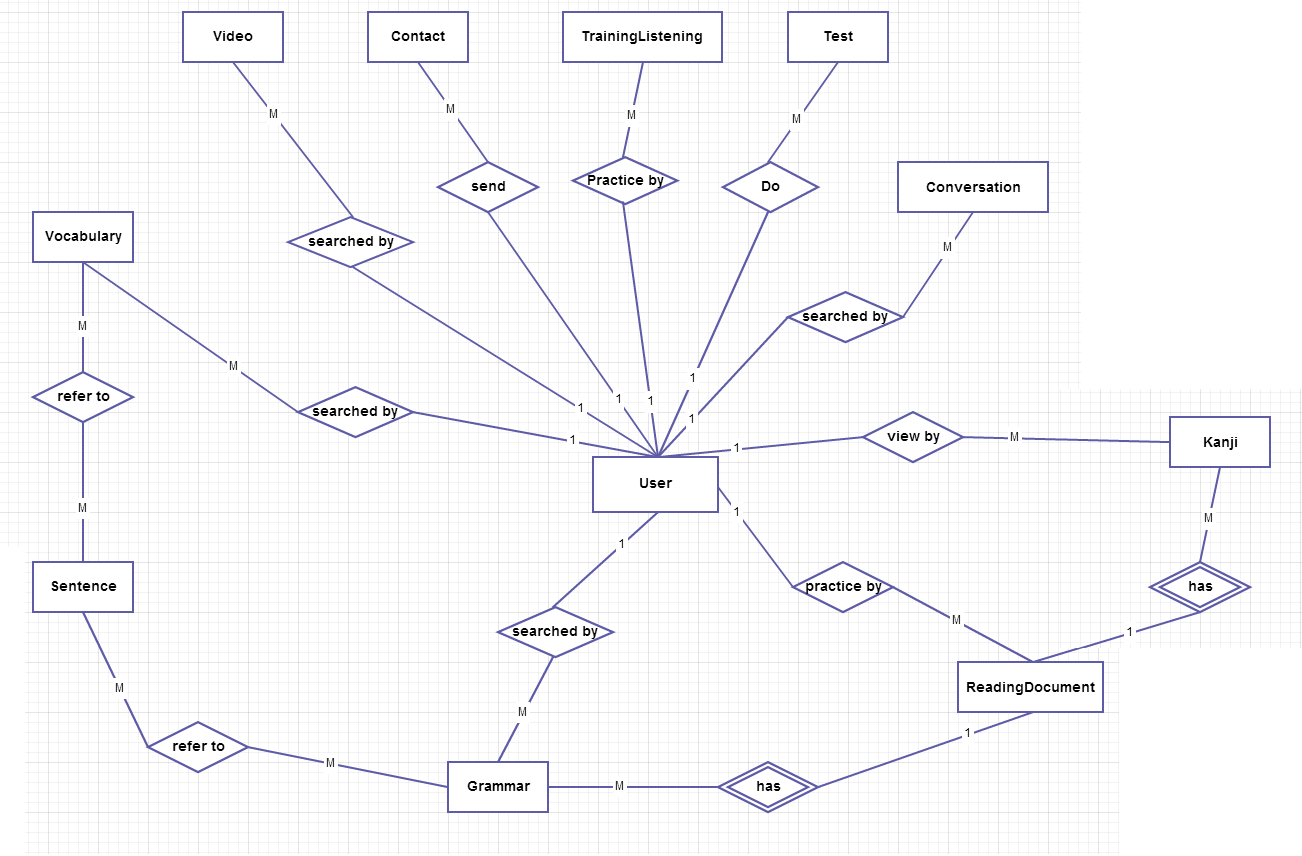
|  |  |
| --- | --- |
| **Name** | **Description** |
| User Manual | Provide detailed explanation about the system, screens and guide users how to use all features of BUIN system. |

### Assumption

* On each bus, there is a GPS device which is able to submit JSON over 3G network.
* Reviewers will have seven days to approve a milestone document. If no comments were received within this time period, the documents would be considered approved.
* There is a distinct QR-Code for each bus number, which is used to fill users’ Collection.

## Entity Relation Model

### Entity-Relationship Diagram



### Entity Detail

#### Vocabulary

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Field Name | Type | Mandatory | Description |
|  | id | Number | Y | Vocabulary’s id |
|  | Hiragana | String | Y | Vocabulary’s hiragana |
|  | Romaji | String | Y | Vocabulary’s romaji |
|  | Meaning | String | Y | Vocabulary’s meaning |
|  | Category | String | Y | Vocabulary’s category |
|  | Kanji | String |  | Vocabulary’s kanji |
|  | Specialized | String |  | Vocabulary’s specialized |
|  | Status | Number | Y | Vocabulary’s status |

#### Sentence

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Field Name | Type | Mandatory | Description |
|  | ID | Number | Y | Sentence’s id |
|  | Hiragana | String | Y | Sentence’s hiragana |
|  | Romaji | String | Y | Sentence’s romaji |
|  | Meaning | String | Y | Sentence’s meaning |
|  | Kanji | String | Y | Sentence’s kanji |

#### Grammar

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Field Name | Type | Mandatory | Description |
|  | ID | Number | Y | Grammar’s id |
|  | Hiragana | String | Y | Grammar’s hiragana |
|  | Romaji | String | Y | Grammar’s romaji |
|  | Level | String | Y | Grammar’s level |
|  | Meaning | String | Y | Grammar’s meaning |
|  | Use | String | Y | Grammar’s use |
|  | Lesson | String |  | Grammar’s lesson |
|  | Status | Number | Y | Grammar’s status |

#### Video

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Field Name | Type | Mandatory | Description |
|  | ID | Number | Y | Video’s id |
|  | Title | String | Y | Video’s title |
|  | Link | String | Y | Video’s link |

#### Kanji

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Field Name | Type | Mandatory | Description |
|  | ID | Number | Y | Kanji’s id |
|  | Kanji | String | Y | Kanji in Japanese |
|  | Hanviet | String | Y | Kanji’s Vietnamese-Han |
|  | Onyomi | String | Y | Kanji’s onyomi |
|  | Kunyomi | String |  | Kanji’s kunyomi |
|  | Meaning | String | Y | Kanji’s meaning |
|  | Level | String | Y | Kanji’s level |
|  | Lesson | String |  | Kanji’s lesson |
|  | Status | Number | Y | Kanji’s status |

#### Conversation

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Field Name | Type | Mandatory | Description |
|  | ID | Number | Y | Conversation’s id |
|  | Titel | String | Y | Conversation’s level |
|  | Level | String | Y | Conversation’s title |
|  | Content | String | Y | Conversation’s content |
|  | Audio | String | Y | Conversation’s audio |
|  | Image | String |  | Conversation’s image |

#### User

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Field Name | Type | Mandatory | Description |
|  | ID | Number | Y | User’s id |
|  | Username | String | Y | Username login |
|  | Password | String | Y | Store password login of user.  Using md5 algorithm. |
|  | Role | Number | Y | Admin can assign permission for user |
|  | Full name | String |  | User’s name display |
|  | Email | String | Y | User’s email |
|  | Register date | Date | Y | Date register |
|  | Status | Number | Y | Active or deactive |

#### Test

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Field Name | Type | Default | Description |
|  | ID | Number | Y | Test’s id |
|  | Title | String | Y | Test’s category |
|  | Level | String | Y | Test’s level |
|  | Category | String | Y | Test’s category |
|  | Content | String |  | Test’s content |
|  | Question | String | Y | Test’s question |
|  | Answer | String | Y | Question’s answer |

#### Contact

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Field Name | Type | Mandatory | Description |
|  | ID | Number | Y | Contact’s id |
|  | Email | String | Y | Contact’s email |
|  | Content | String | Y | Contact’s content |
|  | Type | String | Y | Contact’s type |
|  | Reply | String |  | Contact’s reply |
|  | Status | Number | Y | Contact’s status |

#### Training Listening

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Field Name | Type | Mandatory | Description |
|  | ID | Number | Y | Listening’s id |
|  | Title | String | Y | Listening’s title |
|  | Level | String | Y | Listening’s level |
|  | File | String | Y | Listening’s file |
|  | Question | String | Y | Listening’s question |
|  | Script | String | Y | Listening’s script |
|  | Meaning | String | Y | Listening’s meaning |
|  | Answer | String | Y | Listening’s answer |

#### Reading document

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| No | Field Name | Type | Mandatory | Description |
|  | ID | Number | Y | Reading’s id |
|  | Title | String | Y | Reading’s title |
|  | Level | String | Y | Reading’s level |
|  | Vocabulary | String | Y | Reading’s vocabulary |
|  | Grammar | String | Y | Reading’s grammar |
|  | Kanji | String | Y | Reading’s kanji |
|  | Article | String | Y | Reading’s article |

## Functional Specification

### Common Module

#### Use Case Diagram



#### Screen description

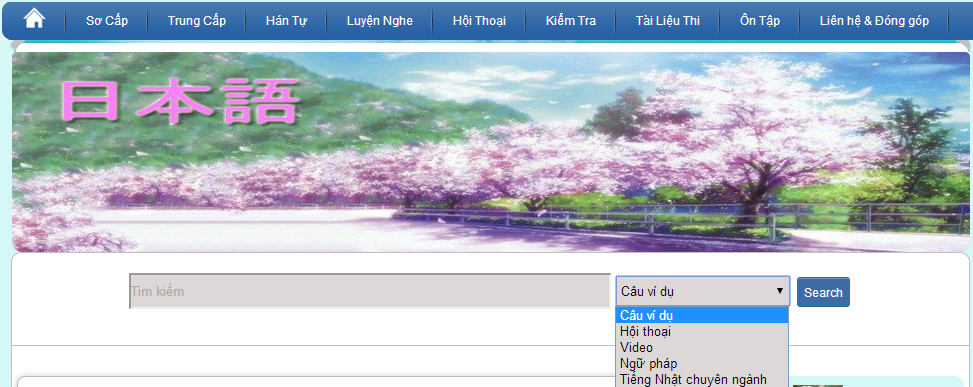


Figure 1: Search

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **No** | **Field name** | **Field name in Vietnamese** | **Type** | **Require** | **Mandatory** | **Length** | **Description** |
| 1 | Searcharea | Tìm kiếm | Text | Text | Y | 255 | User input a new word with length less than 255 characters |
| 2 | SearchOption | Kiểu tìm kiếm | Drop-down list | Click | Y |  | User choose type of search |
| 2 | Search | Search | Button | Click | Y |  | User click on search button |

Table 1: Search’s screen description

#### Use Case Specification

##### UC001: Search sentences

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **UC001 – Search sentences** | | | | |
| **Use-case No.** | <UC001> | **Use-case Version** | | <1.0> |
| **Use-case Name** | Search sentences | | | |
| **Author** | Tuan NN | | | |
| **Date** | 09/06/2014 | **Priority** | <High > | |
| **Actor:**  Guest, Member, Administrator  **Summary:**  When Guest, Member, Administrator want to search by sentences in database successfully if it is existed  **Triggers**  Click on search area , input sentences in the text area, choose type of search and then click “Search” button  **Preconditions:**   * Website is available * User have to input data in search area   **Post Conditions:**  Display detail information of sentences  **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | **Step** | **User** | **System** | | 1 | Enter website link on web browser | Display Home page screen | | 2 | Input data in search area and choose “Câu ví dụ” type then click button Search | Display “sentences information” screen that contains the information of chosen sentences with these elements:   * Serial number * Name of sentences by hiragana * Name of sentences by romaji * Meaning of sentences |     **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 2 | Input data in search area and choose “Câu ví dụ” type then click on another link | Switch to selected page |   **Exceptions:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 2 | Fill data that they want to find (that do not exist in database) into these fields then click “Search” button | Return Error message to inorm that sentences cannot be found | | | | | |

##### UC002: Search conversation

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **UC002 – Search conversation** | | | | |
| **Use-case No.** | <UC002> | **Use-case Version** | | <1.0> |
| **Use-case Name** | Search conversation | | | |
| **Author** | Tuan NN | | | |
| **Date** | 09/06/2014 | **Priority** | <High > | |
| **Actor:**  Guest, Member, Administrator  **Summary:**  When Guest, Member, Administrator want to search by conversation in database successfully if it is existed  **Triggers**  Click on search area , input conversation in the text area, choose type of search and then click “Search” button  **Preconditions:**   * Website is available * User have to input data in search area   **Post Conditions:**  Display detail information of conversation  **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | **Step** | **User** | **System** | | 1 | Enter website link on web browser | Display Home page screen | | 2 | Input data in search area and choose “Hội thoại” type then click button Search | Display “conversation information” screen that contains the information of chosen conversation with these elements:   * Serial number * Name of conversation by hiragana * Name of conversation by romaji * Meaning of conversation |     **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 2 | Input data in search area and choose “Hội thoại” type then click on another link | Switch to selected page |   **Exceptions:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 2 | Fill data that they want to find (that do not exist in database) into these fields then click “Search” button | Return Error message to inform that conversation cannot be found | | | | | |

##### UC003: Search grammar

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **UC003 – Search grammar** | | | | |
| **Use-case No.** | <UC003> | **Use-case Version** | | <1.0> |
| **Use-case Name** | Search grammar | | | |
| **Author** | Tuan NN | | | |
| **Date** | 09/06/2014 | **Priority** | <High > | |
| **Actor:**  Guest, Member, Administrator  **Summary:**  When Guest, Member, Administrator want to search by grammar in database successfully if it is existed  **Triggers**  Click on search area , input grammar in the text area, choose type of search and then click “Search” button  **Preconditions:**   * Website is available * User have to input data in search area   **Post Conditions:**  Display detail information of grammar  **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | **Step** | **User** | **System** | | 1 | Enter website link on web browser | Display Home page screen | | 2 | Input data in search area and choose “Ngữ pháp” type then click button Search | Display “grammar information” screen that contains the information of chosen grammar with these elements:   * Serial number * Name of grammar by hiragana * Name of grammar by romaji * Meaning of grammar |     **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 2 | Input data in search area and choose “Ngữ pháp” type then click on another link | Switch to selected page |   **Exceptions:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 2 | Fill data that they want to find (that do not exist in database) into these fields then click “Search” button | Return Error message to inform that grammar cannot be found | | | | | |

##### UC004: Search video

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **UC004 – Search video** | | | | |
| **Use-case No.** | <UC004> | **Use-case Version** | | <1.0> |
| **Use-case Name** | Search video | | | |
| **Author** | Tuan NN | | | |
| **Date** | 09/06/2014 | **Priority** | <High > | |
| **Actor:**  Guest, Member, Administrator  **Summary:**  When Guest, Member, Administrator want to search by video in database successfully if it is existed  **Triggers**  Click on search area , input video in the text area, choose type of search and then click “Search” button  **Preconditions:**   * Website is available * User have to input data in search area   **Post Conditions:**  Display detail information of video  **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | **Step** | **User** | **System** | | 1 | Enter website link on web browser | Display Home page screen | | 2 | Input data in search area and choose “Video” type then click button Search | Display “video information” screen that contains the information of chosen video with these elements:   * Serial number * Name of video by hiragana * Name of video by romaji * Meaning of video |     **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 2 | Input data in search area and choose “Video” type then click on another link | Switch to selected page |   **Exceptions:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 2 | Fill data that they want to find (that do not exist in database) into these fields then click “Search” button | Return Error message to inform that video cannot be found | | | | | |

##### UC005: Search specialized Japanese

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **UC005 – Search specialized Japanese** | | | | |
| **Use-case No.** | <UC005> | **Use-case Version** | | <1.0> |
| **Use-case Name** | Search specialized Japanese | | | |
| **Author** | Tuan NN | | | |
| **Date** | 09/06/2014 | **Priority** | <High > | |
| **Actor:**  Guest, Member, Administrator  **Summary:**  When Guest, Member, Administrator want to search by specialized Japanese in database successfully if it is existed  **Triggers**  Click on search area , input specialized Japanese in the text area, choose type of search and then click “Search” button  **Preconditions:**   * Website is available * User have to input data in search area   **Post Conditions:**  Display detail information of video  **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | **Step** | **User** | **System** | | 1 | Enter website link on web browser | Display Home page screen | | 2 | Input data in search area and choose “Tiếng Nhật chuyên ngành” type then click button Search | Display “specialized Japanese information” screen that contains the information of chosen specialized Japanese with these elements:   * Serial number * Name of specialized Japanese by hiragana * Name of specialized Japanese by romaji * Meaning of specialized Japanese |     **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 2 | Input data in search area and choose “Tiếng Nhật chuyên ngành” type then click on another link | Switch to selected page |   **Exceptions:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 2 | Fill data that they want to find (that do not exist in database) into these fields then cick “Search” button | Return Error message to inform that specialized Japanese cannot be found | | | | | |

### Account management Module

#### Use Case Diagram



#### Use Case Specification

##### UC006: Login



Figure 2.1: Login

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **No** | **Field name** | **Field name in Vietnamese** | **Type** | **Require** | **Mandatory** | **Max-Length** | **Description** |
| 1 | Username | Tên đăng nhập | Text | Text | Y | 32 | User input username with length less than 32 character |
| 2 | Password | Mật khẩu | Password | Text | Y | 32 | User input their password with length less than 32 characters |
| 3 | Login | Đăng nhập | Button | Click | Y |  | User click on Login button |

Table 2.1: Login’s screen description

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **UC006 – Login** | | | | |
| **Use-case No.** | <UC006> | **Use-case Version** | | <1.0> |
| **Use-case Name** | Login | | | |
| **Author** | Tuan NN | | | |
| **Date** | 09/06/2014 | **Priority** | <High > | |
| **Actor:**  Member, Administrator  **Summary:**  When Member, Administrator want to login by Facebook/Register account to use more functions in website  **Triggers**  User choose the login method, input data and click on login button  **Preconditions:**   * Website is available * Account Facebook/Register must be exist and correctly   **Post Conditions:**  Login successfully and redirect user to previous page.  **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | **Step** | **User** | **System** | | 1 | Enter website link on web browser | Display Homepage screen | | 2 | Choose login method ( login by Facebook/register account), input account and password and then click “Đăng nhập” button | Validate information and log user into system. |     **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 2 | Input data in username and password area then click on another link | Switch to selected page |   **Exceptions:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 3 | Fill incorrect or missing information “Tên đăng nhập”/ “Mật khẩu” field | Return Error message beside “Tên đăng nhập”/ “Mật khẩu” field. | | | | | |

##### UC007: Logout



Figure 2.2: Logout

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **No** | **Field name** | **Type** | **Require** | **Mandatory** | **Max-Length** | **Description** |
| 1 | Logout | Button | Click | Y |  | User click on Logout button |

Table 2.2: Logout’s screen description

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **UC007 – Logout** | | | | |
| **Use-case No.** | <UC007> | **Use-case Version** | | <1.0> |
| **Use-case Name** | Logout | | | |
| **Author** | Tuan NN | | | |
| **Date** | 09/06/2014 | **Priority** | <High > | |
| **Actor:**  Member, Admin  **Summary:**  When Member, Admin want to logout their account  **Triggers**  Click on logout button  **Preconditions:**   * Website is available * Member, Admin must be login   **Post Conditions:**  Redirect user to previous page.  **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | **Step** | **User** | **System** | | 1 | Click on logout button | Redirect to homepage | | | | | |

##### UC008: Register account



Figure 2.3: Register

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **No** | **Field name** | **Field name in Vietnamese** | **Type** | **Require** | **Mandatory** | **Max-Length** | **Description** |
| 1 | Username | Tên đăng nhập | Text | Text | Y | 32 | User input username with length less than 32 characters |
| 2 | Password | Mật khẩu | Password | Text | Y | 32 | User input their password with length less than 32 characters |
| 3 | Re-password | Nhập lại mật khẩu | Password | Text | Y | 32 | User re-input password with length less than 32 characters |
| 4 | Name | Họ và tên | Text | Text | Y | 50 | User input their name with length less than 50 characters |
| 5 | Email | Email | Text | Text | Y | 100 | User input email with length less than 32 characters |
| 6 | Capcha | Mã xác nhận | Text | Text | Y | 100 | User input the verification code |
| 7 | Register | Đăng ký | Button | Click | Y |  | User click Register button |

Table 2.3: Register’s screen description

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **UC008 – Register account** | | | | |
| **Use-case No.** | <UC008> | **Use-case Version** | | <1.0> |
| **Use-case Name** | Register | | | |
| **Author** | Tuan NN | | | |
| **Date** | 09/06/2014 | **Priority** | <High > | |
| **Actor:**  Guest  **Summary:**  Visitor can create new account to use more function as a register user  **Triggers**  Click on register link on the website  **Preconditions:**   * Website is available   **Post Conditions:**  Create account for guest  **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | **Step** | **User** | **System** | | 1 | Enter website link on web browser | Display Homepage screen | | 2 | Click on register link | Display register form | | 3 | Enter necessary and mandatory information and click "Đăng kí" button. | Display message to register successfully and redirect to homepage |     **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 3 | Enter necessary and mandatory information and click another link | Switch to selected page |   **Exceptions:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 3 | Missing “Tên đăng nhập” field and click “Đăng kí” button | Display error message beside “Tên đăng nhập” field. | | 3 | Enter incorrect information or missing “Mật khẩu” field and click “Đăng kí” button | Display error message beside “Mật khẩu” field. | | 3 | Missing “Họ và tên” field and click “Đăng kí” button | Display error message beside “Họ và tên” field. | | 3 | Missing “Email” field and click “Đăng kí” button | Display error message eside “Email” field. | | 3 | Enter incorrect information or missing “Mã xác nhận” field and click “Đăng kí” button | Display error message beside “Mã xác nhận” field. | | | | | |

##### UC009: Edit profile

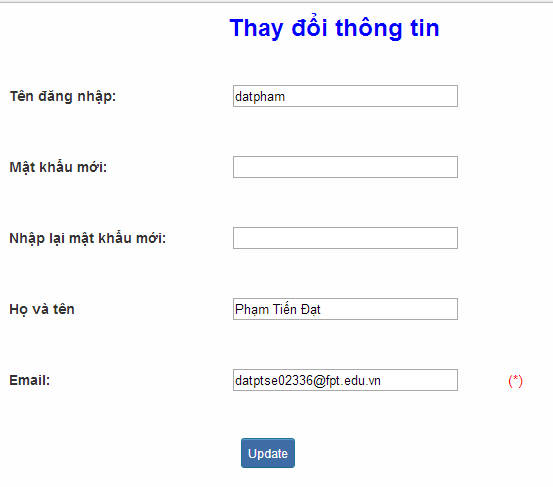


Figure 2.4: Edit profile

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **No** | **Field name** | **Field name in Vietnamese** | **Type** | **Require** | **Mandatory** | **Max-Length** | **Description** |
| 1 | Name | Họ và tên | Text | Text | Y | 32 | User input their name with length less than 32 characters |
| 2 | Old-Password | Mật khẩu cũ | Password | Text | Y | 32 | User input their old password with length less than 32 characters |
| 3 | New-password | Mật khẩu mới | Password | Text | Y | 32 | User input new password with length less than 32 characters |
| 4 | Re-password | Nhập lại mật khẩu mới | Password | Text | Y | 32 | User re-input password with length less than 32 characters |
| 5 | Email | Email | Text | Text | Y | 100 | User input email to with length less than 100 characters |
| 6 | Edit | Thay đổi thông tin | Button | Click | Y |  | User click on Edit button |

Table 2.4: Edit profile’s screen description

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **UC009 – Edit profile** | | | | |
| **Use-case No.** | <UC009> | **Use-case Version** | | <1.0> |
| **Use-case Name** | Edit profile | | | |
| **Author** | Tuan NN | | | |
| **Date** | 09/06/2014 | **Priority** | <High > | |
| **Actor:**  Member  **Summary:**  When member want to change their profile  **Triggers**  Login the website and click on the edit profile link  **Preconditions:**   * Website is available * Member login the website   **Post Conditions:**  Edit profile successful and redirect user to edited profile page  **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | **Step** | **User** | **System** | | 1 | Enter website link on web browser | Display Homepage screen | | 2 | Enter necessary and mandatory information and click "Login” | Redirect to previous page and logged user into system. | | 3 | Click on "Trang cá nhân" link. | Display “Trang cá nhân” page | | 4 | User changes profile and click “Lưu” button | Update new profile |     **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | **t Step** | **User** | **System** | | 4 | Enter necessary and mandatory information and click another link | Switch to selected page |   **Exceptions:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 4 | Enter new password that incorrect form or missing information and click “Lưu” button | Display error message | | 4 | Enter new email that incorrect form or missing information and click “Lưu” button | Display error message | | | | | |

##### UC010: Forgot password

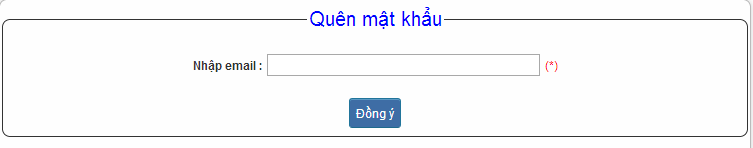


Figure 2.5: Forgot password

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **No** | **Field name** | **Field name in Vietnamese** | **Type** | **Require** | **Mandatory** | **Max-Length** | **Description** |
| 1 | Email | Email | Text | Text | Y | 32 | User input email with length less than 100 characters |
| 2 | Send | Đồng ý | Button | Click | Y |  | Click to receive password |

Table 2.5: Forgot password’s screen description

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **UC010 – Forgot password** | | | | |
| **Use-case No.** | <UC010> | **Use-case Version** | | <1.0> |
| **Use-case Name** | Forgot password | | | |
| **Author** | Tuan NN | | | |
| **Date** | 09/06/2014 | **Priority** | <High > | |
| **Actor:**  Member, Admin  **Summary:**  When Member, Admin forgot their password to login the system, this function will receiving their password to email  **Triggers**  Click on forgot password link on the website  **Preconditions:**   * Website is available   **Post Conditions:**  Receiving their password to their email  **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | **Step** | **User** | **System** | | 1 | Enter website link on web browser | Display Homepage screen | | 2 | Click on “Quên mật khẩu link. | Display “Quên mật khẩu” page | | 3 | Enter necessary and mandatory information in the “Quên mật khẩu” form and click "Gửi yêu cầu" button. | System will send the password into your email. |     **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **Syste** | | 3 | Enter necessary and mandatory information and click another link | Switch to selected page |   **Exceptions:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 3 | Enter email incorrect with email that use to register account | Display error message and request to re-enter email | | | | | |

### Contact admin Module

#### Use case diagram



#### Use Case Specification

##### UC011: Contribute content



Figure 3.1: Contribute content



Figure 3.1.1: Contribute vocabulary

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **No** | **Field name** | **Field name in Vietnamese** | **Type** | **Require** | **Mandatory** | **Max-Length** | **Description** |
| 1 | Vocabulary | Từ | Text | Text | Y | 200 | User input vocabulary with length less than 200 characters |
| 2 | Category | Loại từ | Drop-down list | Click | Y |  | User choose type of category |
| 3 | Kanji | Chữ Hán | Text | Text | Y | 10 | User input kanji of vocabulary (if exist) with length less than 10 characters |
| 4 | Mean | Nhập nghĩa | Text | Text | Y | 500 | User input mean of vocabulary with length less than 500 characters |
| 5 | Capcha | Mã xác nhận | Text | Text | Y |  | User input the verification code |
| 6 | Contribute | Đóng góp | Button | Click | Y |  | User click on contribute button |

Table 3.1: Contribute vocabulary’s screen description

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **UC011 – Contribute content** | | | | |
| **Use-case No.** | <UC011> | **Use-case Version** | | <1.0> |
| **Use-case Name** | Contribute content | | | |
| **Author** | Tuan NN | | | |
| **Date** | 09/06/2014 | **Priority** | <High > | |
| **Actor:**  Member  **Summary:**  When Member want to contribute content for website  **Triggers**  User enter website link and click on “Liên hệ” link on the website  **Preconditions:**   * Website is available * User must be login to the website   **Post Conditions:**  Receive opinions and redirect user to contact page  **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | **Step** | **User** | **System** | | 1 | Enter website link on web browser | Display Homepage screen | | 2 | Enter necessary and mandatory information and click "Login” | Redirect to previous page and logged user into system. | | 3 | Click on “Liên hệ”->”Đóng góp database” section | Display “Đóng góp database” page | | 4 | Enter information that member want to contribute for the website then click “Đóng góp” | System will receive contributions |     **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **ystem** | | 4 | Enter necessary and mandatory information and click another link | Switch to selected page |   **Exceptions:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 4 | Missing “Nhập từ” field and click “Đóng góp” button | Display error message beside “Nhập từ” field. | | 4 | Missing “Loại từ” field and click “Đóng góp” button | Display error message beside “Loại từ” field. | | 4 | Missing “Nhập nghĩa” field and click “Đóng góp” button | Display error message beside “Nhập nghĩa” field. | | 4 | Enter incorrect information or missing “Mã xác nhận” field and click “Đóng góp” button | Display error message beside “Mã xác nhận” field. | | | | | |

##### UC012: Contribute opinion



Figure 3.2: Contribute opinion

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **No** | **Field name** | **Field name in Vietnamese** | **Type** | **Require** | **Mandatory** | **Max-Length** | **Description** |
| 1 | Email | Email | Text | Text | Y | 100 | User input email with length less than100 characters |
| 2 | Content | Nhập nội dung | Text | Text | Y | 1000 | User input content with length less than1000 characters |
| 3 | Capcha | Mã xác nhận | Text | Text | Y |  | User input the verification code |
| 4 | Contribute | Đóng góp | Button | Click | Y |  | User click on contribute button |

Table 3.2: Contribute opinion’s screen description

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **UC012 – Contribute opinion** | | | | |
| **Use-case No.** | <UC012> | **Use-case Version** | | <1.0> |
| **Use-case Name** | Contribute opinion | | | |
| **Author** | Tuan NN | | | |
| **Date** | 09/06/2014 | **Priority** | <High > | |
| **Actor:**  Member  **Summary:**  When Member want to contribute opinion for website  **Triggers**  User enter website link and click on “Liên hệ” link on the website  **Preconditions:**   * Website is available * User must be login to the website   **Post Conditions:**  Receive opinions and redirect user to contact page  **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | **Step** | **Use** | **System** | | 1 | Enter website link on webbrowser | Display Homepage screen | | 2 | Enter necessary and mandatory information and click "Login” | Redirect to previous page and logged user into system. | | 3 | Click on “Liên hệ”->”Đóng góp ý kiến” tab | Display “Đóng góp ý kiến” page | | 4 | Enter information that member want to contribute for the website then click “Đóng góp” | System will receive contributions |   **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 4 | Enter necessary and mandatory information and click another link | Switch to selected page |   **Exceptions:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 4 | Missing “Nhập email” field and click “Đóng góp” button | Display error message beside “Nhập email” field. | | 4 | Missing “Nhập nội dung:” field and click “Đóng góp” button | Display error message beside “Nhập nội dung:” field. | | 4 | Enter incorrect information or missing “Mã xác nhận” field and click “Đóng góp” button | Display error message beside “Mã xác nhận” field. | | | | | |

##### UC013: Send Q&A



Figure 3.3: Send Q&A

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **No** | **Field name** | **Field name in Vietnamese** | **Type** | **Require** | **Mandatory** | **Max-Length** | **Description** |
| 1 | QA | Q&A | Text | Text | Y | 1000 | User input Q&A with length less than 1000 characters |
| 2 | Email | Email | Text | Text | Y | 100 | User input email with length less than 100 characters |
| 3 | Capcha | Mã xác nhận | Text | Text | Y |  | User input the verification code |
| 4 | Contribute | Đóng góp | Button | Click | Y |  | User click on contribute button |

Table 3.3: Send Q&A’s screen description

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **UC013 – Send Q&A** | | | | |
| **Use-case No.** | <UC013> | **Use-case Version** | | <1.0> |
| **Use-case Name** | Send Q&A | | | |
| **Author** | Tuan NN | | | |
| **Date** | 09/06/2014 | **Priority** | <High > | |
| **Actor:**  Member  **Summary:**  When Member have the question, they can create Q&A  **Triggers**  Click on “Liên hệ” link on the website  **Preconditions:**   * Website is available * User must be login to the website   **Post Conditions:**  Add new Q&A into the website  **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | **Step** | **User** | **System** | | 1 | Enter website link on web browser | Display Homepage screen | | 2 | Enter necessary and mandatory information and click "Login” | Redirect to previous page and logged user into system. | | 3 | Click on “Q&A” tab | Display “Q&A” page | | 4 | Enter necessary and mandatory information in the “Q&A” form and click "Gửi" button. | Display this Q&A in the “Q&A”section. |     **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 4 | Enter necessary and mandatory information and click another link | Switch to selected page |   **Exceptions:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 4 | Missing “Nhập email” field and click “Đóng góp” button | Display error message beside “Nhập email” field. | | 4 | Missing “Q&A” field and click “Đóng góp” button | Display error message beside “Q&A” field. | | 4 | Enter incorrect information or missing “Mã xác nhận” field and click “Đóng góp” button | Display error message beside “Mã xác nhận” field. | | | | | |

### Practice management Module

#### Use case diagram



#### Use case specification

##### UC014: Doing test

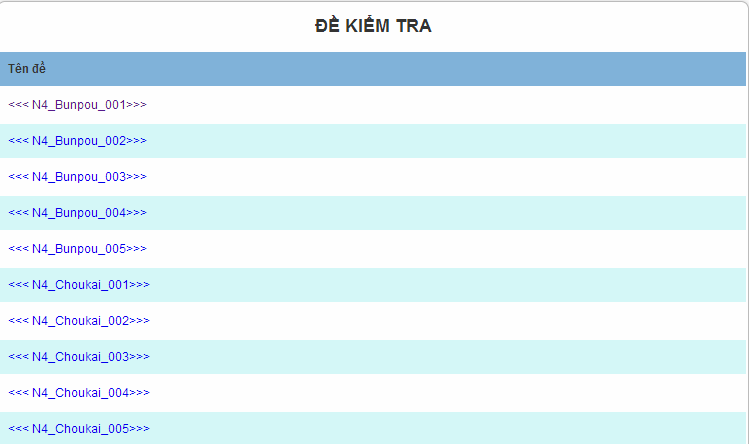


Figure 4.1: Doing test

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **UC014 – Doing test** | | | | |
| **Use-case No.** | <UC014> | **Use-case Version** | | <1.0> |
| **Use-case Name** | Doing test | | | |
| **Author** | Tuan NN | | | |
| **Date** | 09/06/2014 | **Priority** | <High > | |
| **Actor:**  Member  **Summary:**  This function will help users do the online quiz and check the answers, grading and evaluation capabilities  **Triggers**  User going to website, login and then click on “Kiểm tra” link on the website  **Preconditions:**   * Website is available * User must be login to the website   **Post Conditions:**  Doing test in the website  **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | **Step** | **User** | **System** | | 1 | Enter website link on web browser | Display Homepage screen | | 2 | Enter necessary and mandatory information and click "Login” | Redirect to previous page and logged user into system. | | 3 | Click on “Kiểm tra” section | Display “Kiểm tra” page | | 4 | Choose one of items that you want to doing test | Display that item’s page | | 5 | Doing test | Check the answer, grading after finish |     **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 5 | While doing test, click another link | Switch to selected page | | | | | |

##### UC015: Training listening



Figure 4.2: Training listening



Figure 4.2.1: Training listening content

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **No** | **Field name** | **Field name in Vietnamese** | **Type** | **Require** | **Mandatory** | **Description** |
| 1 | Audio | Audio | Audio | Click | Y | User click play button |
| 2 | Translation and Answer | Dịch và đáp án | Link | Click | Y | User click to display translation and answer |

Table 4.2.1: Training listening content’s screen description

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **UC015 – Training listening** | | | | |
| **Use-case No.** | <UC015> | **Use-case Version** | | <1.0> |
| **Use-case Name** | Training listening | | | |
| **Author** | Tuan NN | | | |
| **Date** | 09/06/2014 | **Priority** | <High > | |
| **Actor:**  Guest, Member  **Summary:**  This function provide users some the listening of level N2, N3, N4 to help users training listening skill  **Triggers**  User going to website and click on “Luyện nghe” link on the website  **Preconditions:**   * Website is available   **Post Conditions:**  Training listening in the website  **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | **Step** | **User** | **System** | | 1 | Enter website link on web browser | Display Homepage screen | | 2 | Click on “Luyện nghe” section | Display “Luyện nghe” page |     **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | **At Stp** | **User** | **System** | | 4 | While listening, click another link | Switch to selected page | | | | | |

##### UC016: Listening conversation



Figure 4.3: Listening conversation



Figure 4.3.1: Conversation content

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **No** | **Field name** | **Field name in Vietnamese** | **Type** | **Require** | **Mandatory** | **Description** |
| 1 | Translation | Dịch | Link | Click | Y | User click to display translation |

Table 4.3.1: Training listening content’s screen description

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **UC016 – Listening conversation** | | | | |
| **Use-case No.** | <UC016> | **Use-case Version** | | <1.0> |
| **Use-case Name** | Listening conversation | | | |
| **Author** | Tuan NN | | | |
| **Date** | 09/06/2014 | **Priority** | <High > | |
| **Actor:**  Guest, Member  **Summary:**  This function provide users some the conversation in everyday life and common situations (eg: restaurants, shopping, in hospital ..)  **Triggers**  Click on “Hội thoại” link on the website  **Preconditions:**   * Website is available   **Post Conditions:**  Listening conversation in the website  **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | **Step** | **User** | **System** | | 1 | Enter websie link n web browser | Display Homepage screen | | 2 | Click on “Hội thoại” section | Display “Hội thoại” page |     **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 4 | While listening, click another link | Switch to selected page | | | | | |

##### UC017: Reading document



Figure 4.4: Reading document

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **UC017 – Reading document** | | | | |
| **Use-case No.** | <UC017> | **Use-case Version** | | <1.0> |
| **Use-case Name** | Reading document | | | |
| **Author** | Tuan NN | | | |
| **Date** | 09/06/2014 | **Priority** | <High > | |
| **Actor:**  Guest, Member  **Summary:**  This function provides users some document: elementary, intermediate and review.  **Triggers**  Click on “N3/N2 Bài đọc” link on the website  **Preconditions:**   * Website is available   **Post Conditions:**  Reading document in the website  **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | **Step** | **User** | **System** | | 1 | Enter website link on web browser | Display Homepage screen | | 2 | Click on “Bài đọc” section | Display “Bài đọc” page |     **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 4 | While reading, click another link | Switch to selected page | | | | | |

### Admin’s account management

#### Use case diagram



#### Use case specifications

##### UC018: Add new admin

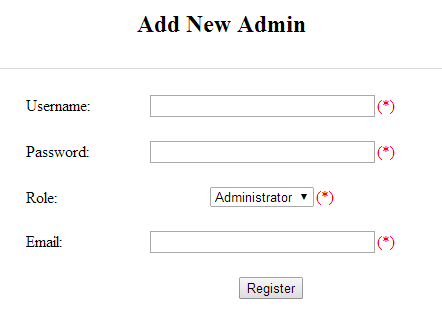


Figure 5.1: Add new admin

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **No** | **Field name** | **Type** | **Require** | **Mandatory** | **Max-Length** | **Description** |
| 1 | Username | Text | Text | Y | 32 | Admin input username of admin’s account with length less than 32 characters |
| 2 | Password | Text | Text | Y | 100 | Admin input password of admin’s account with length less than 32 characters |
| 3 | Roll | Drop-down list | Choose | Y |  | Admin choose the roll of account |
| 4 | Email | Text | Text | Y | 100 | Admin input email of admin’s account with length less than 100 characters |
| 5 | Register | Button | Click | Y |  | Admin add new admin |

Table 5.1: Add new admin’s screen description

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **UC018 – Add new admin** | | | | |
| **Use-case No.** | <UC018> | **Use-case Version** | | <1.0> |
| **Use-case Name** | Add new admin | | | |
| **Author** | Tuan NN | | | |
| **Date** | 09/06/2014 | **Priority** | <High > | |
| **Actor:**  Admin  **Summary:**  Administrator can add new admin  **Triggers**  Admin login the website and click on add new admin link on the website  **Preconditions:**   * Website is available * Admin login to the website   **Post Conditions:**  New admin be added successfully  **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | **Step** | **User** | **System** | | 1 | Enter website link on web browser | Display Homepage screen | | 2 | Enter necessary and mandatory information and click "Login” | Redirect to previous page and logged admin into system. | | 3 | Click on add new admin button | Display “Add New Admin” screen that contains these elements:   * Username * Password * Roll * Email | | 4 | Fill test information into all necessary or mandatory fields and click “Add” button | The system validates the input data and then save new test data into database |     **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 4 | Input data in account area then click on another link | Switch to selected page |   **Exceptions:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 4 | Fill incorrect account name | Return Error message | | | | | |

##### UC019: Edit profile (admin)

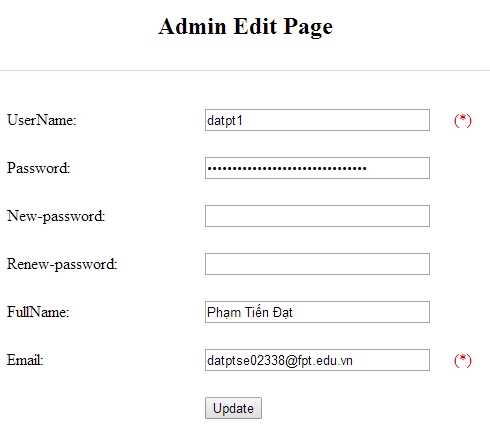


Figure 5.2: Edit profile admin

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **No** | **Field name** | **Type** | **Require** | **Mandatory** | **Max-Length** | **Description** |
| 1 | Username | Text | Text | N |  | Username of admin’s account |
| 2 | New-password | Text | Text | Y | 32 | Admin input new password with length less than 32 characters |
| 3 | Renew-password | Text | Text | Y | 32 | Admin re-input new password with length less than 32 characters |
| 4 | Fullname | Text | Text | Y | 100 | Admin input full name with length less than 100 characters |
| 5 | Email | Text | Text | Y | 100 | Admin input email with length less than 100 characters |
| 6 | Update | Button | Click | Y |  | User click to edit vocabulary |

Table 5.2: Edit profile admin’s screen description

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **UC019 – Edit profile(admin)** | | | | |
| **Use-case No.** | <UC019> | **Use-case Version** | | <1.0> |
| **Use-case Name** | Edit profile admin | | | |
| **Author** | Tuan NN | | | |
| **Date** | 09/06/2014 | **Priority** | <High > | |
| **Actor:**  Administrator  **Summary:**  Administrator want to change their profile  **Triggers**  Administrator login the website and click on the edit profile link  **Preconditions:**   * Website is available * Administrator login the website   **Post Conditions:**  Edit admin profile and redirect to edited profile page  **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | **Step** | **User** | **System** | | 1 | Enter website link on web browser | Display Homepage screen | | 2 | Enter necessary and mandatory information and click "Login” | Redirect to previous page and logged admin into system. | | 3 | Click on edit profile tab | Display “Edit profile” screen that contains these elements:   * Username * Password * New-Password * Renew-Password * Full name * Email | | 4 | Fill test information into all necessary or mandatory fields and click “Add” button | The system validates the input data and then save new test data into database |   **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 4 | Enter necessary and mandatory information and click another link | Switch to selected page |   **Exceptions:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 4 | Enter new password that incorrect form or missing information and click “Lưu” button | Display error message | | 4 | Enter new email that incorrect form or missing information and click “Lưu” button | Display error message | | | | | |

##### UC020: Delete admin

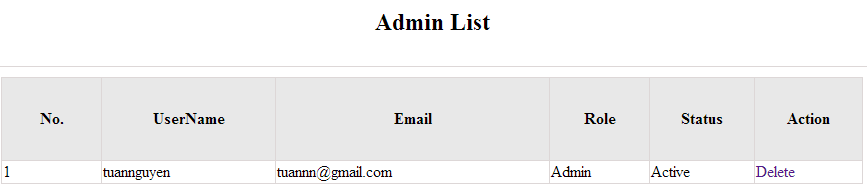


Figure 5.3: Delete admin

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **UC020 – Delete admin** | | | | |
| **Use-case No.** | <UC020> | **Use-case Version** | | <1.0> |
| **Use-case Name** | Delete admin | | | |
| **Author** | Tuan NN | | | |
| **Date** | 09/06/2014 | **Priority** | <High > | |
| **Actor:**  Administrator  **Summary:**  Administrators can remove administrator rights of other admin  **Triggers**  Login the website and click on the delete admin link  **Preconditions:**   * Website is available * Admin login the website   **Post Conditions:**  Admin will be remove administrator rights  **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | **Step** | **User** | **System** | | 1 | Enter website link on web browser | Display Homepage screen | | 2 | Enter necessary and mandatory information and click "Login” | Redirect to previous page and logged admin into system. | | 3 | Click on delete admin link. | Display delete admin page | | 4 | Enter the account that you want to remove administrator rights | Remove administrator rights of account and display message to remove successfully |     **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 4 | Input data in account area then click on another link | Switch to selected page |   **Exceptions:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 4 | Fill incorrect account name | Return Error message | | | | | |

### Management Member’s account

#### Use case diagram



#### Screen description

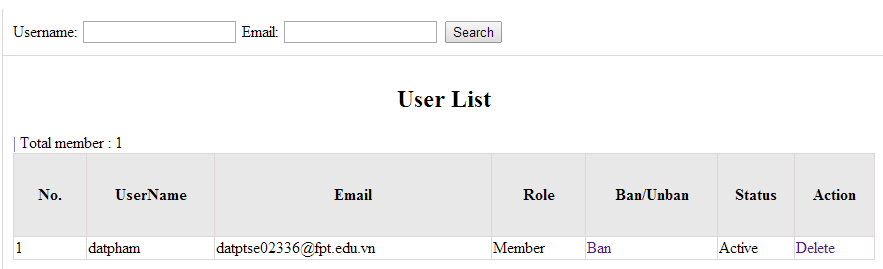


Figure 6: Management Member

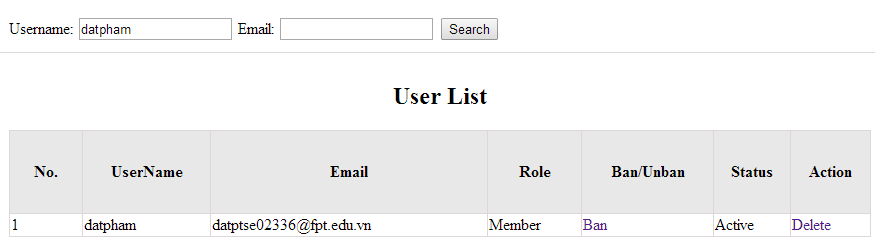
|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **No** | **Field name** | **Type** | **Require** | **Mandatory** | **Max-Length** | **Description** |
| 1 | Username | Text | Text | Y | 32 | Admin input username to search member by username |
| 2 | Email | Text | Text | Y | 100 | Admin input email to search member by email |
| 3 | Ban/Unban | Button | Click | N |  | Admin click ban/unban member |
| 4 | Delete | Button | Click | N |  | Admin click delete member |

Table 6: Management member’s screen description

#### Use case specifications

##### UC021: Search member

Search member screen:



|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **UC021 – Search member** | | | | |
| **Use-case No.** | <UC021> | **Use-case Version** | | <1.0> |
| **Use-case Name** | Search member | | | |
| **Author** | Tuan NN | | | |
| **Date** | 09/06/2014 | **Priority** | <High > | |
| **Actor:**  Admin  **Summary:**  When admin want to search by member’s account in database successfully if it is existed  **Triggers**  Admin login the website and click on search member , input member’s account in the right text box then click “Search” button  **Preconditions:**   * Website is available * Admin must be login * Input data must be correctly   **Post Conditions:**  Display detail information of member  **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | **Step** | **User** | **System** | | 1 | Enter website link on web browser | Display Homepage screen | | 2 | Enter necessary and mandatory information and click "Login” | Redirect to previous page and logged admin into system. | | 3 | Click on "Search member" button and input member’s account or email | Display “member information” screen that contains the information :   * No * User Name * Email * Roll * Ban/Unban * Status * Delete |     **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 3 | Fill information of the member that they want to find into these fields then click on another link | Switch to selected page |   **Exceptions:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 3 | Fill information of the member that they want to find (that do not exist in database) into these fields then click “Search” button | Return Error message to inform that member cannot be found | | | | | |

##### UC022: Ban/Unban member

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **UC022 – Search member** | | | | |
| **Use-case No.** | <UC022> | **Use-case Version** | | <1.0> |
| **Use-case Name** | Ban/Unban member | | | |
| **Author** | Tuan NN | | | |
| **Date** | 09/06/2014 | **Priority** | <High > | |
| **Actor:**  Admin  **Summary:**  When admin can ban user who violated rule of website and unban member  **Triggers**  Admin login the website and click on member’s account and then click “Ban/Unban” button  **Preconditions:**   * Website is available * Admin must be login * Input data must be correctly   **Post Conditions:**  Member’s account will be ban/unban by administrator  **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | **Step** | **User** | **System** | | 1 | Enter website link on web browser | Display Homepage screen | | 2 | Enter necessary and mandatory information and click "Login” | Redirect to previous page and logged admin into system. | | 3 | Click on "Search member" button and input member’s account or email | Display “member information” screen that contains the information | | 4 | Click “Ban/Unban” link | Ban/Unban member |   **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 3 | Fill information of the member that they want to find into these fields then click on another link | Switch to selected page |   **Exceptions:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 3 | Fill information of the member that they want to find (that do not exist in database) into these fields then click “Search” button | Return Error message to inform that member cannot be found | | | | | |

##### UC023: Delete member

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **UC023 – Delete member** | | | | |
| **Use-case No.** | <UC023> | **Use-case Version** | | <1.0> |
| **Use-case Name** | Delete member | | | |
| **Author** | Tuan NN | | | |
| **Date** | 09/06/2014 | **Priority** | <High > | |
| **Actor:**  Admin  **Summary:**  Administrators can delete member who violated rule of website  **Triggers**  Admin login the website and click on the delete member link  **Preconditions:**   * Website is available * Admin must be login * Input data must be correctly   **Post Conditions:**  Member’s account will be removed from system  **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | **Step** | **User** | **System** | | 1 | Enter website link on web browser | Display Homepage screen | | 2 | Enter necessary and mandatory information and click "Login” | Redirect to previous page and logged admin into system. | | 3 | Click on "Search member" button and input member’s account or email | Display information of member | | 4 | Click on delete link corresponding with member want to delete | Remove member from list |     **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 3 | Fill information of the member that they want to find into these fields then click on another link | Switch to selected page |   **Exceptions:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 3 | Fill information of the member that they want to find (that do not exist in database) into these fields then click “Search” button | Return Error message to inform that member cannot be found | | | | | |

### Vocabulary Management

#### Use case diagram



#### Screen description



Figure 7: Vocabulary management

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **No** | **Field name** | **Type** | **Require** | **Mandatory** | **Max-Length** | **Description** |
| 1 | Romaji | Text | Text | Y | 100 | Admin input romaji with length less than 100 character |
| 2 | Search | Button | Click | Y |  | Admin click to search vocabulary |
| 2 | Add-new | Button | Click | N |  | Admin add new vocabulary into database |
| 3 | Add meaning | Button | Click | Y |  | Admin add meaning of vocabulary |
| 4 | Edit | Button | Click | N |  | Admin click edit vocabulary |
| 5 | Delete | Button | Click | N |  | Admin click delete vocabulary |
| 6 | Add-reference | Button | Click | N |  | Admin add reference of vocabulary if reference exist |
| 7 | List-contribute | Button | Click | N |  | Admin click to view list contribute |

Table 7.1: Vocabulary management’s screen description

#### Use case specifications

##### UC024: Search vocabulary



Figure 7.1: Search vocabulary

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **UC0024 – Specification** | | | | |
| **Use-case No.** | <UC0024> | **Use-case Version** | | <1.0> |
| **Use-case Name** | Search vocabulary | | | |
| **Author** | TuanNN | | | |
| **Date** | 09/06/2014 | **Priority** | <High > | |
| **Actor:**  Admin  **Summary:**  When Administrator want to search a vocabulary on database  **Goal:**  Administrator can search vocabulary in database successfully if it is existed  **Triggers**  Admin login the website and click on “Vocabulary management” tab, input vocabulary in the right text box then click “Search” button  **Preconditions:**   * Website is available * Admin must be login * Input data must be correctly   **Post Conditions:**  Display detail information of vocabulary  **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | **Step** | **User** | **System** | | 1 | Enter website link on web browser | Display Homepage screen | | 2 | Enter necessary and mandatory information and click "Login” | Redirect to previous page and logged admin into system. | | 4 | Click on “vocabulary management” tab | Displays criteria search screen | | 5 | Fill information of the vocabulary that they want to find into these fields then click “Search” button | Displays search result as a table with these elements:   * No * Hiragana * Romaji * Status * Meaning * Category * Kanji * Specialized * Add meaning * Edit * Delete * Add reference |     **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 5 | Fill information of the vocabulary that they want to find into these fields then click on another link | Switch to selected page |   **Exceptions:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 5 | Fill information of the vocabulary that they want to find (that do not exited in database) into these fields then click “Search” button | Return Error message to inform that vocabulary structure cannot be found | | | | | |

##### UC025: Add vocabulary



Figure 7.2: Add new vocabulary



Figure 7.2.1: Add vocabulary meaning

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **No** | **Field name** | **Type** | **Require** | **Mandatory** | **Max-Length** | **Description** |
| 1 | Hiragana | Text | Text | Y | 200 | Admin input vocabulary by hiragana with length less than 200 characters |
| 2 | Romaji | Text | Text | Y | 200 | Admin input vocabulary by romaji with length less than 200 characters |
| 3 | Meaning | Text | Text | Y | 500 | Admin input mean of vocabulary with length less than 500 characters |
| 4 | Category | Drop-down list | Click | Y |  | Admin choose category of vocabulary |
| 5 | Kanji | Text | Text | Y | 10 | Admin input vocabulary by kanji with length less than 10 characters |
| 6 | Specialized | Text | Text | Y | 200 | Admin input specialized of vocabulary with length less than 200 characters |
| 7 | Add | Button | Click | Y |  | Admin add new vocabulary |

Table 7.2: Add new vocabulary & meaning’s screen description

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **UC0025 - Specification** | | | | |
| **Use-case No.** | <UC0025> | **Use-case Version** | | <1.0> |
| **Use-case Name** | Add vocabulary | | | |
| **Author** | Tuan NN | | | |
| **Date** | 09/06/2014 | **Priority** | <High > | |
| **Actor:**  Admin  **Summary:**  When Administrator want to add a vocabulary into database. They have to insert all necessary data of vocabulary into “Add new vocabulary” screen  **Goal:**  Administrator can add new vocabulary information in database successfully  **Triggers**  User must click on “Vocabulary management/ Add new” tab and input all necessary information of vocabulary into the right fields then click on “Add new” button  **Preconditions:**   * Website is available * User have logged into system as an admin. * All mandatory fields have been filled * All input data must be valid and have not existed in system   **Post Conditions:**  New vocabulary has been saved into system database successfully  **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | **Step** | **User** | **System** | | 1 | Enter website link on web browser | Display Homepage screen | | 2 | Enter necessary and mandatory information and click "Login” | Redirect to previous page and logged admin into system. | | 3 | Click on “Vocabulary management/Add new” tab | Display “Add New Vocabulary” screen that contains these elements:   * Hiragana * Romaji | | 4 | Fill information into all necessary or mandatory fields and click “Add” button | The system validates the input data and then save new vocabulary data into database | | 5 | Click on “Vocabulary management/Add meaning” tab | Display “Add meaning” screen that contains these elements:   * Hiragana * Romaji * Meaning * Category * Kanji * Specialized | | 6 | Fill information into all necessary or mandatory fields and click “Add” button | The system validates the input data and then save new vocabulary data into database | | 7 | Click on “Vocabulary management/Add reference” tab | Display “Add meaning” screen that contains these elements:   * Vocabulary * Meaning * Sentence | | 8 | Choose sentence and click “Add” button | The system validates the input data and then save new vocabulary data into database |     **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 4 | Click on another link | Do not save new vocabulary data into database then redirect to selected page | | 6 | Click on another link | Do not save meaning data into database then redirect to selected page | | 8 | Click on another link | Do not save reference into database then redirect to selected page |   **Exceptions:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 4 | Do not fill full information into fields then click “Add” button | Return Error message beside empty field and ask if user want to add with empty field. | | 6 | Do not fill full information into fields then click “Add” button | Return Error message beside empty field and ask if user want to add with empty field. | | 8 | Do not fill full information into fields then click “Add” button | Return Error message beside empty field and ask if user want to add with empty field. | | | | | |

##### UC026: Edit vocabulary



Figure 7.3: Edit vocabulary

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **No** | **Field name** | **Type** | **Require** | **Mandatory** | **Max-Length** | **Description** |
| 1 | Hiragana | Text | Text | Y | 200 | Admin input vocabulary by hiragana with length less than 200 characters |
| 2 | Romaji | Text | Text | Y | 200 | Admin input vocabulary by romaji with length less than 200 characters |
| 3 | Meaning | Text | Text | Y | 500 | Admin input mean of vocabulary with length less than 500 characters |
| 4 | Category | Drop-down list | Click | Y |  | Admin choose category of vocabulary |
| 5 | Kanji | Text | Text | Y | 10 | Admin input vocabulary by kanji with length less than 10 characters |
| 6 | Specialized | Text | Text | Y | 200 | Admin input specialized of vocabulary with leng less than 200 characters |
| 7 | Edit | Button | Click | Y |  | Admin edit vocabulary |

Table 7.3: Edit vocabulary’s screen description

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **UC0026 - Specification** | | | | |
| **Use-case No.** | <UC0026> | **Use-case Version** | | <1.0> |
| **Use-case Name** | Edit vocabulary | | | |
| **Author** | TuanNN | | | |
| **Date** | 09/06/2014 | **Priority** | <High > | |
| **Actor:**  Admin  **Summary:**  When Administrator want to edit a vocabulary on database which has some new meanings or errors  **Goal:**  Administrator can edit vocabulary information in database successfully  **Triggers**  User must click on “Vocabulary management” then search for the vocabulary. User click on “Edit” link on corresponding vocabulary. They edit necessary information in the right fields then click on “Edit” button.  **Preconditions:**   * Website is available * User have logged into system as an admin. * All mandatory fields have been filled * All input data must be valid and have not existed in system   **Post Conditions:**  Changed information of vocabulary has been saved into system database successfully  **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | **Step** | **User** | **System** | | 1 | Enter website link on web browser | Display Homepage screen | | 2 | Enter necessary and mandatory information and click "Login” | Redirect to previous page and logged admin into system. | | 3 | Click on “Vocabulary management ” then search for the vocabulary that they want to edit | Displays search result as a table | | 4 | Click on “Edit” link | Display “Edit Vocabulary” screen that contains the information of chosen vocabulary with these elements:   * Hiragana * Romaji * Meaning * Category * Kanji * Specialized | | 5 | Edit vocabulary information and click “Edit” button | The system validates the input data and then save data into database |     **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 4 | Edit vocabulary information then click to another link | Do not save edited data then redirect to selected page |   **Exceptions:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 4 | Edit vocabulary information to be similar to another existed grammar and click “Edit” button | The system validates the input data and return Error message and do not save edited data into database |   **Reference:**  UC0024 - Search Vocabulary | | | | |

##### UC027: Delete vocabulary

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **UC0027 - Specification** | | | | |
| **Use-case No.** | <UC0027> | **Use-case Version** | | <1.0> |
| **Use-case Name** | Delete vocabulary | | | |
| **Author** | TuanNN | | | |
| **Date** | 09/06/2014 | **Priority** | <High > | |
| **Actor:**  Admin  **Summary:**  When Administrator want to delete a vocabulary on database  **Goal:**  Administrator can delete selected vocabulary in database successfully  **Triggers**  User must click on “Vocabulary management” then search for the vocabulary. User click on “Delete” link on corresponding vocabulary.  **Preconditions:**   * Website is available * User have logged into system as an admin. * All mandatory fields have been filled * All input data must be valid and have existed in system   **Post Conditions:**  Vocabulary has been deleted from system database successfully  **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | **Step** | **User** | **System** | | 1 | Enter website link on web browser | Display Homepage screen | | 2 | Enter necessary and mandatory information and click "Login” | Redirect to previous page and logged admin into system. | | 3 | Click on “Vocabulary management ” then search for the vocabulary that they want to delete | Displays search result as a table | | 4 | Click on “Delete” link beside that vocabulary row | Remove that vocabulary from list |   **Exceptions:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | |  |  |  |   **Reference:**  UC0024 - Search vocabulary | | | | |
|  | | | | |

### Grammar Management

#### Use case diagram



#### Screen description

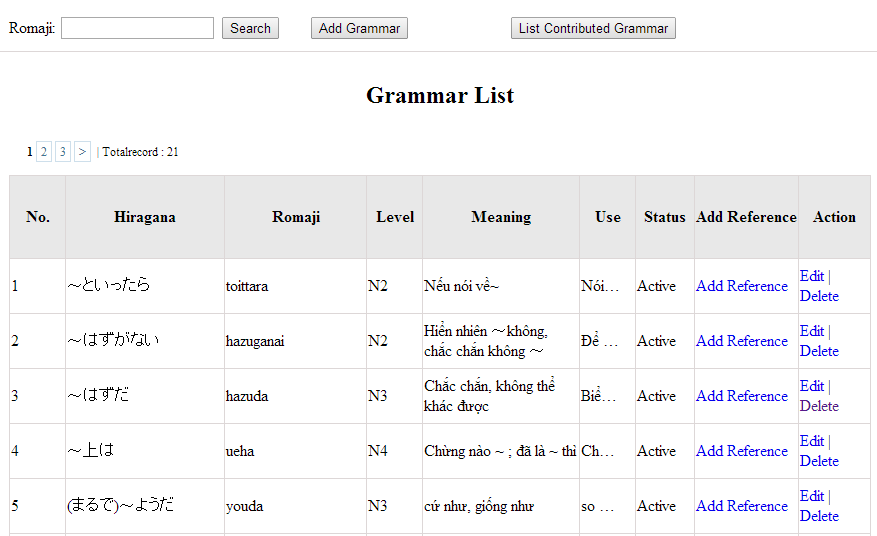


Figure 8: Grammar management

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **No** | **Field name** | **Type** | **Require** | **Mandatory** | **Max-Length** | **Description** |
| 1 | Romaji | Text | Text | Y | 100 | Admin input romaji with length less than 100 character |
| 2 | Add-new | Button | Click | N |  | Admin add new grammar into database |
| 3 | Edit | Button | Click | N |  | Admin click edit grammar |
| 4 | Delete | Button | Click | N |  | Admin click delete grammar |
| 5 | Add-reference | Button | Click | N |  | Admin add reference of grammar |
| 6 | List-contribute | Button | Click | N |  | Admin click to view list contribute |
| Table 8.1: Grammar management’s screen description | | | | | | |

#### Use case specifications

##### UC0028: Search grammar

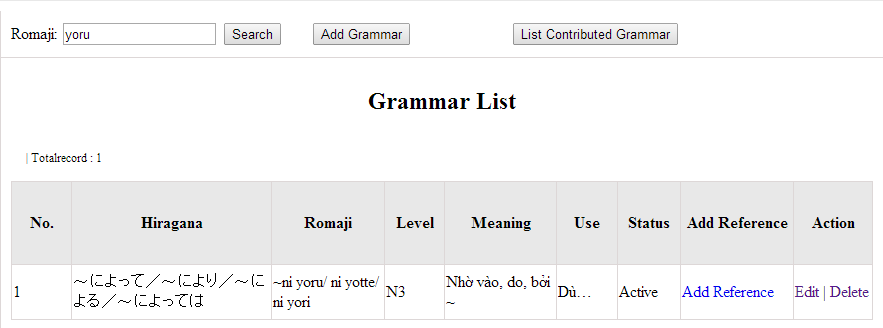


Figure 8.1: Search grammar

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **UC0028 - Specification** | | | | |
| **Use-case No.** | <UC0028> | **Use-case Version** | | <1.0> |
| **Use-case Name** | Search grammar | | | |
| **Author** | Minh PT | | | |
| **Date** | 09/06/2014 | **Priority** | <High > | |
| **Actor:**  Admin  **Summary:**  When Administrator wants to search a grammatical structure in database, Admin can input a grammatical structure by “romaji” letter then click button “Search”. If that grammatical structure is existed, system will return meaning.  **Triggers**  Click on “Grammar management” tab, input grammatical structure in the right text box then click “Search” button  **Preconditions:**   * Website is available * User has to login as Administrator * User has to input data in search area   **Post Conditions:**  Display detail information of grammatical structure  **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | **Step** | **User** | **System** | | 1 | Have logged into system as an admin |  | | 2 | Click on “Grammar management” tab | Displays criteria search screen | | 3 | Fill information of the grammatical structure that they want to find into these fields then click “Search” button | Displays search result as a table with these elements:   * No * Hiragana * Romaji * Level * Meaning * Use * Status * Add reference * Edit * Delete |     **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 3 | Fill information of the grammatical structure that they want to find into these fields then click on another link | Switch to selected page |   **Exceptions:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 3 | Fill information of the grammatical structure that they want to find (that do not exited in database) into these fields then click “Search” button | Return Error message to inform that grammatical structure cannot be found | | | | | |

##### UC0029: Add grammar

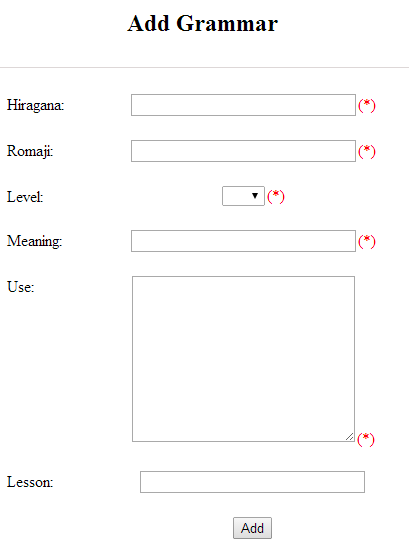


Figure 8.2: Add grammar

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **No** | **Field name** | **Type** | **Require** | **Mandatory** | **Max-Length** | **Description** |
| 1 | Hiragana | Text | Text | Y | 200 | Admin input grammar by hiragana with length less than 200 characters |
| 2 | Romaji | Text | Text | Y | 200 | Admin input grammar by romaji with length less than 200 characters |
| 3 | Meaning | Text | Text | Y | 200 | Admin input mean of grammar with length less than 200 characters |
| 4 | Use | Text | Text | Y | 1000 | Admin input use of grammar with length less than 1000 characters |
| 5 | Level | Drop-down list | Choose | Y |  | Admin choose level of grammar |
| 6 | Lesson | Text | Text | Y | 20 | Admin input lesson |
| 7 | Add | Button | Click | Y |  | Admin add new grammar |

Table 8.2: Add grammar’s screen description

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **UC0029 - Specification** | | | | |
| **Use-case No.** | <UC0029> | **Use-case Version** | | <1.0> |
| **Use-case Name** | Add grammar | | | |
| **Author** | Minh PT | | | |
| **Date** | 09/06/2014 | **Priority** | <High > | |
| **Actor:**  Admin  **Summary:**  When Administrator wants to add a grammar into database. They have to insert all necessary data of grammar into “Add Grammar” screen then click “Add” button  **Triggers**  User must click on “Grammar management/ Add New” and input all necessary information of grammar into the right fields then click on “Add” button  **Preconditions:**   * Website is available * User has to login as Administrator * All mandatory fields have been filled * All input data must be valid and have not existed in system   **Post Conditions:**  New grammatical structure has been saved into system database successfully  **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | **Step** | **User** | **System** | | 1 | Have logged into system as an admin |  | | 2 | Click on “Grammar management/Add New” | Display “Add Grammar” screen that contains these elements:   * Hiragana * Romaji * Level * Meaning * Use * Lesson | | 3 | Fill grammar information into all necessary or mandatory fields and click “Add” button | The system validates the input data and then save new grammar data into database | | 4 | Click on “Grammar management/Add Reference” | Display “Add Grammar” screen that contains these elements:   * Grammar * Meaning * Reference | | 5 | Fill grammar information into all necessary or mandatory fields and click “Add” button | The system validates the input data and then save new grammar data into database |     **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 3 | Click on another link | Do not save new grammar data into database then redirect to selected page | | 5 | Click on another link | Do not save new reference data into database then redirect to selected page |   **Exceptions:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 3 | Do not fill full information into fields then click “Add” button | Return Error message and request user input data into all fields | | 5 | Do not fill full information into fields then click “Add” button | Return Error message and request user input data into all fields | | | | | |

##### UC0030: Edit grammar

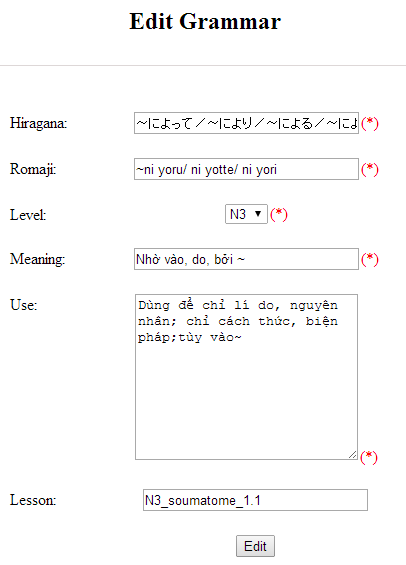


Figure 8.3: Edit grammar

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **No** | **Field name** | **Type** | **Require** | **Mandatory** | **Max-Length** | **Description** |
| 1 | Hiragana | Text | Text | Y | 200 | Admin input grammar by hiragana with length less than 200 characters |
| 2 | Romaji | Text | Text | Y | 200 | Admin input grammar by romaji with length less than 200 characters |
| 3 | Meaning | Text | Text | Y | 200 | Admin input mean of grammar with length less than 200 characters |
| 4 | Use | Text | Text | Y | 1000 | Admin input use of grammar with length less than 1000 characters |
| 5 | Level | Drop-down list | Choose | Y |  | Admin choose level of grammar |
| 6 | Lesson | Text | Text | Y | 20 | Admin input lesson |
| 7 | Add | Button | Click | Y |  | Admin add new grammar |

Table 8.3: Edit vocabulary’s screen description

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **UC0030 - Specification** | | | | |
| **Use-case No.** | <UC0030> | **Use-case Version** | | <1.0> |
| **Use-case Name** | Edit grammar | | | |
| **Author** | Minh PT | | | |
| **Date** | 09/06/2014 | **Priority** | <High > | |
| **Actor:**  Admin  **Summary:**  When Administrator want to edit a grammatical structure in database which has some new meanings or errors. Admin will search that grammar then click “Edit” link. When edit finished, new meaning of that grammar will be updated.  **Triggers**  User must click on “Grammar management” then search for the grammatical structure. User click on “Edit” link corresponding with grammar which want to edit. Users edit necessary information of grammar in the right fields then click on “Edit” button.  **Preconditions:**   * Website is available * User has to login as Administrator * All mandatory fields have been filled * All input data must be valid and have not existed in system   **Post Conditions:**  Changed information of grammar has been saved into system database successfully  **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | **Step** | **User** | **System** | | 1 | Have logged into system as an admin |  | | 2 | Click on “Management grammar ” then search for the grammatical structure that they want to edit | Displays search result as a table | | 3 | Click on “Edit” link corresponding with grammar | Display “Edit Grammar” screen that contains the information of chosen grammar with these elements:   * Hiragana * Romaji * Level * Meaning * Use * Lesson | | 4 | Edit grammar information and click “Edit” button | The system validates the input data and then save data into database |     **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 4 | Edit grammar information then click to another link | Do not save edited data then redirect to selected page |   **Exceptions:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 4 | Edit grammar information to be similar to another existed grammar and click “Edit” button | The system validates the input data and return Error message and do not save edited data into database |   **Reference:**  UC0028 - <Admin> Search Grammar | | | | |

##### UC0031: Delete grammar

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **UC0031 - Specification** | | | | |
| **Use-case No.** | <UC0031> | **Use-case Version** | | <1.0> |
| **Use-case Name** | Delete grammar | | | |
| **Author** | Minh PT | | | |
| **Date** | 09/06/2014 | **Priority** | <High > | |
| **Actor:**  Admin  **Summary:**  When Administrator want to delete a grammar in database. Admin will search that grammar then click “Delete” link. When deleted finished, that grammar no longer exist in database.  **Triggers**  User must click on “Grammar management” then search for the grammatical structure. User click on “Delete” link corresponding with grammar which want to delete.  **Preconditions:**   * Website is available * User has to login as Administrator   **Post Conditions:**  Grammar has been deleted from system database successfully  **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | **Step** | **User** | **System** | | 1 | Have logged into system as an admin |  | | 2 | Click on “Grammar management ” then search for the grammar that they want to delete | Displays search result as a table | | 3 | Click on “Delete” link corresponding with grammar | Remove that grammar in database |   **Reference:** UC0028 - <Admin> Search grammar | | | | |
|  | | | | |

### Reading Document Management

#### Use case diagram



#### Screen description



Figure 9: Reading document

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **No** | **Field name** | **Type** | **Require** | **Mandatory** | **Max-Length** | **Description** |
| 1 | Level | Drop-down list | Click | Y |  | Admin choose the level |
| 2 | Search | Button | Click | Y |  | Admin click to search |
| 3 | Add-new | Button | Click | N |  | Admin add new into database |
| 4 | Edit | Button | Click | N |  | Admin click edit grammar |
| 5 | Delete | Button | Click | N |  | Admin click delete grammar |
| 6 | Detail-Vocab | Hyperlink | Click | N |  | Details of vocabulary |
| 7 | Detail-Article | Hyperlink | Click | N |  | Details of article |
| Table 9: Reading document’s screen description | | | | | | |

#### Use case specifications

##### UC0032: Search reading document



Figure 9.1: Search reading document

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **UC0032 - Specification** | | | | |
| **Use-case No.** | <UC0032> | **Use-case Version** | | <1.0> |
| **Use-case Name** | Search document | | | |
| **Author** | Minh PT | | | |
| **Date** | 09/06/2014 | **Priority** | <High > | |
| **Actor:**  Admin  **Summary:**  When Administrator want to search reading document in database and Administrator can search reading document in database successfully if it is existed  **Triggers**  Click on “Reading management” tab, choose level of reading document in the right text box then click “Search” button  **Preconditions:**  User has to login as Administrator user  **Post Conditions:**  Display detail information of reading document  **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | **Step** | **User** | **System** | | 1 | Have logged into system as an admin |  | | 2 | Click on “Reading management” tab | Displays criteria search screen | | 3 | Choose level of the reading document that they want to find then click “Search” button | Displays search result as a table with these elements:   * No * Title * Code * Level * Vocabulary * Article * Edit * Delete |     **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 3 | Choose level of the reading document that they want to find into these fields then click on another link | Switch to selected page |   **Exceptions:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 3 | Choose level of the reading document that they want to find (that do not exited in database) into these fields then click “Search” button | Return Error message to inform that reading document cannot be found | | | | | |

##### UC0033: Add reading document



Figure 9.2: Add reading document

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **No** | **Field name** | **Type** | **Require** | **Mandatory** | **Max-Length** | **Description** |
| 1 | Code | Text | Text | Y | 50 | Admin input code with length less than 50 character |
| 2 | Title | Text | Text | Y | 100 | Admin input title with length less than 100 characters |
| 3 | Level | Drop-down list | Click | Y |  | Admin choose the level |
| 4 | Add | Button | Click | Y |  | Admin click to add reading |

Table 9.2: Add reading document’s screen description

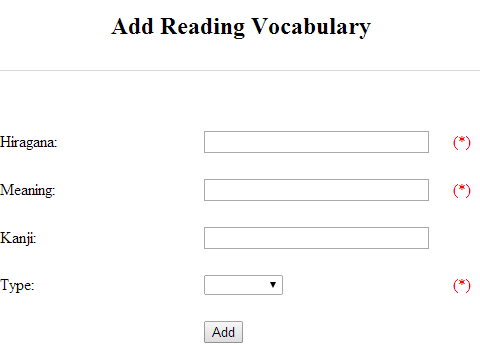


Figure 9.2.1: Add reading vocabulary

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **No** | **Field name** | **Type** | **Require** | **Mandatory** | **Max-Length** | **Description** |
| 1 | Hiragana | Text | Text | Y | 100 | Admin input hiragana with length less than 100 character |
| 2 | Meaning | Text | Text | Y | 100 | Admin input meaning with length less than 100 characters |
| 3 | Kanji | Text | Text | N | 10 | Admin input kanji with length less than 10 characters |
| 4 | Type | Drop-down list | Click | Y |  | Admin choose the type |
| 5 | Add | Button | Click | Y |  | Admin click to add reading vocabulary |

Table 9.2.1: Add reading vocabulary’s screen description

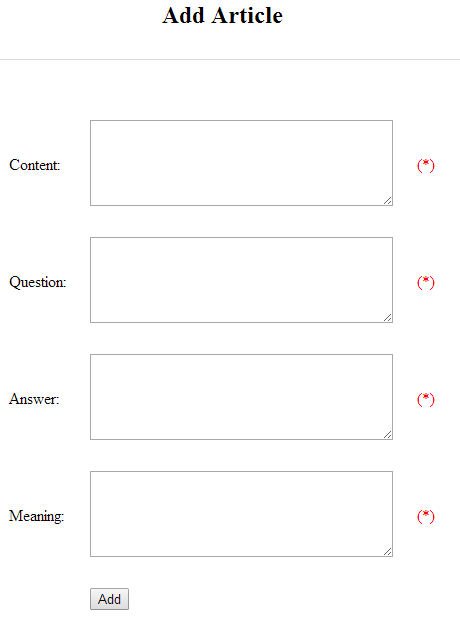


Figure 9.2.2: Add article

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **No** | **Field name** | **Type** | **Require** | **Mandatory** | **Max-Length** | **Description** |
| 1 | Content | Text | Text | Y | 5000 | Admin input content with length less than 5000 character |
| 2 | Question | Text | Text | Y | 5000 | Admin input question with length less than 5000 characters |
| 3 | Answer | Text | Text | Y | 5000 | Admin input answer with length less than 5000 characters |
| 4 | Meaning | Text | Text | Y | 5000 | Admin input meaning with length less than 5000 characters |
| 5 | Add | Button | Click | Y |  | Admin click to add article |

Table 9.2.2: Add article’s screen description

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **UC0030 - Specification** | | | | |
| **Use-case No.** | <UC0030> | **Use-case Version** | | <1.0> |
| **Use-case Name** | Add document | | | |
| **Author** | Minh PT | | | |
| **Date** | 09/06/2014 | **Priority** | <High > | |
| **Actor:**  Admin  **Summary:**  When Administrator want to add new reading document into database. They have to insert all necessary data of reading document into “Add new reading” screen  **Triggers**  User must click on “Reading management/ Add new” tab and input all necessary information of grammar into the right fields then click on “Add new” button  **Preconditions:**   * User have logged into system as an admin. * All mandatory fields have been filled * All input data must be valid and have not existed in system   **Post Conditions:**  New reading document has been saved into system database successfully  **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | **Step** | **User** | **System** | | 1 | Have logged into system as an admin |  | | 2 | Click on “Reading management/Add new” tab | Display “Add New Reading” screen that contains these elements:   * Code * Title * Level | | 3 | Fill reading document information into all necessary or mandatory fields and click “Add ” button | The system validates the input data and then save new reading document data into database | | 4 | Click on “Reading management/Vocabulary Details” | Display “Vocabulary Details” screen that contains these elements:   * Hiragana * Meaning * Kanji * Type | | 5 | Fill reading document information into all necessary or mandatory fields and click “Add ” button | The system validates the input data and then save new reading document data into database | | 6 | Click on “Reading management/Article Details” | Display “Article Details” screen that contains these elements:   * Content * Question * Answer * Meaning | | 7 | Fill reading document information into all necessary or mandatory fields and click “Add ” button | The system validates the input data and then save new reading document data into database |     **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 3 | Click on another link | Do not save new reading document data into database then redirect to selected page | | 5 | Click on another link | Do not save vocabulary details data into database then redirect to selected page | | 7 | Click on another link | Do not save article details data into database then redirect to selected page |   **Exceptions:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 3 | Do not fill full information into fields then click “Add new” button | Return Error message beside empty field and ask if user want to add with empty field. | | 5 | Do not fill full information into fields then click “Add new” button | Return Error message beside empty field and ask if user want to add with empty field. | | 7 | Do not fill full information into fields then click “Add new” button | Return Error message beside empty field and ask if user want to add with empty field. | | | | | |

##### UC0034: Edit reading document



Figure 9.3: Edit reading document

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **No** | **Field name** | **Type** | **Require** | **Mandatory** | **Max-Length** | **Description** |
| 1 | Code | Text | Text | Y | 50 | Admin input code with length less than 50 character |
| 2 | Title | Text | Text | Y | 100 | Admin input title with length less than 100 characters |
| 3 | Level | Drop-down list | Click | Y |  | Admin choose the level |
| 4 | Edit | Button | Click | Y |  | Admin click to edit reading |

Table 9.3: Edit reading document’s screen description

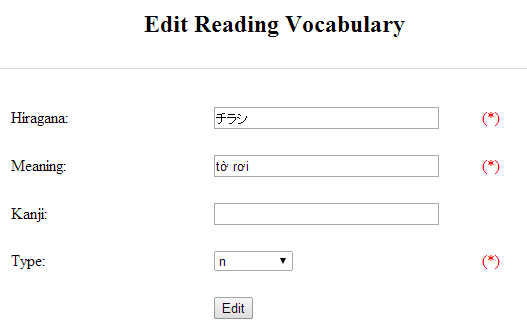


Figure 9.3.1: Add reading vocabulary

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **No** | **Field name** | **Type** | **Require** | **Mandatory** | **Max-Length** | **Description** |
| 1 | Hiragana | Text | Text | Y | 100 | Admin input hiragana with length less than 100 character |
| 2 | Meaning | Text | Text | Y | 100 | Admin input meaning with length less than 100 characters |
| 3 | Kanji | Text | Text | N | 10 | Admin input kanji with length less than 10 characters |
| 4 | Type | Drop-down list | Click | Y |  | Admin choose the type |
| 5 | Edit | Button | Click | Y |  | Admin click to edit reading vocabulary |

Table 9.3.1: Add reading vocabulary’s screen description

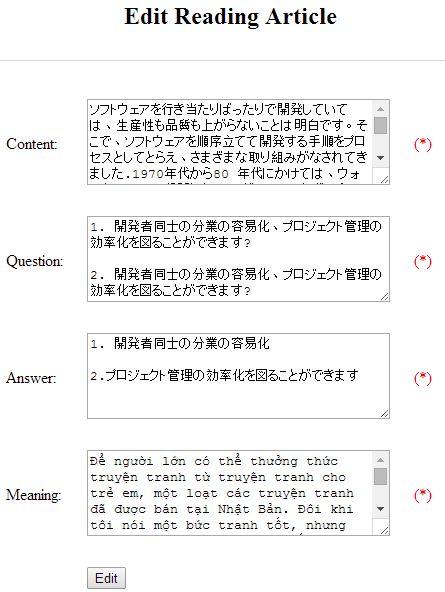


Figure 9.3.2: Add article

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **No** | **Field name** | **Type** | **Require** | **Mandatory** | **Max-Length** | **Description** |
| 1 | Content | Text | Text | Y | 5000 | Admin input content with length less than 5000 character |
| 2 | Question | Text | Text | Y | 5000 | Admin input question with length less than 5000 characters |
| 3 | Answer | Text | Text | Y | 5000 | Admin input answer with length less than 5000 characters |
| 4 | Meaning | Text | Text | Y | 5000 | Admin input meaning with length less than 5000 characters |
| 5 | Edit | Button | Click | Y |  | Admin click to edit article |

Table 9.3.2: Add article’s screen description

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **UC0034 - Specification** | | | | |
| **Use-case No.** | <UC0034> | **Use-case Version** | | <1.0> |
| **Use-case Name** | Edit reading document | | | |
| **Author** | Minh PT | | | |
| **Date** | 09/06/2014 | **Priority** | <High > | |
| **Actor:**  Admin  **Summary:**  When Administrator want to edit reading document on database which has some new meanings or errors  **Triggers**  User must click on “Reading management” then search for the reading document. User click on “Edit” link to corresponding reading document. They edit necessary information of reading document in the right fields then click on “Edit” button.  **Preconditions:**   * User have logged into system as an admin. * All mandatory fields have been filled * All input data must be valid and have not existed in system   **Post Conditions:**  Changed information of reading document has been saved into system database successfully  **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | **Step** | **User** | **System** | | 1 | Have logged into system as an admin |  | | 2 | Click on “Reading management ” then search for the reading document that they want to edit | Displays search result as a table | | 3 | Click on “Edit” link | Display “Edit reading” screen that contains the information of chosen reading with these elements:   * Code * Title * Level | | 4 | Edit reading document information and click “Edit” button | The system validates the input data and then save data into database | | 5 | Click on “VocabularyEdit” link | Display “Edit vocabulary” screen that contains the information of chosen reading with these elements:   * Hiragana * Meaning * Kanji * Type | | 6 | Edit reading document information and click “Edit” button | The system validates the input data and then save data into database | | 7 | Click on “ArticleEdit” link | Display “Edit article” screen that contains the information of chosen reading with these elements:   * Content * Question * Answer * Meaning | | 8 | Edit reading document information and click “Edit” button | The system validates the input data and then save data into database |     **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 4 | Edit reading information then click to another link | Do not save edited data then redirect to selected page | | 6 | Edit reading information then click to another link | Do not save edited data then redirect to selected page | | 8 | Edit reading information then click to another link | Do not save edited data then redirect to selected page |   **Exceptions:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 4 | Edit reading information to be similar to another existed reading and click “Edit” button | The system validates the input data and return Error message and do not save edited data into database | | 6 | Edit reading information to be similar to another existed reading and click “Edit” button | The system validates the input data and return Error message and do not save edited data into database | | 8 | Edit reading information to be similar to another existed reading and click “Edit” button | The system validates the input data and return Error message and do not save edited data into database |   **Reference:**  UC0032- <Admin> Search reading document | | | | |

##### UC0035: Delete reading document

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **UC0035 - Specification** | | | | |
| **Use-case No.** | <UC0035> | **Use-case Version** | | <1.0> |
| **Use-case Name** | Delete reading document | | | |
| **Author** | Minh PT | | | |
| **Date** | 09/06/2014 | **Priority** | <High > | |
| **Actor:**  Admin  **Summary:**  When Administrator want to delete reading document on database  **Triggers**  User must click on “Reading management” then search for the reading document. User click on “Delete” link on corresponding reading document.  **Preconditions:**   * User have logged into system as an admin. * All mandatory fields have been filled * All input data must be valid and have existed in system   **Post Conditions:**  Reading document has been deleted from system database successfully  **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | **Step** | **User** | **System** | | 1 | Have logged into system as an admin |  | | 2 | Click on “Reading management ” then search for the reading document that they want to delete | Displays search result as a table | | 3 | Click on “Delete” link beside that reading document row | Displays pop up to confirm if they really want to remove that reading document | | 4 | Click “Yes” button on popup | Closes the popup then remove that reading document name from reading list |     **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 4 | Click close icon of the popup | Only closes the popup, does not remove that reading document |   **Exceptions:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 4 | Click “Cancel” button on popup | Only closes the popup, does not remove that reading document |   **Reference:**  UC0032 - <Admin> Search reading document | | | | |
|  | | | | |

### Conversation management

#### Use case diagram



#### Screen description



Figure 10: Conversation management

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **No** | **Field name** | **Type** | **Require** | **Mandatory** | **Max-Length** | **Description** |
| 1 | Level | Drop-down list | Click | N |  | Admin choose the level |
| 2 | Search | Button | Click | N |  | Admin click to search conversation |
| 3 | Add-new | Button | Click | N |  | Admin click to add new conversation |
| 4 | View | Hyperlink | Click | N |  | Admin click to view content |
| 5 | Edit | Hyperlink | Click | N |  | Admin click edit conversation |
| 6 | Delete | Hyperlink | Click | N |  | Admin click delete conversation |

Table 10: Conversation management’s screen description



#### Use case specifications

##### UC0036: Search conversation

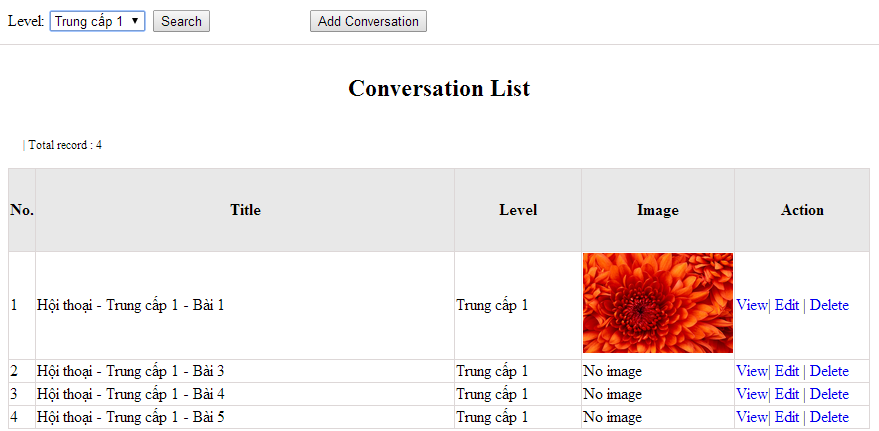


Figure 10.1: Search conversation

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **UC0036 - Specification** | | | | |
| **Use-case No.** | <UC0036> | **Use-case Version** | | <1.0> |
| **Use-case Name** | Search conversation | | | |
| **Author** | Minh PT | | | |
| **Date** | 09/06/2014 | **Priority** | <High > | |
| **Actor:**  Admin  **Summary:**  When Administrator wants to search conversation in database. User choose level of conversation or level then click “Search” button  **Triggers**  Click on “Conversation management” tab, choose level of conversation in the right text box then click “Search” button  **Preconditions:**   * Website is available * User has to login as Administrator * User has to input data in search area   **Post Conditions:**  Display detail information of conversation  **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | **Step** | **User** | **System** | | 1 | Have logged into system as an admin |  | | 2 | Click on “Conversation management” tab | Displays criteria search screen | | 3 | Choose level of the conversation that they want to find then click “Search” button | Displays search result as a table with these elements:   * No * Title * Level * Image * View * Edit * Delete |     **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 3 | Choose level of the conversation that they want to find into these fields then click on another link | Switch to selected page |   **Exceptions:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 3 | Choose level of the conversation that they want to find (that do not exited in database) into these fields then click “Search” button | Return Error message to inform that conversation cannot be found | | | | | |

##### UC0037: Add conversation



Figure 10.2.1: Add conversation

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **No** | **Field name** | **Type** | **Require** | **Mandatory** | **Max-Length** | **Description** |
| 1 | Title | Text | Text | Y | 100 | Admin input title of conversation with length less than 100 characters |
| 3 | Level | Drop-down list | Text | Y |  | Admin choose the level |
| 4 | Image | Button | Click | N |  | Admin choose the image |
| 5 | Add | Button | Click | Y |  | Admin add new conversation |

Table 10.2.1: Add conversation’s screen description

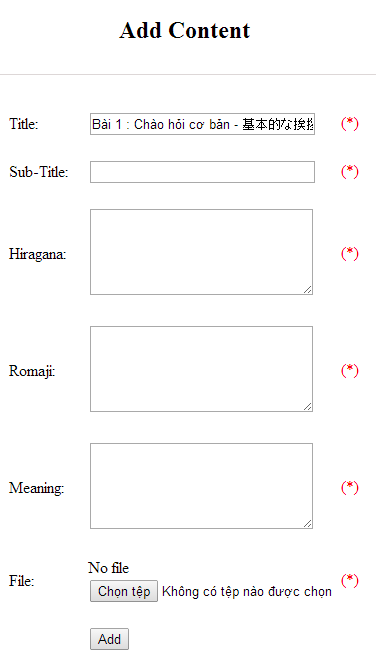


Figure 10.2.2: Add new conversation content

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **No** | **Field name** | **Type** | **Require** | **Mandatory** | **Max-Length** | **Description** |
| 1 | Title |  |  |  |  |  |
| 2 | Sub-title | Text | Text | Y | 200 | Admin input subtitle with length less than 200 characters |
| 3 | Hiragana | Text | Text | Y | 5000 | Admin input hiragana with length less than 5000 characters |
| 4 | Romaji | Text | Text | Y | 5000 | Admin input conversation by romaji with length less than 5000 characters |
| 5 | Meaning | Text | Text | Y | 5000 | Admin input conversation’s meaning with length less than 5000 characters |
| 6 | File | Button | Click | Y |  | Admin choose the file |
| 7 | Add | Button | Click | Y |  | Admin add new content |

Table 10.2.2: Add conversation content’s screen description

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **UC0037 - Specification** | | | | |
| **Use-case No.** | <UC0037> | **Use-case Version** | | <1.0> |
| **Use-case Name** | Add conversation | | | |
| **Author** | Minh PT | | | |
| **Date** | 09/06/2014 | **Priority** | <High > | |
| **Actor:**  Admin  **Summary:**  When Administrator wants to add new conversation into database. They have to insert all necessary data of conversation into “Add Conversation” screen  **Triggers**  User must click on “Conversation management/ Add New” and input all necessary information of conversation into the right fields then click on “Add” button  **Preconditions:**   * Website is available * User have logged into system as an admin. * All mandatory fields have been filled * All input data must be valid and have not existed in system   **Post Conditions:**  New conversation has been saved into system database successfully  **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | **Step** | **User** | **System** | | 1 | Have logged into system as an admin |  | | 2 | Click on “Conversation management/Add New” | Display “Add Conversation” screen that contains these elements:   * Title * Level * Image | | 3 | Fill conversation information into all necessary or mandatory fields and click “Add” button | The system validates the input data and then save new conversation data into database | | 4 | Click on “Conversation management/View/Add new content” | Display “Add Content” screen that contains these elements:   * Title * Subtitle * Hiragana * Romaji * Meaning * File | | 5 | Fill conversation information into all necessary or mandatory fields and click “Add” button | The system validates the input data and then save new conversation data into database |     **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 3 | Click on another link | Do not save new conversation data into database then redirect to selected page | | 5 | Click on another link | Do not save new content conversation data into database then redirect to selected page |   **Exceptions:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 3 | Do not fill full information into fields then click “Add” button | Return Error message and request user input data into all fields | | 5 | Do not fill full information into fields then click “Add” button | Return Error message and request user input data into all fields | | | | | |

##### UC0038: Edit conversation



Figure 10.3.1: Edit conversation

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **No** | **Field name** | **Type** | **Require** | **Mandatory** | **Max-Length** | **Description** |
| 1 | Title | Text | Text | Y | 100 | Admin input title of conversation with length less than 100 characters |
| 3 | Level | Drop-down list | Text | Y |  | Admin choose the level |
| 4 | Image | Button | Click | N |  | Admin choose the image |
| 5 | Edit | Button | Click | Y |  | Admin add edit conversation |

Table 10.3.1: Edit conversation’s screen description

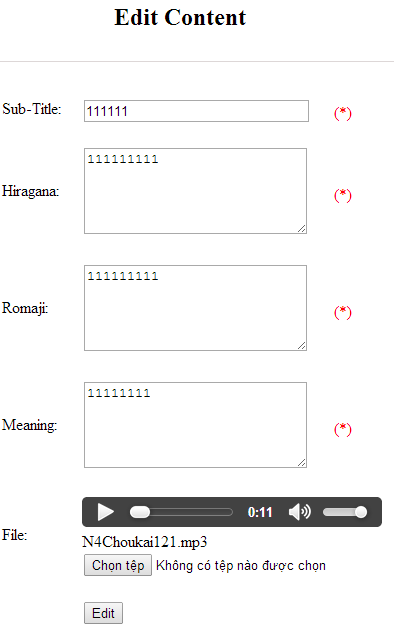


Figure 10.3.2: Edit new conversation content

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **No** | **Field name** | **Type** | **Require** | **Mandatory** | **Max-Length** | **Description** |
| 1 | Sub-title | Text | Text | Y | 200 | Admin input subtitle with length less than 200 characters |
| 2 | Hiragana | Text | Text | Y | 5000 | Admin input hiragana with length less than 5000 characters |
| 3 | Romaji | Text | Text | Y | 5000 | Admin input conversation by romaji with length less than 5000 characters |
| 4 | Meaning | Text | Text | Y | 5000 | Admin input conversation’s meaning with length less than 5000 characters |
| 5 | File | Button | Click | Y |  | Admin choose the file |
| 6 | Edit | Button | Click | Y |  | Admin edit conversation |

Table 10.3.2: Edit conversation content’s screen description

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **UC0038 - Specification** | | | | |
| **Use-case No.** | <UC0038> | **Use-case Version** | | <1.0> |
| **Use-case Name** | Edit conversation | | | |
| **Author** | Minh PT | | | |
| **Date** | 09/06/2014 | **Priority** | <High > | |
| **Actor:**  Admin  **Summary:**  When Administrator want to edit conversation in database which has some new meanings or errors. When edit finished, new meaning will be updated  **Triggers**  User must click on “Conversation management” then search for the conversation. User click on “Edit” link on corresponding conversation. They edit necessary information of conversation in the right fields then click on “Edit” button.  **Preconditions:**   * Website is available * User have logged into system as an admin. * All mandatory fields have been filled * All input data must be valid and have not existed in system   **Post Conditions:**  Changed information of conversation has been saved into system database successfully  **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | **Step** | **User** | **System** | | 1 | Have logged into system as an admin |  | | 2 | Click on “Conversation management ” then search for the conversation that they want to edit | Displays search result as a table | | 3 | Click on “Edit” link corresponding | Display “Edit conversation” screen that contains the information of chosen conversation with these elements:   * Title * Level * Image | | 4 | Edit conversation information and click “Edit” button | The system validates the input data and then save data into database | | 5 | Click “View/Edit content” | Display “Edit Conversation Content” screen that contains the information of chosen conversation with these elements:   * Sub-title * Hiragana * Romaji * Meaning * File | | 6 | Edit conversation content information and click “Edit” button | The system validates the input data and then save data into database |     **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 4 | Edit conversation then click to another link | Do not save edited data then redirect to selected page | | 6 | Edit conversation content then click to another link | Do not save edited data then redirect to selected page |   **Exceptions:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 4 | Edit conversation to be similar to another existed conversation |  | | 6 | Click “Edit” button | The system validates the input data and return Error message and do not save edited data into database |   **Reference:**  UC0036- <Admin> Search conversation | | | | |

##### UC0039: Delete conversation

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **UC0039 - Specification** | | | | |
| **Use-case No.** | <UC0039> | **Use-case Version** | | <1.0> |
| **Use-case Name** | Delete conversation | | | |
| **Author** | Minh PT | | | |
| **Date** | 09/06/2014 | **Priority** | <High > | |
| **Actor:**  Admin  **Summary:**  When Administrator want to delete conversation in database  **Triggers**  User must click on “Conversation management” then search for the conversation. User click on “Delete” link on corresponding conversation.  **Preconditions:**   * Website is available * User have logged into system as an admin.   **Post Conditions:**  Conversation has been deleted from system database successfully  **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | **Step** | **User** | **System** | | 1 | Have logged into system as an admin |  | | 2 | Click on “Conversation management ” then search for the conversation that they want to delete | Displays search result as a table | | 3 | Click on “Delete” link corresponding with conversation | Remove that conversation in database |   **Exceptions:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 3 | Click on “Delete” link corresponding with conversation (conversation content is existing) | Return Error message and request user remove conversation content first |   **Reference:**  UC0036 - <Admin> Search conversation | | | | |
|  | | | | |

### Video Management

#### Use case diagram



#### Screen description



Figure 11: Video management

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **No** | **Field name** | **Type** | **Require** | **Mandatory** | **Max-Length** | **Description** |
| 1 | Title | Text | Text | Y | 100 | Admin input title with length less than 100 character |
| 2 | Add new | Button | Click | N |  | Admin add new video into database |
| 3 | Edit | Button | Click | N |  | Admin click edit video |
| 4 | Delete | Button | Click | N |  | Admin click delete video |

Table 11.1: Video management’s screen description

#### Use case specifications

##### UC040: Search video



Figure 11.1: Search video

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **UC0040 - Specification** | | | | |
| **Use-case No.** | <UC0040> | **Use-case Version** | | <1.0> |
| **Use-case Name** | Search video | | | |
| **Author** | Minh PT | | | |
| **Date** | 09/06/2014 | **Priority** | <High > | |
| **Actor:**  Admin  **Summary:**  When Administrator wants to search video in database. User input title of video then click “Search” button  **Triggers**  Click on “Video management” tab, input title of video in the right text box then click “Search” button  **Preconditions:**   * Website is available * User has to login as Administrator * User has to input data in search area   **Post Conditions:**  Display detail information of video  **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | **Step** | **User** | **System** | | 1 | Have logged into system as an admin |  | | 2 | Click on “Video management” tab | Displays criteria search screen | | 3 | Fill information of the video that they want to find into these fields then click “Search” button | Displays search result as a table with these elements:   * No * Title * Link * Edit * Delete |     **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 3 | Fill information of the video that they want to find into these fields then click on another link | Switch to selected page |   **Exceptions:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 3 | Fill information of the video that they want to find (that do not exited in database) into these fields then click “Search” button | Return Error message to inform that video cannot be found | | | | | |

##### UC041: Add video



Figure 11.2: Add video

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **No** | **Field name** | **Type** | **Require** | **Mandatory** | **Max-Length** | **Description** |
| 1 | Title | Text | Text | Y | 200 | Admin input title with length less than 200 characters |
| 2 | Link | Text | Text | Y |  | Admin input hyperlink |
| 3 | Add | Button | Click | Y |  | Admin add new video |
| 4 | Reset | Button | Click | N |  | Admin reset information |

Table 11.2: Add video’s screen description

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **UC0041 - Specification** | | | | |
| **Use-case No.** | <UC0041> | **Use-case Version** | | <1.0> |
| **Use-case Name** | Add video | | | |
| **Author** | Minh PT | | | |
| **Date** | 09/06/2014 | **Priority** | <High > | |
| **Actor:**  Admin  **Summary:**  When Administrator wants to add new video into database. They have to insert all necessary data of video into “Add Video” screen  **Triggers**  User must click on “Video management/ Add New” tab and input all necessary information of video into the right fields then click on “Add” button  **Preconditions:**   * Website is available * User have logged into system as an admin. * All mandatory fields have been filled * All input data must be valid and have not existed in system   **Post Conditions:**  New video has been saved into system database successfully  **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | **Step** | **User** | **System** | | 1 | Have logged into system as an admin |  | | 2 | Click on “Video management/Add New” tab | Display “Add Video” screen that contains these elements:   * Title * Link | | 3 | Fill video information into all necessary or mandatory fields and click “Add” button | The system validates the input data and then save new video data into database |     **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 3 | Click on another link | Do not save new video data into database then redirect to selected page |   **Exceptions:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 3 | Do not fill full information into fields then click “Add” button | Return Error message and request user input data into all fields | | | | | |

##### UC042: Edit video



Figure 11.3: Edit video

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **No** | **Field name** | **Type** | **Require** | **Mandatory** | **Max-Length** | **Description** |
| 1 | Title | Text | Text | Y | 200 | Admin input title with length less than 200 characters |
| 2 | Link | Text | Text | Y | 1000 | Admin input hyperlink |
| 3 | Add | Button | Click | Y |  | Admin edit video |

Table 11.3: Edit video’s screen description

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **UC0042 - Specification** | | | | |
| **Use-case No.** | <UC0042> | **Use-case Version** | | <1.0> |
| **Use-case Name** | Edit video | | | |
| **Author** | Minh PT | | | |
| **Date** | 09/06/2014 | **Priority** | <High > | |
| **Actor:**  Admin  **Summary:**  When Administrator wants to edit video in database which has some new meanings or errors. When edit finished, new meaning will be updated  **Triggers**  User must click on “Video management” then search for the video. User click on “Edit” link corresponding with video. User edits necessary information of video in the right fields then click on “Edit” button.  **Preconditions:**   * Website is available * User have logged into system as an admin. * All mandatory fields have been filled * All input data must be valid and have not existed in system   **Post Conditions:**  Changed information of video has been saved into system database successfully  **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | **Step** | **User** | **System** | | 1 | Have logged into system as an admin |  | | 2 | Click on “Video management ” then search for the video that they want to edit | Displays search result as a table | | 3 | Click on “Edit” link corresponding | Display “Edit video” screen that contains the information of chosen video with these elements:   * Title * Link | | 4 | Edit video information and click “Edit” button | The system validates the input data and then save data into database |     **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 4 | Edit video then click to another link | Do not save edited data then redirect to selected page |   **Exceptions:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 4 | Edit video to be similar to another existed video and click “Edit” button | The system validates the input data and return Error message and do not save edited data into database |   **Reference:**  UC0040- <Admin> Search video | | | | |

##### UC043: Delete video

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **UC0043 - Specification** | | | | |
| **Use-case No.** | <UC0043> | **Use-case Version** | | <1.0> |
| **Use-case Name** | Delete video | | | |
| **Author** | Minh PT | | | |
| **Date** | 09/06/2014 | **Priority** | <High > | |
| **Actor:**  Admin  **Summary:**  When Administrator wants to delete video in database  **Triggers**  User must click on “Video management” then search for the video. User click on “Delete” link on corresponding video.  **Preconditions:**   * Website is available * User have logged into system as an admin.   **Post Conditions:**  Video has been deleted from system database successfully  **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | **Step** | **User** | **System** | | 1 | Have logged into system as an admin |  | | 2 | Click on “Video management ” then search for the video that they want to delete | Displays search result as a table | | 3 | Click on “Delete” link corresponding with conversation | Remove that video in database |     **Reference:**  UC0040 - <Admin> Search video | | | | |
|  | | | | |

### Training Listening Management

#### Use case diagram



#### Screen description

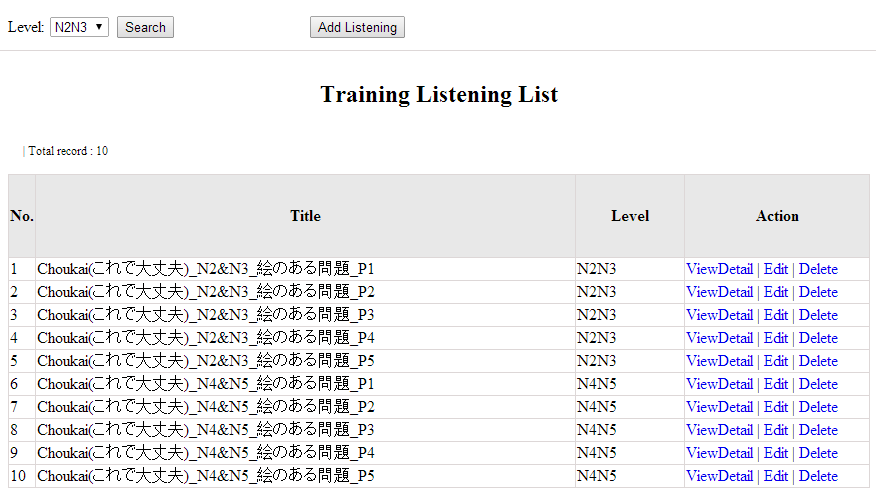
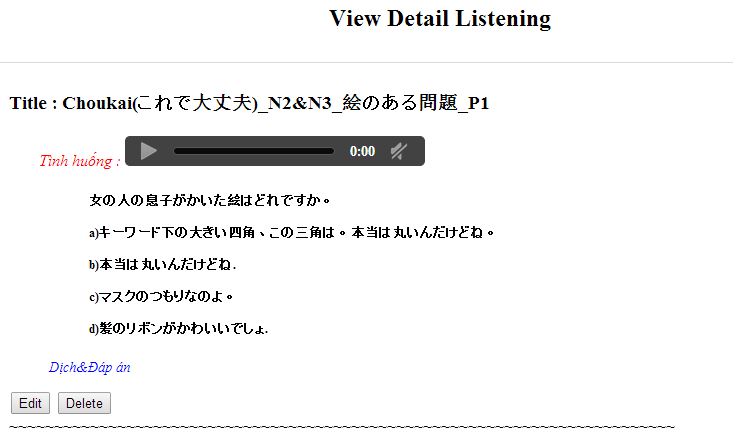


Figure 12: Listening article management

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **No** | **Field name** | **Type** | **Require** | **Mandatory** | **Max-Length** | **Description** |
| 1 | Level | Drop-down list | Click | Y |  | Admin choose the level |
| 2 | Search | Button | Click | Y |  | Admin click to search |
| 3 | Addnew | Button | Click | N |  | Admin add new listening into database |
| 4 | ViewDetail | Hyperlink | Click | N |  | Admin click to view details of listening |
| 5 | Edit | Button | Click | N |  | Admin click edit listening article |
| 6 | Delete | Button | Click | N |  | Admin click delete article |

Table 12.1: Conversation management’s screen description



#### Use case specifications

##### UC044: Search listening article



Figure 12.1: Search listening article

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **UC0044 - Specification** | | | | |
| **Use-case No.** | <UC0044> | **Use-case Version** | | <1.0> |
| **Use-case Name** | Search listening article | | | |
| **Author** | Minh PT | | | |
| **Date** | 09/06/2014 | **Priority** | <High > | |
| **Actor:**  Admin  **Summary:**  When Administrator wants to search listening article in database. User choose level of listening level then click “Search” button  **Triggers**  Click on “Listening practice management” tab, choose level in the right text box then click “Search” button  **Preconditions:**   * Website is available * User has to login as Administrator * User has to input data in search area   **Post Conditions:**  Display detail information of listening article  **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | **Step** | **User** | **System** | | 1 | Have logged into system as an admin |  | | 2 | Click on “Listening article management” tab | Displays criteria search screen | | 3 | Choose level of the listening article that they want to find then click “Search” button | Displays search result as a table with these elements:   * No * Title * Level * View details * Edit * Delete |     **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 3 | Choose level of the listening article that they want to find into these fields then click on another link | Switch to selected page |   **Exceptions:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 3 | Choose level of the listening article that they want to find (that do not exited in database) into these fields then click “Search” button | Return Error message to inform that listening article cannot be found | | | | | |

##### UC045: Add listening article



Figure 12.2: Add listening

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **No** | **Field name** | **Type** | **Require** | **Mandatory** | **Max-Length** | **Description** |
| 1 | Title | Text | Text | Y | 500 | Admin input id with length less than 500 characters |
| 2 | Level | Drop-down list | Choose | Y |  | Admin choose level |
| 3 | Add | Button | Click | Y |  | Admin add new listening |

Table 12.2: Add listening’s screen description

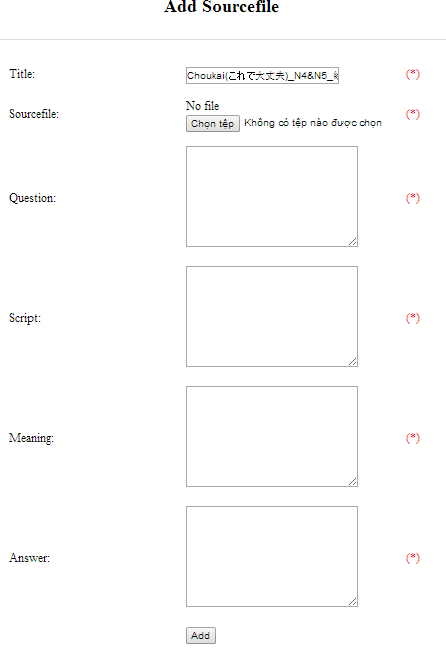


Figure 12.2.1: Add listening source file

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **No** | **Field name** | **Type** | **Require** | **Mandatory** | **Max-Length** | **Description** |
| 1 | Source\_file | Button | Click | Y |  | Admin choose the file |
| 2 | Question | Text | Text | Y | 5000 | Admin input question of listening with length less than 5000 characters |
| 3 | Script | Text | Text | Y | 5000 | Admin input script of listening with length less than 5000 characters |
| 4 | Meaning | Text | Text | Y | 5000 | Admin input meaning of listening with length less than 5000 characters |
| 5 | Answer | Text | Text | Y | 5000 | Admin input answer of listening with length less than 5000 characters |
| 6 | Add | Button | Click | Y |  | Admin add source file |

Table 12.2.1: Add listening source file’s screen description

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **UC0045 - Specification** | | | | |
| **Use-case No.** | <UC0045> | **Use-case Version** | | <1.0> |
| **Use-case Name** | Add listening article | | | |
| **Author** | Minh PT | | | |
| **Date** | 09/06/2014 | **Priority** | <High > | |
| **Actor:**  Admin  **Summary:**  When Administrator wants to add new listening article into database. They have to insert all necessary data of listening article into “Add new listening” screen  **Triggers**  User must click on “Listening management/ Add New” and input all necessary information of listening article into the right fields then click on “Add” button  **Preconditions:**   * Website is available * User have logged into system as an admin. * All mandatory fields have been filled * All input data must be valid and have not existed in system   **Post Conditions:**  New listening article has been saved into system database successfully  **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | **Step** | **User** | **System** | | 1 | Have logged into system as an admin |  | | 2 | Click on “Listening article management/Add New” | Display “Add New Listening” screen that contains these elements:   * Title * Level | | 3 | Fill listening article information into all necessary or mandatory fields click “Add” button | The system validates the input data and then save new listening article data into database | | 4 | Click on “Listening article management/View details/ Add source file” | Display “Add source file” screen that contains these elements:   * Title * Source file * Question * Script * Meaning * Answer | | 5 | Fill listening article information into all necessary or mandatory fields click “Add” button | The system validates the input data and then save new listening article data into database |     **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 3 | Click on another link | Do not save new listening article data into database then redirect to selected page | | 5 | Click on another link | Do not save new source file data into database then redirect to selected page |   **Exceptions:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 3 | Do not fill full information into fields then click “Add” button | Return Error message and request user input data into all fields | | 5 | Do not fill full information into fields then click “Add” button | Return Error message and request user input data into all fields | | | | | |

##### UC046: Edit listening article

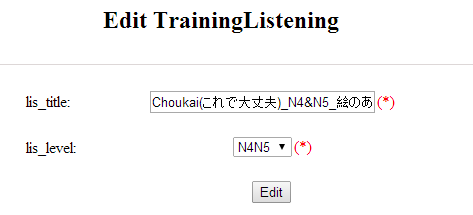


Figure 12.3: Edit listening

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **No** | **Field name** | **Type** | **Require** | **Mandatory** | **Max-Length** | **Description** |
| 1 | Title | Text | Text | Y | 500 | Admin input id with length less than 500 characters |
| 2 | Level | Drop-down list | Choose | Y |  | Admin choose level |
| 3 | Edit | Button | Click | Y |  | Admin edit listening |

Table 12.3: Edit listening ’s screen description

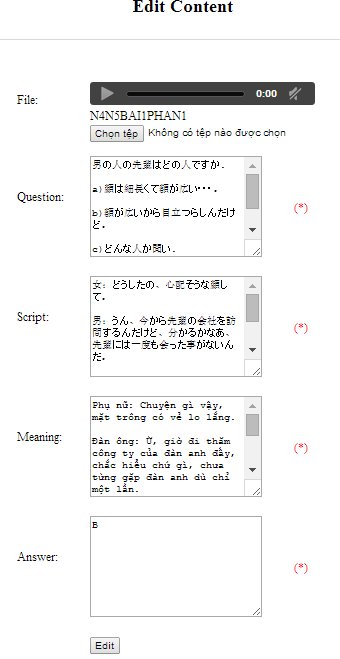


Figure 12.3.1: Edit listening source file

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **No** | **Field name** | **Type** | **Require** | **Mandatory** | **Max-Length** | **Description** |
| 1 | Source\_file | Button | Click | Y |  | Admin choose the file |
| 2 | Question | Text | Text | Y | 5000 | Admin input question of listening with length less than 5000 characters |
| 3 | Script | Text | Text | Y | 5000 | Admin input script of listening with length less than 5000 characters |
| 4 | Meaning | Text | Text | Y | 5000 | Admin input meaning of listening with length less than 5000 characters |
| 5 | Answer | Text | Text | Y | 5000 | Admin input answer of listening with length less than 5000 characters |
| 6 | Edit | Button | Click | Y |  | Admin edit source file |

Table 12.3.1: Edit listening source file’s screen description

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **UC0046 - Specification** | | | | |
| **Use-case No.** | <UC0046> | **Use-case Version** | | <1.0> |
| **Use-case Name** | Edit listening article | | | |
| **Author** | Minh PT | | | |
| **Date** | 09/06/2014 | **Priority** | <High > | |
| **Actor:**  Admin  **Summary:**  When Administrator wants to edit listening article in database which has some new meanings or errors. When edit finished, new meaning will be updated  **Triggers**  User must click on “Listening management” then search for the listening article. User click on “Edit” link corresponding with listening article. They edit necessary information of listening article in the right fields then click on “Edit” button.  **Preconditions:**   * Website is available * User have logged into system as an admin. * All mandatory fields have been filled * All input data must be valid and have not existed in system   **Post Conditions:**  Changed information of listening article has been saved into system database successfully  **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | **Step** | **User** | **System** | | 1 | Have logged into system as an admin |  | | 2 | Click on “Training listening” then search for the listening article that they want to edit | Displays search result as a table | | 3 | Click on “Edit” link corresponding | Display “Edit listening” screen that contains the information of chosen listening article with these elements:   * Title * Level | | 4 | Edit listening article information and click “Edit” button | The system validates the input data and then save data into database | | 5 | Click on “View details/ Edit” link corresponding | Display “Edit listening” screen that contains the information of chosen listening article with these elements:   * File * Question * Script * Meaning * Answer | | 6 | Edit listening article information and click “Edit” button | The system validates the input data and then save data into database |     **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 4 | Edit listening article then click to another link | Do not save edited data then redirect to selected page | | 6 | Edit listening article then click to another link | Do not save edited data then redirect to selected page |   **Exceptions:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 4 | Edit listening article to be similar to another existed listening article click “Edit” button | The system validates the input data and return Error message and do not save edited data into database | | 6 | Edit listening article to be similar to another existed listening article click “Edit” button | The system validates the input data and return Error message and do not save edited data into database |   **Reference:**  UC0044- <Admin> Search listening article | | | | |

##### UC047: Delete listening article

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **UC0047 - Specification** | | | | |
| **Use-case No.** | <UC0047> | **Use-case Version** | | <1.0> |
| **Use-case Name** | Delete listening article | | | |
| **Author** | Minh PT | | | |
| **Date** | 09/06/2014 | **Priority** | <High > | |
| **Actor:**  Admin  **Summary:**  When Administrator want to delete listening article inn database  **Triggers**  User must click on “Listening article management” then search for the listening article. User click on “Delete” link corresponding with listening article.  **Preconditions:**   * Website is available * User have logged into system as an admin.   **Post Conditions:**  Listening article has been deleted from system database successfully  **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | **Step** | **User** | **System** | | 1 | Have logged into system as an admin |  | | 2 | Click on “Listening article management ” then search for the listening article that they want to delete | Displays search result as a table | | 3 | Click on “Delete” link corresponding | Remove that listening article in database |     **Reference:**  UC0044 - <Admin> Search listening article | | | | |
|  | | | | |

### Test management

#### Use case diagram



#### Screen description

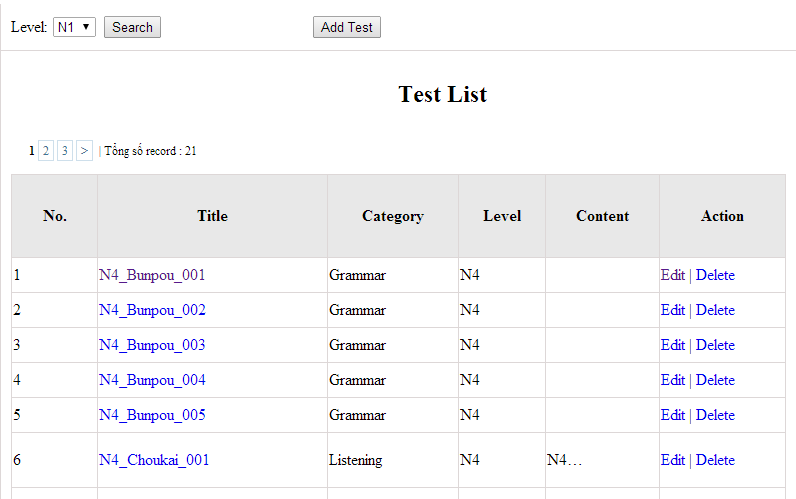


Figure 13: Doing test management

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **No** | **Field name** | **Type** | **Require** | **Mandatory** | **Max-Length** | **Description** |
| 1 | Level | Drop-down list | Click | N |  | Admin choose the level |
| 2 | Search | Button | Click | N |  | Admin click to search |
| 3 | List | Hyperlink | Click | N |  | Admin click to view details |
| 4 | Edit | Button | Click | N |  | Admin click edit test |
| 5 | Delete | Button | Click | N |  | Admin click delete test |
| Table 13.1: Doing test management’s screen description | | | | | | |

#### Use case specifications

##### UC048: Search test

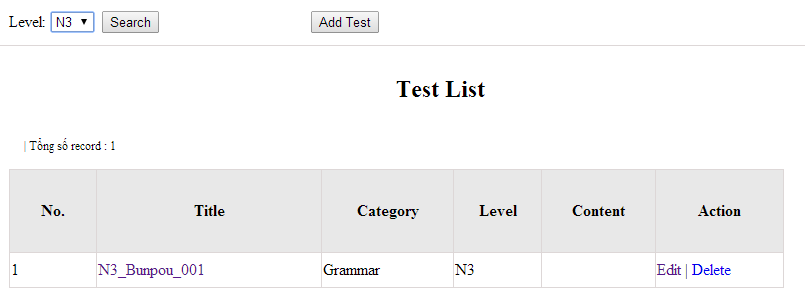


Figure 13.1: Search test

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **UC0048 - Specification** | | | | |
| **Use-case No.** | <UC0048> | **Use-case Version** | | <1.0> |
| **Use-case Name** | Search test | | | |
| **Author** | Minh PT | | | |
| **Date** | 09/06/2014 | **Priority** | <High > | |
| **Actor:**  Admin  **Summary:**  When Administrator wants to search test article in database. User choose test level then click “Search” button.  **Triggers**  Click on “Test management” tab, choose level in the right text box then click “Search” button  **Preconditions:**   * Website is available * User has to login as Administrator * User has to input data in search area   **Post Conditions:**  Display detail information of that test  **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | **Step** | **User** | **System** | | 1 | Have logged into system as an admin |  | | 2 | Click on “Test management” tab | Displays criteria search screen | | 3 | Choose level of the test that they want to find then click “Search” button | Displays search result as a table with these elements:   * No * Title * Category * Level * Content * Edit * Delete |     **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 3 | Choose level of the test that they want to find into these fields then click on another link | Switch to selected page |   **Exceptions:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 3 | Choose level of the test that they want to find (that do not exited in database) into these fields then click “Search” button | Return Error message to inform that test cannot be found | | | | | |

##### UC049: Add test



Figure 13.2: Add test

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **No** | **Field name** | **Type** | **Require** | **Mandatory** | **Max-Length** | **Description** |
| 1 | ID | Text | Text | Y | 100 | Admin input id with length less than 100 characters |
| 2 | Category | Drop-down list | Click | Y |  | Admin choose category |
| 3 | Level | Drop-down list | Click | Y |  | Admin choose level of test |
| 4 | Test content | Text | Text | Y | 5000 | Admin input content with length less than 5000 characters |
| 5 | Add | Button | Click | Y |  | Admin click to add test |
| Table 13.2: Add test’s screen description | | | | | | |

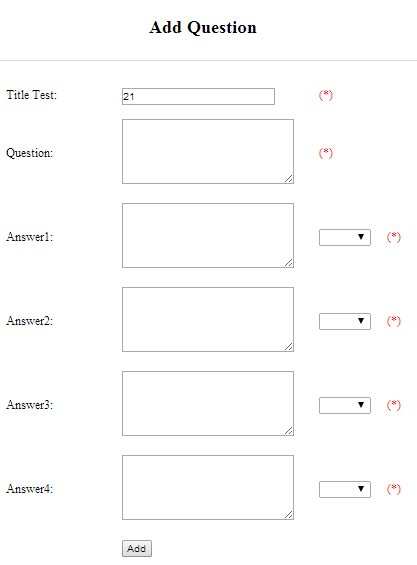


Figure 13.2.1: Add question

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **No** | **Field name** | **Type** | **Require** | **Mandatory** | **Max-Length** | **Description** |
| 1 | Question | Text | Text | Y | 200 | Admin input question with length less than 200 characters |
| 2 | Answer 1 | Text | Text | Y | 200 | Admin input answer 1 with length less than 200 characters |
| 3 | Correct answer 1 | Drop-down list | Click | Y |  | Admin choose correct answer |
| 4 | Answer 2 | Text | Text | Y | 200 | Admin input answer 2 with length less than 200 characters |
| 5 | Correct answer 2 | Drop-down list | Click | Y |  | Admin choose correct answer |
| 6 | Answer 3 | Text | Text | Y | 200 | Admin input answer 3 with length less than 200 characters |
| 7 | Correct answer 3 | Drop-down list | Click | Y |  | Admin choose correct answer |
| 8 | Answer 4 | Text | Text | Y | 200 | Admin input answer 4 with length less than 200 characters |
| 9 | Correct answer 4 | Drop-down list | Click | Y |  | Admin choose correct answer |
| 10 | Add | Button | Click | Y |  | Admin click to add |

Table 13.2.1: Add question’s screen description

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **UC0049 - Specification** | | | | |
| **Use-case No.** | <UC0049> | **Use-case Version** | | <1.0> |
| **Use-case Name** | Add test | | | |
| **Author** | Minh PT | | | |
| **Date** | 09/06/2014 | **Priority** | <High > | |
| **Actor:**  Admin  **Summary:**  When Administrator want to add new test into database. They have to insert all necessary data of test into “Add new test” screen  **Triggers**  User must click on “Test management/ Add New” and input all necessary information of test into the right fields then click on “Add” button  **Preconditions:**   * Website is available * User have logged into system as an admin. * All mandatory fields have been filled * All input data must be valid and have not existed in system   **Post Conditions:**  New test has been saved into system database successfully  **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | **Step** | **User** | **System** | | 1 | Have logged into system as an admin |  | | 2 | Click on “Test management/Add New” | Display “Add New Test” screen that contains these elements:   * Title * Category * Level * Content | | 3 | Fill test information into all necessary or mandatory fields and click “Add” button | The system validates the input data and then save new test data into database | | 4 | Click on “Title link/Add new question” | Display “Add New Question” screen that contains these elements:   * Title * Question * Answer 1 * Correct answer 1 * Answer 2 * Correct answer 2 * Answer 3 * Correct answer 3 * Answer 4 * Correct answer 4 | | 5 | Fill test information into all necessary or mandatory fields and click “Add” button | The system validates the input data and then save new test data into database |     **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 3 | Click on another link | Do not save new test data into database then redirect to selected page | | 5 | Click on another link | Do not save new question data into database then redirect to selected page |   **Exceptions:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 3 | Do not fill full information into fields then click “Add” button | Return Error message and request user input data into all fields | | 5 | Do not fill full information into fields then click “Add” button | Return Error message and request user input data into all fields | | | | | |

##### UC050: Edit test



Figure 13.3: Edit test

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **No** | **Field name** | **Type** | **Require** | **Mandatory** | **Max-Length** | **Description** |
| 1 | ID | Text | Text | Y | 100 | Admin input id with length less than 100 characters |
| 2 | Category | Drop-down list | Click | Y |  | Admin choose category |
| 3 | Level | Drop-down list | Click | Y |  | Admin choose level of test |
| 4 | Test content | Text | Text | Y | 5000 | Admin input content with length less than 5000 characters |
| 5 | Edit | Button | Click | Y |  | Admin click to edit test |

Table 13.3: Edit test’s screen description



Figure 13.3.1: Edit question

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **No** | **Field name** | **Type** | **Require** | **Mandatory** | **Max-Length** | **Description** |
| 1 | Question | Text | Text | Y | 200 | Admin input question with length less than 200 characters |
| 2 | Answer 1 | Text | Text | Y | 200 | Admin input answer 1 with length less than 200 characters |
| 3 | Correct answer 1 | Drop-down list | Click | Y |  | Admin choose correct answer |
| 4 | Answer 2 | Text | Text | Y | 200 | Admin input answer 2 with length less than 200 characters |
| 5 | Correct answer 2 | Drop-down list | Click | Y |  | Admin choose correct answer |
| 6 | Answer 3 | Text | Text | Y | 200 | Admin input answer 3 with length less than 200 characters |
| 7 | Correct answer 3 | Drop-down list | Click | Y |  | Admin choose correct answer |
| 8 | Answer 4 | Text | Text | Y | 200 | Admin input answer 4 with length less than 200 characters |
| 9 | Correct answer 4 | Drop-down list | Click | Y |  | Admin choose correct answer |
| 10 | Edit | Button | Click | Y |  | Admin click to edit |

Table 13.3.1: Edit question’s screen description

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **UC0050 - Specification** | | | | |
| **Use-case No.** | <UC0050> | **Use-case Version** | | <1.0> |
| **Use-case Name** | Edit test | | | |
| **Author** | Minh PT | | | |
| **Date** | 09/06/2014 | **Priority** | <High > | |
| **Actor:**  Admin  **Summary:**  When Administrator want to edit test in database that has some new meanings or errors. When edit finished, new meaning will be updated  **Triggers**  User must click on “Test management” then search for the test. User click on “Edit” link on corresponding test. User edits necessary information of test in the right fields then click on “Edit” button.  **Preconditions:**   * Website is available * User have logged into system as an admin. * All mandatory fields have been filled * All input data must be valid and have not existed in system   **Post Conditions:**  Changed information of test has been saved into system database successfully  **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | **Step** | **User** | **System** | | 1 | Have logged into system as an admin |  | | 2 | Click on “Test management ” then search for the test that they want to edit | Displays search result as a table | | 3 | Click on “Edit” link corresponding | Display “Edit Test” screen that contains the information of chosen test with these elements:   * Title * Category * Level * Content | | 4 | Edit test information and click “Edit” button | The system validates the input data and then save data into database |     **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 4 | Edit test then click to another link | Do not save edited data then redirect to selected page |   **Exceptions:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 4 | Edit test to be similar to another existed test and click “Edit” button | The system validates the input data and return Error message and do not save edited data into database |   **Reference:**  UC0048- <Admin> Search test | | | | |

##### UC051: Delete test

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **UC0051 - Specification** | | | | |
| **Use-case No.** | <UC0051> | **Use-case Version** | | <1.0> |
| **Use-case Name** | Delete test | | | |
| **Author** | Minh PT | | | |
| **Date** | 09/06/2014 | **Priority** | <High > | |
| **Actor:**  Admin  **Summary:**  When Administrator want to delete test in database  **Triggers**  User must click on “Test management” then search for the test. User click on “Delete” link corresponding with test.  **Preconditions:**   * Website is available * User have logged into system as an admin.   **Post Conditions:**  Test has been deleted from system database successfully  **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | **Step** | **User** | **System** | | 1 | Have logged into system as an admin |  | | 2 | Click on “Test management ” then search for the test that they want to delete | Displays search result as a table | | 3 | Click on “Delete” link corresponding | Remove that test in database |     **Reference:**  UC0048 - <Admin> Search test | | | | |
|  | | | | |

### Contact management

#### Use case diagram



#### Use case specifications

##### UC052: Search question



Figure 14.1: Search contact management’s screen

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **No** | **Field name** | **Type** | **Require** | **Mandatory** | **Max-Length** | **Description** |
| 1 | Type | Drop-down list | Click | N |  | Admin choose the typ |
| 2 | Search | Button | Click | N |  | Admin click to search |
| 3 | Reply | Button | Click | N |  | Admin click reply the question |
| 4 | Delete | Button | Click | N |  | Admin click delete question |
| 5 | List reply | Button | Click | N |  | Admin click to view list reply |

Table 14.1: Search contact management’s screen description

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **UC0055 – Specification** | | | | |
| **Use-case No.** | <UC0055> | **Use-case Version** | | <1.0> |
| **Use-case Name** | Search question | | | |
| **Author** | Minh PT | | | |
| **Date** | 09/06/2014 | **Priority** | <High > | |
| **Actor:**  Admin  **Summary:**  When administrator wants to search question from member. User choose data then click “Search” button.  **Triggers**  Click on “Contact Management ” tab, choose type of data in the right text box then click “Search” button  **Preconditions:**   * Website is available * User has to login as Administrator * User has to input data in search area   **Post Conditions:**  Display detail information of question  **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | **Step** | **User** | **System** | | 1 | Have logged into system as an admin |  | | 2 | Click on “Contact Management ” tab | Displays criteria search screen | | 3 | Choose type of contact that they want to find then click “Search” button | Displays search result as a table with these elements:   * No * Email * Content * Type * Status * Reply * Delete |     **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 3 | Fill information that they want to find into these fields then click on another link | Switch to selected page |   **Exceptions:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 3 | Fill information that they want to find (that do not exited in database) into these fields then click “Search” button | Return Error message to inform that cannot be found | | | | | |

##### UC053: Reply question



Figure 16.2: Reply contact

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **No** | **Field name** | **Type** | **Require** | **Mandatory** | **Max-Length** | **Description** |
| 1 | Email |  |  |  |  | Email of admin’s account |
| 2 | Content |  |  |  |  | Question |
| 3 | Reply | Text | Text | Y |  | Admin input reply of question |
| 4 | Reply | Button | Click | N |  | Admin click send reply question |

Table 16.2: Reply contact’s screen description

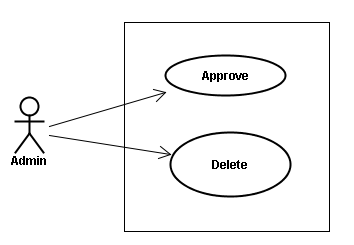
|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **UC0056 - Specification** | | | | |
| **Use-case No.** | <UC0056> | **Use-case Version** | | <1.0> |
| **Use-case Name** | Search question | | | |
| **Author** | Minh PT | | | |
| **Date** | 09/06/2014 | **Priority** | <High > | |
| **Actor:**  Admin  **Summary:**  When administrator wants to reply question from member.  **Triggers**  Click on “Opinion/Q&A Management ” tab, User search question then click “Reply” link corresponding  **Preconditions:**   * Website is available * User has to login as Administrator * User has to input answer   **Post Conditions:**  Answer be sent to user  **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | **Step** | **User** | **System** | | 1 | Have logged into system as an admin |  | | 2 | Click on “Opinion/Q&A Management ” tab | Displays criteria search screen | | 3 | Click “Reply” link corresponding | Displays Reply screen with these elements:   * Email * Content * Reply | | 4 | Input the answer and click “Reply” button | The answer of question will be sent to member |     **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 4 | Input answer then click on another link | Switch to selected page |   **Exceptions:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | |  |  |  |   **Reference:**  UC0052 - < Opinion/Q&A Management > Search question | | | | |

##### UC054: Delete question

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **UC0054 - Specification** | | | | |
| **Use-case No.** | <UC0051> | **Use-case Version** | | <1.0> |
| **Use-case Name** | Delete question | | | |
| **Author** | Minh PT | | | |
| **Date** | 09/06/2014 | **Priority** | <High > | |
| **Actor:**  Admin  **Summary:**  When Administrator want to delete question  **Triggers**  User must click on “Contact management” then search for the test. User click on “Delete” link corresponding with test.  **Preconditions:**   * Website is available * User have logged into system as an admin.   **Post Conditions:**  Question has been deleted from system database successfully  **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | **Step** | **User** | **System** | | 1 | Have logged into system as an admin |  | | 2 | Click on “Contact management ” then search for the test that they want to delete | Displays search result as a table | | 3 | Click on “Delete” link corresponding | Remove that test in database |     **Reference:**  UC0052 - <Admin> Search contact | | | | |
|  | | | | |

### Contributed content management

#### Use case diagram



#### Use case specifications

##### UC055 <Contact’s content Management>: Approve contribute content

Approve contribute content screen:

1. Approve contribute kanji screen:

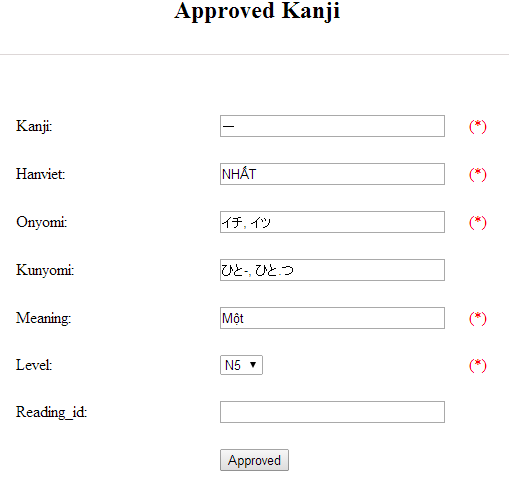


Figure 15.1: Approved kanji’s screen

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **No** | **Field name** | **File name in Vietnamese** | **Type** | **Require** | **Mandatory** | **Max-Length** | **Description** |
| 1 | Kanji | Kanji | Text | Text | Y | 10 | Admin input kanji with length less than 10 characters |
| 2 | HanViet | Hán Việt | Text | Text | N | 50 | Admin input to the field with length less than 50 characters |
| 3 | Onyomi | Âm Onyomi | Text | Text | Y | 100 | Admin input onyomi with length less than 100 characters |
| 4 | Kunyomi | Âm kunyomi | Text | Text | Y | 100 | Admin input kunyomi with length less than 100 characters |
| 5 | Meaning | Nghĩa | Text | Text | Y | 200 | Admin input meaning with length less than 200 characters |
| 6 | Level | Level | Drop-down list | Click | Y |  | Admin choose the level |
| 7 | Reading\_id |  | Text | Text | N | 20 | Admin input reading id with length less than 20 characters |
| 8 | Approved | Approved | Button | Click | Y |  | Admin click to approved contribute |

Table 15.1: Approved kanji’s screen description

1. Approve contribute grammar screen

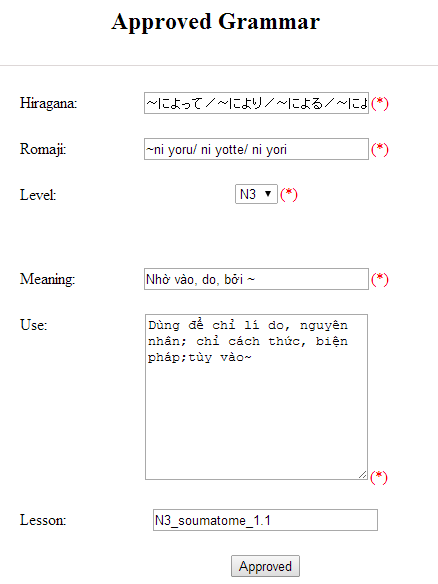


Figure 15.2: Approved grammar screen

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **No** | **Field name** | **Type** | **Require** | **Mandatory** | **Max-Length** | **Description** |
| 1 | Hiragana | Text | Text | Y | 200 | Admin input hiragana with length less than 200 characters |
| 2 | Romaji | Text | Text | Y | 200 | Admin input romaji with length less than 200 characters |
| 3 | Meaning | Text | Text | Y | 200 | Admin input meaning with length less than 200 characters |
| 4 | Level | Drop-down list | Click | Y |  | Admin choose the level |
| 5 | Use | Text | Text | Y | 1000 | Admin input how to use with length less than 1000 characters |
| 6 | Lesson | Text | Text | N | 20 | Admin input lesson with length less than 20 characters |
| 7 | Approved | Button | Click | Y |  | Admin click to approved contribute |

Table 15.2: Approved grammar’s screen description

1. Approve contribute vocabulary screen:



Table 15.3: Approved vocabulary

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **No** | **Field name** | **Type** | **Require** | **Mandatory** | **Max-Length** | **Description** |
| 1 | Hiragana | Text | Text | Y | 200 | Admin input hiragana with length less than 200 characters |
| 2 | Romaji | Text | Text | N | 200 | Admin input romaji with length less than 200 characters |
| 3 | Meaning | Text | Text | Y | 500 | Admin input meaning with length less than 500 characters |
| 4 | Category | Drop-down list | Click | Y | 10 | Admin choose category |
| 5 | Kanji | Text | Text | N | 10 | Admin input kanji with length less than 10 characters |
| 6 | Specialized | Text | Text | N | 200 | Admin input specialized with length less than 200 characters |
| 7 | Approved | Button | Click | Y |  | Admin click to approved contribute |

Table 15.3: Approved vocabulary’s screen description

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **UC0053 - Specification** | | | | |
| **Use-case No.** | <UC0053> | **Use-case Version** | | <1.0> |
| **Use-case Name** | Approve contribute content | | | |
| **Author** | Minh PT | | | |
| **Date** | 09/06/2014 | **Priority** | <High > | |
| **Actor:**  Admin  **Summary:**  When administrator wants to approve contribute content include kanji, grammar, vocabulary in database. User click on link corresponding with kanji, grammar, vocabulary  **Triggers**  Click on “Contribute Kanji Management” or “Contribute Grammar Management” or “Contribute Vocabulary Management” tab, input data in the right text box then click “Search” button. Click on link corresponding with kanji, grammar, vocabulary which want to approve to database  **Preconditions:**   * Website is available * User has to login as Administrator * All mandatory fields have been filled * All input data must be valid and have not existed in system   **Post Conditions:**  Display detail information of contribute content  **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | **Step** | **User** | **System** | | 1 | Have logged into system as an admin |  | | 2 | Click on “Kanji Management/List contribute kanji” or “Grammar Management/List contribute grammar” or “Vocabulary/List contribute vocabulary” tab | Displays criteria search screen | | 3 | Fill information that they want to find into text box then click “Search” button | Displays search result | | 4 | Click “Approved” link corresponding want to update into database | Display Approve kanji screen with these elements:   1. Kanji - Kanji - Âm hán - Âm Onyomi - Âm Kunyoumi - Meaning - level - Reading\_id - Approved 2. Grammar: - Hiragana - Romaji - Level - Meaning - Use - Lesson - Approved 3. Vocabulary: - Hiragana - Romaji - Meaning - Category - Kanji - Specialized - Approved | | 5 | Edit or add more information and Click “Approved” button | The system validates the input data and then save data into database |     **Alternative Scenario:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 5 | Fill information then click on another link | Switch to selected page |   **Exceptions:**   |  |  |  | | --- | --- | --- | | **At Step** | **User** | **System** | | 5 | Fill information that exited in database into fields then click “Approved” button | Return Error message to inform that data is exiting in database |   **Reference:** | | | | |

##### UC0056: < Contact’s content Management > Delete contribute content

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **UC0054 - Specification** | | | | |
| **Use-case No.** | <UC0054> | **Use-case Version** | | <1.0> |
| **Use-case Name** | Delete contribute content | | | |
| **Author** | Minh PT | | | |
| **Date** | 09/06/2014 | **Priority** | <High > | |
| **Actor:**  Admin  **Summary:**  When Administrator wants to delete a contribute content. Admin will search that content then click “Delete” link corresponding.  **Triggers**  User must click on “Contribute Kanji Management” or “Contribute Grammar Management” or “Contribute Vocabulary Management” tab then search for the contribute content. User click on “Delete” link corresponding with kanji, grammar, vocabulary which want to delete.  **Preconditions:**   * Website is available * User has to login as Administrator   **Post Conditions:**  Kanji, grammar, vocabulary have been deleted from list successfully  **Main Success Scenario:**   |  |  |  | | --- | --- | --- | | **Step** | **User** | **System** | | 1 | Have logged into system as an admin |  | | 2 | Click on “Contribute Kanji Management ” or “Contribute Grammar Management ” or “Contribute Vocabulary Management ” tab | Displays search result as a table | | 3 | Click on “Delete” link corresponding with kanji, grammar, vocabulary | Remove that kanji, grammar, vocabulary from list |   **Reference:** | | | | |
|  | | | | |

## Non-functional Specification

### Reliability

* Mean time between failures: The mean time between each failure is expected to be about 480 hours of using.
* Mean time to repair: Immediately when Administrator finds out problem or website is attacked/hacked by someone. Average 1 day.
* The maximum bugs per function are 2 bugs/a function when user uses software within 2 months. The average number of bugs in the software during system testing is about to be around 1 bugs/1000 LOC.
* The database must be backed up daily and can be recovered if necessary

### Performance Requirements

#### Availability

The application must be available 95% of time. Users can access to it everywhere from their

Android smartphones with an active internet connection and GPS enabled.

#### Response time

In term of response time, time for the app to fully load will not exceed 5 seconds. Accessing any function will not takes more than 1 second. Depending on the internet connections and GPS services, waiting time of requesting data will takes no more than 20 seconds in worst case.

### User Interface

* **Color:** The background color will mostly be dark grey by default. The color of text will be white by default. Accent colors is pink/green/yellow by default. These properties can be changed in the Settings menu.
* **Language:** Vietnamese by default. English option can be found in Settings menu.
* **Text:** All texts bases on the default Roboto font and title or label will use upper case in the first letter.
* **Graphics:** Big, bold, clear and colorful to attrack user’s attention.

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

### Usability

Usability Requirements support the following from the perspective of its primary users:

● **Efficiency of use:** user can complete each function in less than 8 actions

● **Intuitiveness:** all help/error messages are simple and easy to understand; user can figure out exactly how to use each feature after using it once.

### Security Requirements

In order to avoid unwanted access by strangers, the security implemented in various ways:

* **User layer**: User data will be stored at user’s devices and can be protected by basic security options provided by Android system itself. User data can be synchronized to server after user active this function with distinct username and password. There will also be a option to delete all user data on the current device – which will not affect synchronized data on server.
* **Manage Data Layer**: Only Administrator can modify database system. User data is encrypted by their password and is not accessible by any means.
* **Stored Data**: All synchronized user data will be saved in MSSQL Server and optimized for daily backup.

### Hardware/Software Requirements

● **Hardware requirement:** Android smartphones of all kinds (with active internet connection and GPS enabled)

● **Software requirements:** Android 4.4 or higher.