

**Vietnamese Eazy**

**Software Requirement Specification**

**Project Code: Veazy**

**Document Code: Veazy– v1.0**

**Hoa Lac, 2016/05/20**

**RECORD OF CHANGE**

\*A - Added M - Modified D - Deleted

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**SIGNATURE PAGE**

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# INTRODUCTION

*[The introduction of the* ***Software Requirements Specification (SRS)*** *provides an overview of the entire* ***SRS****. It includes the purpose, scope, definitions, acronyms, abbreviations, references, and overview of the* ***SRS****.]*

*[Note: The* ***SRS*** *document captures the complete software requirements for the system, or a portion of the system. Following is a typical* ***SRS*** *outline for a project using only traditional, natural-language style requirements—with* ***no use-case modeling.*** *It captures all requirements in a single document, with applicable sections inserted from the Supplementary Specifications (which would no longer be needed). For a template of an* ***SRS*** *using use-case modeling, which consists of a package containing Use Cases of the use-case model and applicable Supplementary Specifications and other supporting information.]*

*[Many different arrangements of an* ***SRS*** *are possible. Refer to [IEEE830-1998] for further elaboration of these explanations, as well as other options for* ***SRS*** *organization.]*

## Purpose

*[Specify the purpose of this SRS. The SRS fully describes the external behavior of the application or subsystem identified. It also describes nonfunctional requirements, design constraints, and other factors necessary to provide a complete and comprehensive description of the requirements for the software.]*

The purpose of this document is to present a detailed description of the Vietnamese Eazy. It will explain the purpose and features of the system, the interfaces of the system, what the system will do, the constraints under which it must operate and how the system will react to external stimuli.

## Scope

*[A brief description of the software application that the SRS applies to, the feature or other subsystem grouping, what Use-Case model(s) it is associated with, and anything else that is affected or influenced by this document.]*

The “Vietnamese Eazy” is a website which help Japanese people learn Vietnamese.

There are four basic users Guest, Member, Editor, Admin.

* Guest can use dictionary, view lesson, do test.
* Member can use dictionary, view lesson, do test and save learning process.
* Editor can manage website content which include dictionary, lessons, test following each lesson.
* Admin can manage user, view system report.

## Definitions, Acronyms, and Abbreviations

*[This subsection provides the definitions of all terms, acronyms, and abbreviations required to properly interpret the SRS. This information may be provided by reference to the project’s Glossary.]*

|  |  |
| --- | --- |
| **Term** | **Definition** |
| UC | Usecase |
| A | Account |
|  |  |

## References

1. IEEE Software Engineering Standards Committee, “IEEE Std 830-1998, IEEE Recommended Practice for Software Requirements Specifications”, October 20, 1998. (*see Appendix 1*)
2. FPT Software, “Template Software Requirements Specifications”.

*[This subsection provides a complete list of all documents referenced elsewhere in the SRS. Identify each document by title, report number if applicable, date, and publishing organization. Specify the sources from which the references can be obtained. This information may be provided by reference to an appendix or to another document.]*

## Overview

The remain of this document includes 3 chapters.

The first chapter represents the overview of the product i.e. the perspective of the product, which the main features of the product is, what the user characteristics, also the constraints, assumptions and dependencies of the product.

The second chapter produces the specific functional and non-functional requirements of system, which must be satified when designers design and testers test the system.

The last chapter shows the additional information to support to make this document easier to understand.

# OVERALL DESCRIPTION

* 1. Product perspective:

The product is a web based system implementing client-server model. The Vietnamese Eazy system is supposed to be an e-learning system for all Japanese who want to study Vietnamese themselves.

* 1. Product functions:

The following are the main features that are included in the system:

* User account: The system allows the user to create their accounts in the system and provide features of updating and viewing profiles.
* Number of users being supported by the system: Though the number is precisely not mentioned but the system is able to support a large number of online users at a time.
* E-learning system: Provides a well-organised lessons system for users.
* Dictionary: Provides Vietnamese-Japanese dictionary and vice versus for users to loop up.
* Read
* Discussion forum: Provides users with a platform to discuss and help each other with their problems.
* Ticketing system: Allows user to submit his issue to the admin in case his problems are not solved by discussion forums.
  1. User characteristics:

There are 3 types of users involving in the system:

* Normal users: Requires basic knowledge of internet & computer.
* Editors: As normal users, but they need to have upper-level of Vietnamese language and abilities to write academic articles influently. They also need to have management skills to manage those articles.
* Administators: The administrators of the system need to have high-level technical skills, management skills and abilities to promote the website.
  1. Constraints:

The system is constrained by the internet connection. Since the browser fetchs data from the server, it is crucial to have an internet connection to function. Especially when user plays media, the speed and bandwitch of the internet connection is a constraint of the system.

The capacity of the database is also a constraint of the system. Since the database is forced to serve many requests at the same time, the time to fetch data will increase depending on the capacity of the database.

* 1. Assumptions & Dependencies:

The system depends on which type and version of browser being installed on the client machine i.e. the browser should support both HTML5 and CSS3. The internet connection speed and bandwitch is also a dependencies of the system.

One assumption that user has a strong enough internet connect which can adapt to system load. If the speed and bandwidth is not strong enough, there is one scenario that browser cannot fully load the webpage, which may affect web layout displaying. Another scenario is that when user plays media such as listening or watching conversation, the media quality may be affected badly by a weak internet connection, which results a bad user experience.

Another assumption is that user is using a fully technical supported browser. If the browser does not support full technique, website cannot adapt full functionalities.

* 1. Requirements subset:

# SPECIFIC REQUIREMENTS

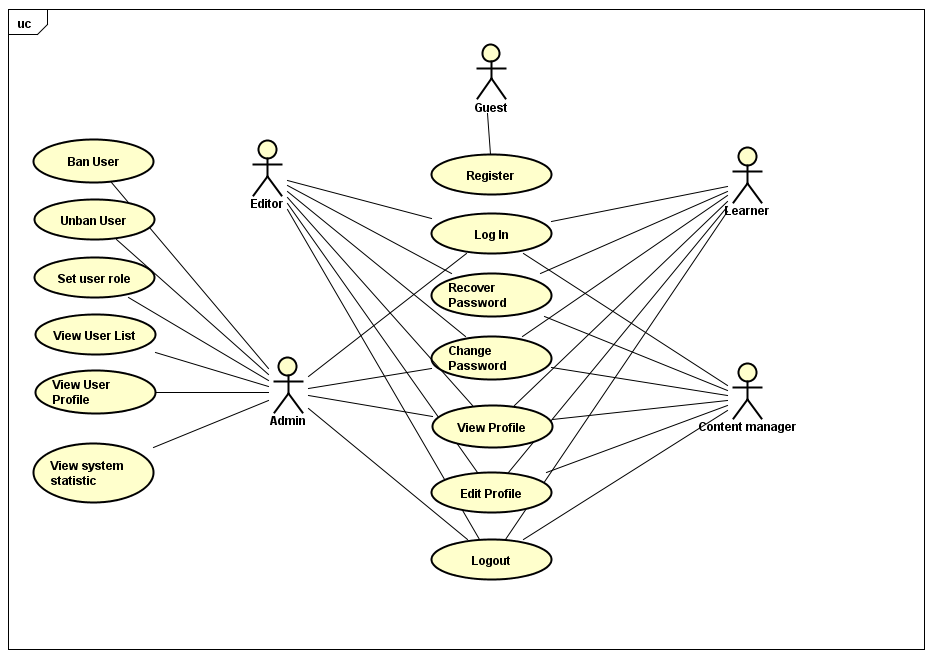
*[This section of the SRS contains all software requirements to a level of detail sufficient to enable designers to design a system to satisfy those requirements, and testers to test that the system satisfies those requirements. When using use-case modeling, these requirements are captured in the Use Cases and the applicable supplementary specifications. If use-case modeling is not used, the outline for supplementary specifications may be inserted directly into this section, as shown below.]*

## Functionality

*[This section describes the functional requirements of the system for those requirements that are expressed in the natural language style. For many applications, this may constitute the bulk of the SRS package and thought should be given to the organization of this section. This section is typically organized by feature, but alternative organization methods may also be appropriate; for example, organization by user or organization by subsystem. Functional requirements may include feature sets, capabilities, and security.*

*Where application development tools, such as requirements tools, modeling tools, and the like, are employed to capture the functionality, this section of the document would refer to the availability of that data, indicating the location and name of the tool used to capture the data.]*

### Account Management Module



### UC-A-001 : Register

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Use Case Name | Register | | | | |
| Use Case ID | UC-A-001 | | | | |
| Created By | QuanNH | | **Last Updated By** | | QuanNH |
| Date Created | 27/06/2016 | | **Date Last Updated** | | 27/06/2016 |
| Actor | Guest | | | | |
| Goal/Description | Allow user to register account in system | | | | |
| Pre-condition | System is in “Home” page | | | | |
| Trigger | User wants to register account in system | | | | |
| Basic Path | **Actor’s Action** | | | **System’s Response** | |
|  | 1. Click on “Register” tab name | | | Show “Register” page | |
|  | 1. Input information   *There are exception paths: E1, E2, E3, E4, E5, E6, E7, E8, E9* | | |  | |
|  | 1. Click on “I have read and accepted with VEAZY Website’s Policy” | | |  | |
|  | 1. Click on “Register” button   *There are exception paths: E9, E10, E11* | | | Show “Thank for Register” popup and redirect to “Homepage” | |
| Alternative Path |  | | | | |
| Post Condition | * If basic path is successful, user account will be registered successfully. System will redirect to Homepage * If exceptions are thrown, the result must match with output of each described exception. | | | | |
| Exception Paths |  | **Actor’s Action** | | **System’s Response** | |
|  | E1 | If Username textbox is null | | Show the notice “Please Enter Username” | |
|  | E2 | If Password textbox is null | | Show the notice “Please Enter Password” | |
|  | E3 | If Email textbox is null | | Show the notice “Please Enter Email” | |
|  | E4 | If inputted Password less than 8 character | | Show the notice “The Password Must Be More than 8 Characters” | |
|  | E5 | If Inputted Username less than 5 characters | | Show the notice “Username Must Be More than 5 Characters and Less than 25 Characters” | |
|  | E6 | If Inputted Username more than 25 characters | | Show the notice “Username Must Be More than 5 Characters and Less than 25 Characters” | |
|  | E7 | If Inputted Re-enter Password doesn’t match Inputted Password | | Show the notice “The Password and Re-enter Password Do not Match.” | |
|  | E8 | If Email is wrongly formatted | | Show the notice “Email Is Wrongly Formatted” | |
|  | E9 | If User did not check agree with Policy | | Show the notice “Please Agree with Policy to Register” | |
|  | E10 | If Username is already existed in system | | Show the notice “Username is already existed” | |
|  | E11 | If email is already existed in system | | Show the notice “Email is already existed” | |

### UC-A-002 : Login

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Use Case Name | Log In | | | | |
| Use Case ID | UC-A-002 | | | | |
| Created By | QuanNH | | **Last Updated By** | | QuanNH |
| Date Created | 27/06/2016 | | **Date Last Updated** | | 27/06/2016 |
| Actor | Learner, Editor, Content Manager, Adminstrator | | | | |
| Goal/Description | Allow user to log in to the front-end system | | | | |
| Pre-condition | User has registered account | | | | |
| Trigger | User wants to log in to system | | | | |
| Basic Path | **Actor’s Action** | | | **System’s Response** | |
|  | 1. Click on “Login” button | | | Show “Login” page | |
|  | 1. Enter username and password   *There is an alternative path: A1, A2*  *There are exception paths: E1, E2, E3* | | |  | |
|  | 1. Check “Remember Me” checkbox (Optional) | | |  | |
|  | 1. Click on “Login” button   *There is an exception path: E3* | | | Show popup “Login successfully” and stay on initial page and show avatar of signed in user on right top menu | |
| Alternative Path |  | **Actor’s Action** | | **System’s Response** | |
|  | A1 | 1. Click on “Login with Google +” button | | Redirect to choose Google+ Account Screen | |
|  |  | 2. Choose Google+ Account and accept account | | Redirect to previous screen and show avatar of signed in user on right top menu | |
|  | A2 | 1. Click on “Login with Facebook” button | | Redirect to choose Facebook Account Screen | |
|  |  | 2. Accept account Facebook | | Redirect to previous screen and show avatar of signed in user on right top menu | |
| Post Condition | * If basic path is successful system stay on initial screen and show avatar of signed in user on right top menu * If exceptions are thrown, the result must match with output of each described exception. | | | | |
| Exception Paths |  | **Actor’s Action** | | **System’s Response** | |
|  | E1 | If Username textbox is null | | Show the notice “Please Enter Your Username” and return to step 2 of basic path | |
|  | E2 | If Password Textbox is null | | Show the notice “Please Enter Your Password” and return to step 2 of basic path | |
|  | E3 | If user forget password; user click on “Forget Password?” | | Redirect to UC-A-003 | |
|  | E4 | If user enter the wrong Password or Username | | Show the notice “Invalid Username or Password “and return to step 2 of basic path | |
|  |  |  | |  | |

### UC-A-003 : View Profile

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Use Case Name | View Profile | | | |
| Use Case ID | UC-A-003 | | | |
| Created By | QuanNH | **Last Updated By** | | QuanNH |
| Date Created | 27/06/2016 | **Date Last Updated** | | 27/06/2016 |
| Actor | Learner, Editor, Content Manager, Adminstrator | | | |
| Goal/Description | Allow user to view user profile | | | |
| Pre-condition | User has already logged in | | | |
| Trigger | User wants to view profile | | | |
| Basic Path | **Actor’s Action** | | **System’s Response** | |
|  | 1. Click on “avatar” button in right top menu | | Show a dropdown list with options | |
|  | 2. Click “Profile” button | | Redirect View Profile Page | |
| Alternative Path |  | | | |
| Post Condition | * If basic path is successful system redirect to user profile page | | | |
| Exception Paths |  | | | |

### UC-A-004 : Edit Profile

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| Use Case Name | Edit Profile | | | | | |
| Use Case ID | UC-A-004 | | | | | |
| Created By | QuanNH | | | **Last Updated By** | | QuanNH |
| Date Created | 04/07/2016 | | | **Date Last Updated** | | 04/07/2016 |
| Actor | Learner, Editor, Content Manager, Adminstrator | | | | | |
| Goal/Description | Allow user to edit their own profile | | | | | |
| Pre-condition | User has already logged in and done UC-A-003 successfully | | | | | |
| Trigger | User wants to edit profile | | | | | |
| Basic Path | **Actor’s Action** | | | | **System’s Response** | |
|  | 1. Click on “Edit Profile” button. | | | | Show “Edit Profile” popup | |
|  | 1. Edit information | | | |  | |
|  | 1. Click on “Save” button.   *There is an alternative path: A1* | | | | Information of user will updated and redirect to “View Profile” page | |
| Alternative Path |  | | **Actor’s Action** | | **System’s Response** | |
|  | A1 | | Click on “Cancel” button | | Cancel “Editing Profile Action” and close “Edit Profile” popup | |
| Post Condition | * If basic path is successful system stay on initial screen and show “Edit Profile” popup * If exception are thrown, the result must match with output of each described exception. | | | | | |
| Exception Paths |  | **Actor’s Action** | | | **System’s Response** | |
|  |  |  | | |  | |

### UC-A-005 : Recover Password

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Use Case Name | Recover Password | | | | |
| Use Case ID | UC-A-005 | | | | |
| Created By | QuanNH | | **Last Updated By** | | QuanNH |
| Date Created | 27/06/2016 | | **Date Last Updated** | | 27/06/2016 |
| Actor | Learner, Editor, Content Manager, Adminstrator | | | | |
| Goal/Description | Allow user to reset password | | | | |
| Pre-condition | User has already forgot password and in “Login” page | | | | |
| Trigger | User wants to reset password | | | | |
| Basic Path | **Actor’s Action** | | | **System’s Response** | |
|  | 1. Click “Forgot your Password?” link | | | Show “Recover Password” page | |
|  | 1. Input user email   *There are exception paths: E1, E2* | | |  | |
|  | 1. Click “Recover” button   *There is an exception path: E3* | | | Show the notice “An email has been sent a link to reset your password” | |
| Alternative Path |  | | | | |
| Post Condition | * If basic path is successful system stay on initial screen and receive new password in their mailbox * If exceptions are thrown, the result must match with output of each described exception. | | | | |
| Exception Paths |  | **Actor’s Action** | | **System’s Response** | |
|  | E1 | If Email is wrongly formatted | | Show the notice “Email Is Wrongly Formatted” | |
|  | E2 | If Email textbox is null | | Show the notice “Please Enter Email” | |
|  | E3 | If email is not existed in database | | Show the notice “Email is not existed” | |

### UC-A-006 : Change Password

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Use Case Name | Change Password | | | | |
| Use Case ID | UC-A-006 | | | | |
| Created By | QuanNH | | **Last Updated By** | | QuanNH |
| Date Created | 27/06/2016 | | **Date Last Updated** | | 27/06/2016 |
| Actor | Learner, Editor, Content Manager, Adminstrator | | | | |
| Goal/Description | Allow user to change password | | | | |
| Pre-condition | User has already logged in and done UC-A-003 successfully | | | | |
| Trigger | User wants to change password | | | | |
| Basic Path | **Actor’s Action** | | | **System’s Response** | |
|  | 1. Click on “Change password” button. | | | Show a popup with requiring input information | |
|  | 1. Input information   *There are exception paths: E1, E2, E3* | | |  | |
|  | 1. Click on “Save” button.   *There is exception path: E4* | | |  | |
| Alternative Path |  | | | | |
| Post Condition | * If basic path is successful system stay on initial screen and password is changed successfully. * If exceptions are thrown, the result must match with output of each described exception. | | | | |
| Exception Paths |  | **Actor’s Action** | | **System’s Response** | |
|  | E1 | Old password text field has less than 8 inputted character | | Show the notice “The Old Password Must More Than 8 Characters.” | |
|  | E2 | New password text field has less than 8 inputted character | | Show the notice “The New Password Must More Than 8 Characters.” | |
|  | E3 | New password and confirmed password is not match | | Show the notice “The Password And Confirmation Password Do Not Match.” | |
|  | E4 | Old password is not valid | | Show the notice “Wrong Old Password” | |

### UC-A-007 : View users list

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Use Case Name | View user list | | | |
| Use Case ID | UC-A-007 | | | |
| Created By | QuanNH | **Last Updated By** | | QuanNH |
| Date Created | 27/06/2016 | **Date Last Updated** | | 27/06/2016 |
| Actor | Adminstrator | | | |
| Goal/Description | Allow user to view list users | | | |
| Pre-condition | User has already logged | | | |
| Trigger | User wants to view list users | | | |
| Basic Path | **Actor’s Action** | | **System’s Response** | |
|  | In “Admin dashboard page”, click on “Member” button in right menu | | Show “List Member” page | |
|  |  | |  | |
| Alternative Path |  | | | |
| Post Condition |  | | | |
| Exception Paths |  | | | |

### UC-A-008 : View User Profile

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Use Case Name | View User Profile | | | |
| Use Case ID | UC-A-008 | | | |
| Created By | QuanNH | **Last Updated By** | | QuanNH |
| Date Created | 27/06/2016 | **Date Last Updated** | | 27/06/2016 |
| Actor | Adminstrator | | | |
| Goal/Description | Allow user to view user profile | | | |
| Pre-condition | User has already logged in and done UC-A-007 successfully | | | |
| Trigger | User wants to view user profile | | | |
| Basic Path | **Actor’s Action** | | **System’s Response** | |
|  | 1. Click on “user” hyperlink in list users | | Show a ”User Details Profile” | |
|  |  | |  | |
| Alternative Path |  | | | |
| Post Condition | * If basic path is successful system redirect to user profile page | | | |
| Exception Paths |  | | | |

### UC-A-009 : Ban user

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Use Case Name | Ban user | | | |
| Use Case ID | UC-A-009 | | | |
| Created By | QuanNH | **Last Updated By** | | QuanNH |
| Date Created | 27/06/2016 | **Date Last Updated** | | 27/06/2016 |
| Actor | Adminstrator | | | |
| Goal/Description | Allow user to ban user | | | |
| Pre-condition | User has already logged in and done UC-A-008 successfully | | | |
| Trigger | User wants to ban member of system | | | |
| Basic Path | **Actor’s Action** | | **System’s Response** | |
|  | 1. In “List users page”, click on member who want to ban | | Show a user profile | |
|  | 1. Click on “Ban” button | | Show “Ban user successful” popup | |
| Alternative Path |  | | | |
| Post Condition |  | | | |
| Exception Paths |  | | | |

### UC-A-010 : UnBan user

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Use Case Name | Unban user | | | |
| Use Case ID | UC-A-010 | | | |
| Created By | QuanNH | **Last Updated By** | | QuanNH |
| Date Created | 27/06/2016 | **Date Last Updated** | | 27/06/2016 |
| Actor | Adminstrator | | | |
| Goal/Description | Allow user to unban user | | | |
| Pre-condition | User has already logged in and done UC-A-008 successfully | | | |
| Trigger | User wants to unban member | | | |
| Basic Path | **Actor’s Action** | | **System’s Response** | |
|  | 1. In “List users page”, click on member who want to unban | | Show a user profile | |
|  | 1. Click on “Unban” button | | Show “Unban user successful” popup | |
| Alternative Path |  | | | |
| Post Condition |  | | | |
| Exception Paths |  | | | |

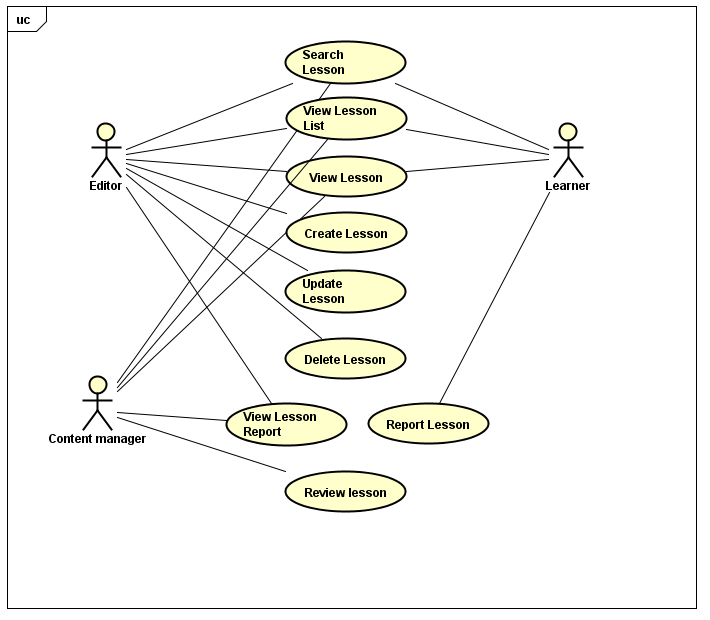
### UC-A-011 : View System Satistics

### UC-A-012 : Set User Role

### UC-A-013 : Logout

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Use Case Name | Log Out | | | |
| Use Case ID | UC-A-013 | | | |
| Created By | QuanNH | **Last Updated By** | | QuanNH |
| Date Created | 27/06/2016 | **Date Last Updated** | | 27/06/2016 |
| Actor | Learner, Editor, Content Manager, Adminstrator | | | |
| Goal/Description | Allow user to log out of the front-end system | | | |
| Pre-condition | User has already logged in | | | |
| Trigger | User wants to log out of the front-end system | | | |
| Basic Path | **Actor’s Action** | | **System’s Response** | |
|  | 1. Click on “avatar” button on right top menu | | Show a dropdown list menu | |
|  | 1. Click on “Log Out” button | | Redirect to Homepage | |
| Alternative Path |  | | | |
| Post Condition | Redirect to Home Screen and user signed out successfully | | | |
| Exception Paths |  | | | |

### Lesson Module



### UC-L-001 : Search Lesson

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Use Case Name | Search Lesson | | | |
| Use Case ID | UC-L-001 | | | |
| Created By | QuanNH | **Last Updated By** | | QuanNH |
| Date Created | 27/06/2016 | **Date Last Updated** | | 27/06/2016 |
| Actor | Learner, Editor, Content Manager, Adminstrator | | | |
| Goal/Description | Allow user to search lessons | | | |
| Pre-condition |  | | | |
| Trigger | User wants to search lessons | | | |
| Basic Path | **Actor’s Action** | | **System’s Response** | |
|  | Input text to the search box | | System will filter and display result | |
|  |  | |  | |
| Alternative Path |  | | | |
| Post Condition |  | | | |
| Exception Paths |  | | | |

### UC-L-002 : View Lessons List

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Use Case Name | View Lessons List | | | |
| Use Case ID | UC-L-002 | | | |
| Created By | QuanNH | **Last Updated By** | | QuanNH |
| Date Created | 27/06/2016 | **Date Last Updated** | | 27/06/2016 |
| Actor | Guest, Learner, Editor, Content Manager, Adminstrator | | | |
| Goal/Description | Allow user to view list lessons of courses | | | |
| Pre-condition |  | | | |
| Trigger | User wants to view list lessons of courses | | | |
| Basic Path | **Actor’s Action** | | **System’s Response** | |
|  | Click on “Course” button in top menu | | Redirect to Course page | |
|  |  | |  | |
| Alternative Path |  | | | |
| Post Condition | * If basic path is successful system redirect to course page | | | |
| Exception Paths |  | | | |

### UC-L-003 : View Lesson Details

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Use Case Name | View Lesson Details | | | |
| Use Case ID | UC-L-003 | | | |
| Created By | QuanNH | **Last Updated By** | | QuanNH |
| Date Created | 27/06/2016 | **Date Last Updated** | | 27/06/2016 |
| Actor | Guest, Learner, Editor, Content Manager, Adminstrator | | | |
| Goal/Description | Allow user to view lesson details | | | |
| Pre-condition | System in “Course” page | | | |
| Trigger | User wants to view lesson details | | | |
| Basic Path | **Actor’s Action** | | **System’s Response** | |
|  | Click on “lesson name” link in each lesson box | | Redirect to lesson details page | |
|  |  | |  | |
| Alternative Path |  | | | |
| Post Condition | * If basic path is successful system redirect to lesson details page | | | |
| Exception Paths |  | | | |

### UC-L-004 : Create Lesson

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Use Case Name | Create Lesson | | | | |
| Use Case ID | UC-L-004 | | | | |
| Created By | QuanNH | | **Last Updated By** | | QuanNH |
| Date Created | 27/06/2016 | | **Date Last Updated** | | 27/06/2016 |
| Actor | Editor | | | | |
| Goal/Description | Allow user to create lesson | | | | |
| Pre-condition | User has already logged in and system in “Lesson List” page | | | | |
| Trigger | User wants to create lesson | | | | |
| Basic Path | **Actor’s Action** | | | **System’s Response** | |
|  | 1. Click on “Add lesson” button | | | Redirect to Add Lesson Page | |
|  | 1. Input information   *There are exception paths: E1, E2* | | |  | |
|  | 1. Click on “Add” button   *There is an alternative path: A1, A2* | | | Redirect to UC-L-003 | |
| Alternative Path |  | **Actor’s Action** | | **System’s Response** | |
|  | A1 | Click on “Save” button | | System will save lastest action of adding lesson | |
|  | A2 | Click on “Cancel” button | | System will cancel adding lesson action and redirect to “Course” page | |
| Post Condition | * If basic path is successful system redirect to “Lesson Details” page   If exceptions are thrown, the result must match with output of each described exception. | | | | |
| Exception Paths |  | **Actor’s Action** | | **System’s Response** | |
|  | E1 | If Lesson Name textbox is null | | Show the notice “Please Input Lesson Name” | |
|  | E2 | If Level textbox is null | | Show the notice “Please Input Level” | |

### UC-L-005 : Update Lesson

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Use Case Name | Update Lesson | | | | |
| Use Case ID | UC-L-005 | | | | |
| Created By | QuanNH | | **Last Updated By** | | QuanNH |
| Date Created | 27/06/2016 | | **Date Last Updated** | | 27/06/2016 |
| Actor | Editor | | | | |
| Goal/Description | Allow user to create lesson | | | | |
| Pre-condition | User has already logged in and system in “Lesson Details” page | | | | |
| Trigger | User wants to create lesson | | | | |
| Basic Path | **Actor’s Action** | | | **System’s Response** | |
|  | 1. Click on “Update lesson” button | | |  | |
|  | 1. Update information   *There are exception paths: E1, E2* | | |  | |
|  | 1. Click on “Update” button   *There is an alternative path: A1, A2* | | | Redirect to UC-L-003 | |
| Alternative Path |  | **Actor’s Action** | | **System’s Response** | |
|  | A1 | Click on “Save” button | | System will save lastest action of updating lesson | |
|  | A2 | Click on “Cancel” button | | System will cancel Updating lesson action and redirect to “Course” page | |
| Post Condition | * If basic path is successful system redirect to “Lesson Details” page   If exceptions are thrown, the result must match with output of each described exception. | | | | |
| Exception Paths |  | **Actor’s Action** | | **System’s Response** | |
|  | E1 | If Lesson Name textbox is null | | Show the notice “Please Input Lesson Name” | |
|  | E2 | If Level textbox is null | | Show the notice “Please Input Level” | |

### UC-L-006 : Delete Lesson

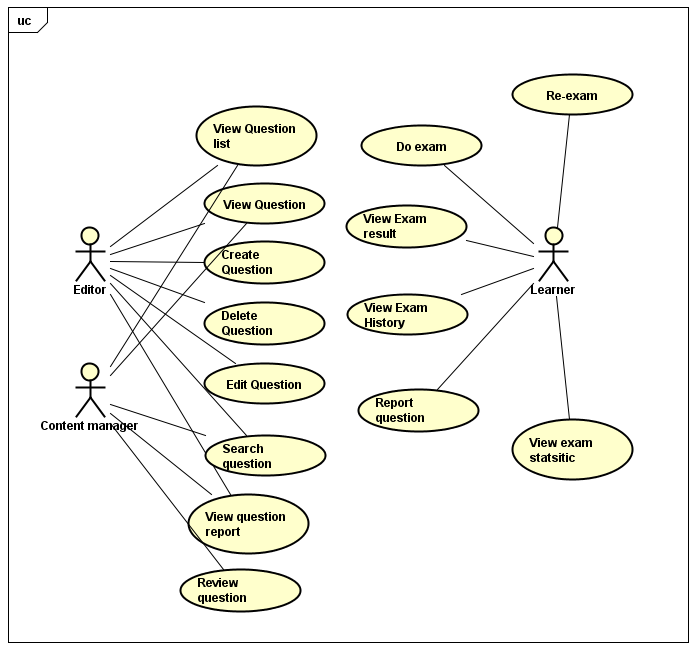
|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Use Case Name | Delete Lesson | | | | |
| Use Case ID | UC-L-006 | | | | |
| Created By | QuanNH | | **Last Updated By** | | QuanNH |
| Date Created | 27/06/2016 | | **Date Last Updated** | | 27/06/2016 |
| Actor | Editor | | | | |
| Goal/Description | Allow user to delete lesson | | | | |
| Pre-condition | User has already logged in, system in “Lessons List” page and lesson status is not “deleted” | | | | |
| Trigger | User wants to delete lesson | | | | |
| Basic Path | **Actor’s Action** | | | **System’s Response** | |
|  | Click “Delete” button | | | Show “Are you sure to delete this lesson” popup | |
|  | Click “Yes” button  *There is an alternative path: A1* | | | Show the notice “Delete successfull” | |
| Alternative Path |  | **Actor’s Action** | | **System’s Response** | |
|  | A1 | Click “No” button | | Cancel deleting lesson action | |
| Post Condition | * If basic path is successful system redirect to lessons list page | | | | |
| Exception Paths |  | | | | |

### UC-L-007 : Report Lesson

### UC-L-008 : View Lesson Report

### UC-L-009 : Preview Lesson

### Exam Module



### UC-E-001 : Do Exam

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Use Case Name | Do Exam | | | | |
| Use Case ID | UC-E-001 | | | | |
| Created By | QuanNH | | **Last Updated By** | | QuanNH |
| Date Created | 04/07/2016 | | **Date Last Updated** | | 04/07/2016 |
| Actor | Guest, Learner | | | | |
| Goal/Description | Allow user to create exam and do exam | | | | |
| Pre-condition | User has already logged in | | | | |
| Trigger | User wants to create exam and do exam | | | | |
| Basic Path | **Actor’s Action** | | | **System’s Response** | |
|  | Click on “Exam” button in top menu | | | Show “Exam” dropdown list | |
|  | Click on “Create Exam” menu | | | Redirect to “Create Exam” page | |
|  | Click on “Level” dropdown list  *There are exception paths: E1* | | | Show list level of exam | |
|  | Input number of question  *There are exception paths: E2* | | |  | |
|  | Click on “Strat Exam” | | | Redirect to “Do Exam” page | |
| Alternative Path |  | **Actor’s Action** | | **System’s Response** | |
|  |  |  | |  | |
| Post Condition | * If basic path is successful system redirect to “Create Exam” page | | | | |
| Exception Paths |  | **Actor’s Action** | | **System’s Response** | |
|  | E1 | If LevelTest is null | | Show the notice “Please choose level exam” | |
|  | E2 | If NumberQuestion is null | | Show the notice “Please input number of question” | |

### UC-E-002 : View Exam Result

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Use Case Name | View Exam Result | | | | |
| Use Case ID | UC-E-002 | | | | |
| Created By | QuanNH | | **Last Updated By** | | QuanNH |
| Date Created | 04/07/2016 | | **Date Last Updated** | | 04/07/2016 |
| Actor | Guest, Learner | | | | |
| Goal/Description | Allow user to view result of their exam | | | | |
| Pre-condition | User has already logged in and done UC-E-001 successfully | | | | |
| Trigger | User wants to view result of their exam | | | | |
| Basic Path | **Actor’s Action** | | | **System’s Response** | |
|  | Click on “Finish” button at bottom of “Do Exam”page  *There is an alternative path: A1* | | | Redirect to “Exam Result” page | |
| Alternative Path |  | **Actor’s Action** | | **System’s Response** | |
|  | A1 | Click on “Exit” button at bottom of “Do Exam” page | | Exit exam and redirect to “Create Exam” page | |
| Post Condition | * If basic path is successful system redirect to “Exam Result” page | | | | |
| Exception Paths |  | **Actor’s Action** | | **System’s Response** | |
|  |  |  | |  | |

### UC-E-003 : View Exam History

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Use Case Name | View Exam History | | | | |
| Use Case ID | UC-E-003 | | | | |
| Created By | QuanNH | | **Last Updated By** | | QuanNH |
| Date Created | 04/07/2016 | | **Date Last Updated** | | 04/07/2016 |
| Actor | Learner | | | | |
| Goal/Description | Allow user to view their history exam | | | | |
| Pre-condition | User has already logged in | | | | |
| Trigger | User wants to view their history exam | | | | |
| Basic Path | **Actor’s Action** | | | **System’s Response** | |
|  | Click on “Exam” button in top menu | | | Show “Exam” dropdown list | |
|  | Click on “History Exam” menu | | | Redirect to “History Exam” page | |
|  | Click on “Exam Name” hyperlink that user want to view | | | Show “Exam Details” page | |
| Alternative Path |  | **Actor’s Action** | | **System’s Response** | |
|  |  |  | |  | |
| Post Condition | * If basic path is successful system redirect to “History Exam” page | | | | |
| Exception Paths |  | **Actor’s Action** | | **System’s Response** | |
|  |  |  | |  | |

### UC-E-004 : Re-Exam

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Use Case Name | Re-Exam | | | | |
| Use Case ID | UC-E-004 | | | | |
| Created By | QuanNH | | **Last Updated By** | | QuanNH |
| Date Created | 04/07/2016 | | **Date Last Updated** | | 04/07/2016 |
| Actor | Learner | | | | |
| Goal/Description | Allow user to re-exam | | | | |
| Pre-condition | User has already logged in and done UC-E-003 successfully | | | | |
| Trigger | User wants to re-exam | | | | |
| Basic Path | **Actor’s Action** | | | **System’s Response** | |
|  | Click on “Exam” button in top menu | | | Show “Exam” dropdown list | |
|  | Click on “History Exam” menu | | | Redirect to “History Exam” page | |
|  | Click on “Exam Name” hyperlink that user want to re exam | | | Show “Exam Details” page | |
|  | Click on “Re-Exam” button | | | Redirect ro “Do Exam” page | |
| Alternative Path |  | **Actor’s Action** | | **System’s Response** | |
|  |  |  | |  | |
| Post Condition | * If basic path is successful system redirect to “Do Exam” page | | | | |
| Exception Paths |  | **Actor’s Action** | | **System’s Response** | |
|  |  |  | |  | |

### UC-E-005 : View Exam Satistic

### UC-E-006 : Report Question

### UC-E-007 : View Questions List

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Use Case Name | View Question List | | | |
| Use Case ID | UC-E-007 | | | |
| Created By | QuanNH | **Last Updated By** | | QuanNH |
| Date Created | 04/07/2016 | **Date Last Updated** | | 04/07/2016 |
| Actor | Editor, Content Manager | | | |
| Goal/Description | Allow user to view list questions | | | |
| Pre-condition | User has already logged in | | | |
| Trigger | User wants to view list questions | | | |
| Basic Path | **Actor’s Action** | | **System’s Response** | |
|  | Click on “Question” button in menu | | Redirect to “List Questions” page | |
|  |  | |  | |
| Alternative Path |  | | | |
| Post Condition | * If basic path is successful system redirect to “List Questions” page | | | |
| Exception Paths |  | | | |

### UC-E-008 : View Question Details

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Use Case Name | View Question Details | | | |
| Use Case ID | UC-E-008 | | | |
| Created By | QuanNH | **Last Updated By** | | QuanNH |
| Date Created | 04/07/2016 | **Date Last Updated** | | 04/07/2016 |
| Actor | Editor, Content Manager | | | |
| Goal/Description | Allow user to view question details | | | |
| Pre-condition | User has already logged in and done UC-E-007 successfully | | | |
| Trigger | User wants to view question details | | | |
| Basic Path | **Actor’s Action** | | **System’s Response** | |
|  | Click on “Question name” link in list questions | | Redirect to question details page | |
|  |  | |  | |
| Alternative Path |  | | | |
| Post Condition | * If basic path is successful system redirect to question details page | | | |
| Exception Paths |  | | | |

### UC-E-009 : Create Question

### UC-E-010 : Edit Question

### UC-E-011 : Delete Question

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Use Case Name | Delete Lesson | | | | |
| Use Case ID | UC-E-011 | | | | |
| Created By | QuanNH | | **Last Updated By** | | QuanNH |
| Date Created | 05/07/2016 | | **Date Last Updated** | | 05/07/2016 |
| Actor | Editor | | | | |
| Goal/Description | Allow user to delete question | | | | |
| Pre-condition | User has already logged in, system in “Questions List” page and question status is not “deleted” | | | | |
| Trigger | User wants to delete question | | | | |
| Basic Path | **Actor’s Action** | | | **System’s Response** | |
|  | Click “Delete” button | | | Show “Are you sure to delete this question” popup | |
|  | Click “Yes” button  *There is an alternative path: A1* | | | Show the notice “Delete successfull” | |
| Alternative Path |  | **Actor’s Action** | | **System’s Response** | |
|  | A1 | Click “No” button | | Cancel deleting question action | |
| Post Condition | * If basic path is successful system redirect to lessons list page | | | | |
| Exception Paths |  | | | | |

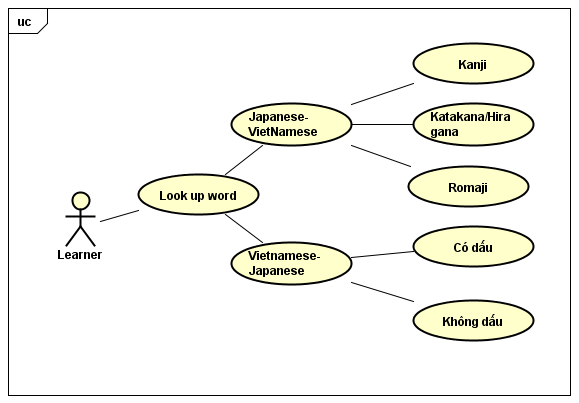
### UC-E-012 : Search Question

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Use Case Name | Search Lesson | | | |
| Use Case ID | UC-E-012 | | | |
| Created By | QuanNH | **Last Updated By** | | QuanNH |
| Date Created | 04/07/2016 | **Date Last Updated** | | 04/07/2016 |
| Actor | Editor, Content Manager | | | |
| Goal/Description | Allow user to search question | | | |
| Pre-condition | User has already logged in and done UC-E-007 successfully | | | |
| Trigger | User wants to search question | | | |
| Basic Path | **Actor’s Action** | | **System’s Response** | |
|  | Input text to the search box | | System will filter and display result | |
|  |  | |  | |
| Alternative Path |  | | | |
| Post Condition |  | | | |
| Exception Paths |  | | | |

### UC-E-013 : View Question Reports

### UC-E-014 : Review Question.

### Dictionary Module



### UC-D-001 : Look Up Word

### UC-D-002 : Find Kanji Word

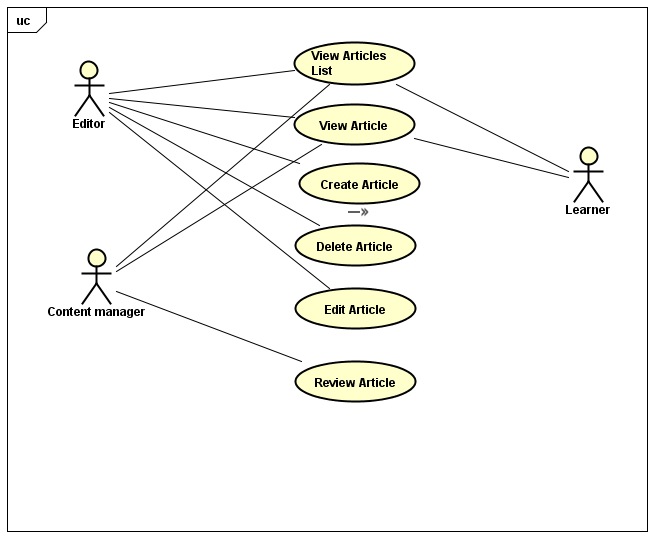
### UC-D-003 : Find Katakana/Hiragara Word

### UC-D-004 : Find Romaji Word

### UC-D-005 : Find “Có dấu” Word

### UC-D-006 : Find “Không dấu” Word.

### Article Module



### UC-AR-001 : View Articles List

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Use Case Name | View Articles List | | | | |
| Use Case ID | UC-AR-001 | | | | |
| Created By | QuanNH | | **Last Updated By** | | QuanNH |
| Date Created | 05/07/2016 | | **Date Last Updated** | | 05/07/2016 |
| Actor | Guest, Learner, Editor, Content Manager, Adminstrator | | | | |
| Goal/Description | Allow user to view list articles | | | | |
| Pre-condition |  | | | | |
| Trigger | User wants to view list article | | | | |
| Basic Path | **Actor’s Action** | | | **System’s Response** | |
|  | Click on “Aricle” button in top menu | | | Redirect to “Article List” page | |
|  |  | | |  | |
| Alternative Path |  | **Actor’s Action** | | **System’s Response** | |
|  |  |  | |  | |
| Post Condition | * If basic path is successful system redirect to article list page | | | | |
| Exception Paths |  | | | | |

### UC-AR-002 : View Article Details

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Use Case Name | View Article Details | | | | |
| Use Case ID | UC-AR-002 | | | | |
| Created By | QuanNH | | **Last Updated By** | | QuanNH |
| Date Created | 05/07/2016 | | **Date Last Updated** | | 05/07/2016 |
| Actor | Guest, Learner, Editor, Content Manager, Adminstrator | | | | |
| Goal/Description | Allow user to view article details | | | | |
| Pre-condition |  | | | | |
| Trigger | User wants to view article details | | | | |
| Basic Path | **Actor’s Action** | | | **System’s Response** | |
|  | Click on “Aricle” button in top menu | | | Redirect to “Article List” page | |
|  | Click on “Article Name” link tin list articles | | | Redirect to “Article Details” page | |
| Alternative Path |  | **Actor’s Action** | | **System’s Response** | |
|  |  |  | |  | |
| Post Condition | * If basic path is successful system redirect to article list page | | | | |
| Exception Paths |  | | | | |

### UC-AR-003 : Create Article

### UC-AR-004 : Edit Article

### UC-AR-005 : Delete Article

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| Use Case Name | Delete Article | | | | |
| Use Case ID | UC-AR-005 | | | | |
| Created By | QuanNH | | **Last Updated By** | | QuanNH |
| Date Created | 05/07/2016 | | **Date Last Updated** | | 05/07/2016 |
| Actor | Editor | | | | |
| Goal/Description | Allow user to delete article | | | | |
| Pre-condition | User has already logged in, system in “Articles List” page and article status is not “deleted” | | | | |
| Trigger | User wants to delete article | | | | |
| Basic Path | **Actor’s Action** | | | **System’s Response** | |
|  | Click “Delete” button | | | Show “Are you sure to delete this article” popup | |
|  | Click “Yes” button  *There is an alternative path: A1* | | | Show the notice “Delete successfull” | |
| Alternative Path |  | **Actor’s Action** | | **System’s Response** | |
|  | A1 | Click “No” button | | Cancel deleting article action | |
| Post Condition | * If basic path is successful system redirect to lessons list page | | | | |
| Exception Paths |  | | | | |

### UC-AR-006 : Review Article

## Usability

* Interface should be simple, clear, user friendly, easy to learn how to use and easy to remember how to use.
* Interface design should support the following from the perspectives of its primary users:
  + Efficiency of use : goals are easy to accomplish quickly and with few or no user errors.
  + Intuitiveness : the interface is easy to learn and navigate: buttons, headings, and help/error messages are simple to understand.
  + Low percieved workload : the interface appears easy to use, rather than intimidating, demaining and frustrating.
* Users need to understand the function of each section to be able to use reasonable discretion and its effectiveness.
* Users should be supported and guided how to use the functionality of the system to use system easily after short time.
* The system should have the flexibility to be can satisfied future changed as:
  + Can add more lessons, tests and new words.
  + Changes in processing of information.
* The system must meet the requirements for data memory, need to calculate the amount of memory to be able to meet the requirements of the development of the system.

*[This section includes all those requirements that affect usability. For example,*

*specify the required training time for a normal users and a power user to become productive at particular operations*

*specify measurable task times for typical tasks or base the new system’s usability requirements on other systems that the users know and like*

*specify requirement to conform to common usability standards, such as IBM’s CUA standards Microsoft’s GUI standards]*

### <Usability Requirement One>

*[The requirement description goes here.]*

## Reliability

*[Requirements for reliability of the system should be specified here. Some suggestions follow:*

*Availability—specify the percentage of time available ( xx.xx%), hours of use, maintenance access, degraded mode operations, and so on.*

*Mean Time Between Failures (MTBF) — this is usually specified in hours, but it could also be specified in terms of days, months or years.*

*Mean Time To Repair (MTTR)—how long is the system allowed to be out of operation after it has failed?*

*Accuracy—specifies precision (resolution) and accuracy (by some known standard) that is required in the system’s output.*

*Maximum Bugs or Defect Rate—usually expressed in terms of bugs per thousand lines of code (bugs/KLOC) or bugs per function-point( bugs/function-point).*

*Bugs or Defect Rate—categorized in terms of minor, significant, and critical bugs: the requirement(s) must define what is meant by a “critical” bug; for example, complete loss of data or a complete inability to use certain parts of the system’s functionality.]*

### <Reliability Requirement One>

*[The requirement description.]*

## Performance

Response Time:

* Time for searching: At most 10 seconds
* Time for loading image: At most 5 seconds
* Time to progress any function: Will not exceed 7 seconds

## Supportability

*[This section indicates any requirements that will enhance the supportability or maintainability of the system being built, including coding standards, naming conventions, class libraries, maintenance access, and maintenance utilities.]*

### <Supportability Requirement One>

*[The requirement description goes here.]*

## Design Constraints

*[This section indicates any design constraints on the system being built. Design constraints represent design decisions that have been mandated and must be adhered to. Examples include software languages, software process requirements, prescribed use of developmental tools, architectural and design constraints, purchased components, class libraries, and so on.]*

### <Design Constraint One>

*[The requirement description goes here.]*

## On-line User Documentation and Help System Requirements

*[Describes the requirements, if any, for o-line user documentation, help systems, help about notices, and so forth.]*

## Purchased Components

*[This section describes any purchased components to be used with the system, any applicable licensing or usage restrictions, and any associated compatibility and interoperability or interface standards.]*

## Interfaces

*[This section defines the interfaces that must be supported by the application. It should contain adequate specificity, protocols, ports and logical addresses, and the like, so that the software can be developed and verified against the interface requirements.]*

### User Interfaces

*[Describe the user interfaces that are to be implemented by the software.]*

### Hardware Interfaces

*[This section defines any hardware interfaces that are to be supported by the software, including logical structure, physical addresses, expected behavior, and so on.]*

### Software Interfaces

*[This section describes software interfaces to other components of the software system. These may be purchased components, components reused from another application or components being developed for subsystems outside of the scope of this SRS but with which this software application must interact.]*

### Communications Interfaces

[Describe any communications interfaces to other systems or devices such as local area networks, remote serial devices, and so forth.]

## Licensing Requirements

*[Defines any licensing enforcement requirements or other usage restriction requirements that are to be exhibited by the software.]*

## Legal, Copyright, and Other Notices

*[This section describes any necessary legal disclaimers, warranties, copyright notices, patent notices, wordmark, trademark, or logo compliance issues for the software.]*

## Applicable Standards

*[This section describes by reference any applicable standard and the specific sections of any such standards which apply to the system being described. For example, this could include legal, quality and regulatory standards, industry standards for usability, interoperability, internationalization, operating system compliance, and so forth.]*

# SUPPORTING INFORMATION

* 1. Appendices:
     1. Appendix 1: 830-1998 - IEEE Recommended Practice for Software Requirements Specifications

“The content and qualities of a good software requirements specification (SRS) are described, and several sample SRS outlines are presented. This recommended practice is aimed at specifying the requirements of software to be developed, but can also be applied to assist in the selection of in-house and commercial software products. Guidelines for compliance with IEEE/EIA Std 12207.1-1997 are also provided.”

https://standards.ieee.org/findstds/standard/830-1998.html

*[The supporting information makes the SRS easier to use. It includes:*

* *Table of contents*
* *Index*
* *Appendices*

*These may include use-case storyboards or user-interface prototypes. When appendices are included, the SRS should explicitly state whether or not the appendices are to be considered part of the requirements.]*