**Architecture Driver Specification**

Admission system

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# **Revision**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **No** | **Phiên bản** | **Ngày** | **Tác giả** | **Nội dung** |
| 1 | 0.1 | 05/12/2013 | Huynh Trong Khang | Create Architecture driver specification  Introduction, Project Overview, Architecture Overview, Specifications Traceability Matrix. |
| 2 | 0.2 | 08/12/2013 | DeadLine Team | Create Entities, Usecase-model and description, Quality attribute |
| 3 | 0.3 | 15/12/2013 | Khau Thanh Dao  Ngo Quang Huy  Nguyen Phan Xuan Huy  Huynh Trong Khang | Update Entity, use case, quality attribute for  “Danh mục” & “Hỏi đáp” |
| 4 | 0.4 | 17/12/2013 | Le Ngoc Chau  Ta Ngoc Thien Phu  Huynh Trong Khang | Update Use case diagram + description for “Soạn tin” module.  Synthesis parts are divided  Entiy, User case, Quality  Update template table |
| 5 | 0.5 | 8/1/2014 | Le Ngoc Chau | Update entities and usecases  Update list quality attributes |
| 6 | 0.6 | 28/3/2014 | Ngo Quang Huy | Update usecase description |

Table 1: Revision history

# **Introduction**

## Purpose

This document is used to analyze the scenario from the stakeholders and will continue to be recorded, refine during project development.

Acting as the main repository of project requirements.

## Reader

The reader of this document will include Deadline teams, clients and stakeholders in the project.

## The acronym

|  |  |  |
| --- | --- | --- |
| **No.** | **Glossary** | **Description** |
| 1 | E<XX> | Entity ID includes:  E: Entity.  <XX>: Number of Entity |
| 2 | UC.<XX> | High level usecase ID includes:  UC: Use Case.  <XX>: Number of high level usecase |
| 3 | UC.<XX>.<YY> | Use case ID detail includes:  UC: Use Case.  <XX>: Number of high level usecase  <YY>: Number of usecase detail |
| 4 | QAU | Quality Attribute Usability. |
| 5 | QAS | Quality Attribute Security. |
| 6 | QAP | Quality Attribute Performance. |
| 7 | QAA | Quality Attribute Availability. |
| 8 | QAM | Quality Attribute Modifiability. |
| 9 | QAL | Quality Attribute Scalability |
| 10 | BC.<XX> | Business constraint ID includes:  BC: Business Constraint.  <XX>: Number of business constraint |
| 11 | TC.<XX> | Technical constraint ID includes:  TC: Technical Constraint.  <XX>: Number of technical constraint |
| 12 | BR.<XX>.<YY> | Business rule ID includes:  BR: Business Rule.  <XX>: Number of high level usecase.  <YY>: Number of business rule. |

Table 2: The acronym

## Refer

|  |  |  |
| --- | --- | --- |
| **No** | **Document** | **Description** |
| 1 | Architecting.Software.Intensive.Systems.A.Practitioners.Guide.Nov.2008. | Used to make document |
| 2 | Documenting Software Architectures - View and Beyond, Paul Clements, 2010 (Clements 10) | Apply for describing Views |
| 3 | Software Architecture in Practice | Apply for describing Views |
| 4 | AS\_RE\_OperationRequirement | Used to analyze customer requirements |

Table 3: Refer

# **Project overview**

Admissions System (AD) is an application that integrate tools (Article, Catalog, questions and answers) independent, it's supported base on web and android platform aimed at helping users easily perform a variety of work related problems admission. The system consists of three main tools:

* Article system
* Catalog management system
* Dictionary management system and Dictionary display system

# **Architect overview**

Architectural drivers are presented in this document include:

* Functional Requirements: descript requirements is shown on use cases and requirements are defined in the operation document.
* Non-functional Requirements: are requirements that support the system and are shown on the quality attributes scenarios, identified in the operation document.
* Business constraints are identified in the operation document.
* Technical constraints: are identified in the operation document.

# **Functional requirements**

## Requirement description

Refer to Operation document

## Entities list

|  |  |
| --- | --- |
| **ID** | **Entity** |
| [E01](#_Tổng_biên_tập) | Editor-in-chief |
| [E02](#_Biên_tập) | Editor |
| [E03](#_Phóng_viên) | Reporter |
| [E04](#_Quản_trị_danh) | Catalog manager |
| [E05](#_Bộ_phận_trả) | Answer Department |
| [E06](#_Người_dùng) | User |
| [E07](#_Công_cụ_soạn) | Article system |
| [E08](#_Công_cụ_hiển) | Display article-inter |
| [E09](#_Công_cụ_hiển_1) | Display article-intra |
| [E10](#_Công_cụ_quản) | Dictionary management system |
| [E11](#_Công_cụ_hiển_2) | Dictionary display system |
| [E12](#_Công_cụ_quản_1) | Dictionary management system (andrioid app) |
| [E13](#_Công_cụ_hiển_3) | Dictionary display system (andrioid app) |
| [E14](#_Mail_server) | Mail Server |
| [E15](#_Database_intranet) | Database intranet |
| [E16](#_Database_internet) | Database internet |
| [E17](#_Quản_trị_người) | User management |
| [E18](#_Tính_năng_quản) | User management module |

Table 4: Entity list

### Entities description detail

#### Editor-in-chief

|  |  |  |
| --- | --- | --- |
| **Entity Name: Editor-in-chief** | | **ID:E01** |
| **Description:**  Editor-in-chief is person who use Article system, highest role, drafting news and is responsible for the approval and drop- article to internet or intranet. Besides Editor-in-chief can choose a person who can represent do their work in one specific time period through authorize to other. | | |
| **Provides assumptions:** | **Requires assumptions:** | |
| Editor-in-chief provides for Article system content of article in text format, attachments in format of img, video, .doc, .xls, .pdf, .ppt and the other articles that relate.  *(\*Related article: is article uploaded and its content relate with content of article that is creating)* | Editor-in-chief requires Article system provide interface to create the article in text format, attachments in format of img, video, .doc, xls, .pdf, .ppt and the other article that relate. | |
| Editor-in-chief provides for Article system name of related article | Editor-in-chief requires Article system provide interface to edit information of article. | |
| Editor-in-chief provides for Article system information of article that need to search, include:   * Title in text format * Content summary in text format * Main content in text format * Creater by * Create date * Approve by * Approve date * Delete by * Delete date * Upload by * Upload date * Drop by * Drop date | Editor-in-chief requires Article system provide interface to search, include:   * Title in text format * Content summary in text format * Main content in text format * Creater by * Create date * Approve by * Approve date * Delete by * Delete date * Upload by * Upload date * Drop by * Drop date. | |
| Editor-in-chief provides for Article system information of related article that need to search, include:   * Title in text format * Content summary in text format * Main content in text format * Create by * Create date * Approved by * Approved date * Upload by * Upload date | Editor-in-chief requires Article system provide interface to search related article, include:   * Title in text format * Content summary in text format * Main content in text format * Create by * Create date * Approve by * Approve date * Upload by * Upload date | |
| Editor-in-chief provides for Article system article’s name that need to view detail, include:   * Article is created * Article waiting for approve * Article is approved * Article is deleted * Article is upload * Article is droped * Article is returned | Editor-in-chief requires Article system provide interface to view detail of article in lists, include:   * Article is created * Article waiting for approve * Article is approved * Article is deleted * Article is upload * Article is droped * Article is returned | |
| Editor-in-chief provides for Article system article’s name that need to review. | Editor-in-chief requires Article system provide interface to review article. | |
| Editor-in-chief provides for Article system article that want to approve. | Editor-in-chief requires Article system provide the ability to browse the article was sent from the lower level. | |
| Editor-in-chief provides for Article system article that need to return and name of person is returned. | Editor-in-chief requires Article system provide the ability to return article for person who sent this article or person who editor-in-chief is chosen. | |
| Editor-in-chief provides for Article system article that want to upload in internet or intranet. | Editor-in-chief requires Article system provide the ability upload article in internet or intranet. | |
| Editor-in-chief provides for Article system article that want to drop. | Editor-in-chief requires Article system provide the ability to drop article. | |
| Editor-in-chief provides for Article system article that want to comment and formulation | Editor-in-chief requires Article system provide interface to comment for article. | |
| Editor-in-chief provides for Article system person’s name who is authorized and time. | Editor-in-chief requires Article system provide the ability to authorize all author of editor-in-chief. | |
| Editor-in-chief provides for Article system name of person who is deleted the authorization | Editor-in-chief requires Article system provide the ability to delete the authorization for person who receive the authorization before. | |
| Editor-in-chief provides for Article system article that want to delete. | Editor-in-chief requires Article system provide the ability to delete article. | |
| Editor-in-chief provides for Article system news that want to deleted permanently. | Editor-in-chief requires Article system provide the ability to delete news permanently. | |
| Editor-in-chief provides for Article system the sort order of messages to be displayed on the internet or intranet. | Editor-in-chief requires Article system provide interface to sort article that display on the internet or intranet. | |
| Editor-in-chief provides for Article system index that want to create. | Editor-in-chief requires Article system provide interface to create index for news | |
| **Identified use cases:** | | |
| * Create article | UC01.01 | |
| * Edit article | UC01.02 | |
| * Search articles | UC01.03 | |
| * Search related articles | UC01.04 | |
| * View article | UC01.05 | |
| * Preview articles | UC01.06 | |
| * Approve articles | UC01.08 | |
| * Return articles | UC01.09 | |
| * Upload articles | UC01.10.01 | |
| * Drop articles | UC01.11.01 | |
| * Authorize | UC01.13.01 | |
| * Delete authorization | UC01.13.02 | |
| * Delete article | UC01.14 | |
| * Deleted article permanently | UC01.15 | |
| * Sort articles | UC01.16 | |
| * Create index | UC01.23 | |
| * Comments | UC01.17 | |

Table 5: Descrip entity Editor-in-chief

#### Editor

|  |  |  |
| --- | --- | --- |
| **Entity Name: Editor** | | **ID:E02** |
| **Description:**  Editor is a person who used Article system, may edit article, and is responsible for confirm the article that is sent by reporter and return article to reporter if it’s wrong, and send to higher level when the article is approved, beside they can upload the article on internet or intranet. | | |
| **Provides assumptions:** | **Requires assumptions:** | |
| Editor provides cho Article system content of article in text format and attachment in format of img, video, .doc, .xls, .pdf, .ppt and related article  *(\*Related article: is article uploaded and its content relate with content of article that is creating)* | Editor requires Article system provide interface to create the article in text format, attachments in format of img, video, .doc, xls, .pdf, .ppt and the other article that relate.. | |
| Editor provides cho Article system name of article that want to edit | Editor requires Article system provide interface to edit article | |
| Editor provides cho Article system information of article that need to search, include:   * Title in text format * Content summary in text format * Main content in text format * Create by * Create date * Approved by * Approved date * Delete by * Delete date * Upload by * Upload date * Drop by * Drop date. | Editor requires Article system provide interface to search, include:   * Title in text format * Content summary in text format * Main content in text format * Create by * Create date * Approved by * Approved date * Delete by * Delete date * Upload by * Upload date * Drop by * Drop date. | |
| Editor provides cho Article system system information of related article that need to search, include:   * Title in text format * Content summary in text format * Main content in text format * Create by * Create date * Approved by * Approved date * Upload by * Upload date | Editor requires Article system provide interface to search related article, include:   * Title in text format * Content summary in text format * Main content in text format * Create by * Create date * Approved by * Approved date * Upload by * Upload date | |
| Editor provides cho Article system article’s name that need to view detail, include:   * Article is created * Article waiting for approve * Article is approved * Article is deleted * Article is upload * Article is droped * Article is returned | Editor requires Article system provide interface to view detail of article in lists, include:   * Article is created * Article waiting for approve * Article is approved * Article is deleted * Article is upload * Article is droped * Article is returned | |
| Editor provides cho Article system article’s name that need to review. | Editor requires Article system provide interface to review article. | |
| Editor provides cho Article system articles that want to transfer to other. | Editor requires Article system provide the ability to tranfer article to the other | |
| Editor provides cho Article system article that want to approve. | Editor requires Article system provide the ability to approve articles from lower level. | |
| Editor provides cho Article system article that need to return and name of person is returned. | Editor requires Article system provide the ability to return article for person who sent this article or person who editor-in-chief is chosen | |
| Editor provides cho Article system article HTML that need to upload on internet or intranet. | Editor requires Article system provide the ability to upload article HTML on internet or intranet. | |
| Editor provides cho Article system article HTML that need to drop from internet or intranet. | Editor requires Article system provide the ability to drop article HTML from internet or intranet | |
| Editor provides cho Article system the article that want to get from list of article that waiting for approve | Editor requires Article system provide the ability to get article from list of article that waiting for approve to edit | |
| Editor provides cho Article system article that want to comment and formulation | Editor requires Article system provide interface to comment for article. | |
| Editor provides cho Article system article that want to delete. | Editor requires Article system provide the ability to delete article. | |
| Editor provides cho Article system news that want to deleted permanently. | Editor requires Article system provide the ability to delete news permanently. | |
| **Identified use cases:** | | |
| * Create article | UC01.01 | |
| * Edit article | UC01.02 | |
| * Search articles | UC01.03 | |
| * Search related articles | UC01.04 | |
| * View article | UC01.05 | |
| * Preview articles | UC01.06 | |
| * Transfer articles | UC01.07 | |
| * Approve articles | UC01.08 | |
| * Return article | UC01.09 | |
| * Upload article HTML | UC01.10.02 | |
| * Drop article HTML | UC01.11.02 | |
| * Get articles | UC01.12 | |
| * Delete articles | UC01.14 | |
| * Deleted article permanently | UC01.15 | |
| * Comment | UC01.17 | |

Table 6:Descrip entity Editor

#### Reporter

|  |  |  |
| --- | --- | --- |
| **Entity Name: Reporter** | | **ID:E03** |
| **Description:**  Reporter is person who used Article system may edit article, send article to higher level or the other to approve, beside they can upload the article on internet or intranet. | | |
| **Provides assumptions:** | **Requires assumptions:** | |
| Reporter provides cho Article system content of article in text format and attachment in format of img, video, .doc, .xls, .pdf, .ppt and related article.  *(\*Related article: is article uploaded and its content relate with content of article that is creating)* | Reporter requires Article system provide interface to create the article in text format, attachments in format of img, video, .doc, xls, .pdf, .ppt and the other article that relate.. | |
| Reporter provides cho Article system name of article that want to edit | Reporter requires Article system provide interface to edit article | |
| Reporter provides cho Article system information of article that need to search, include:   * Title in text format * Content summary in text format * Main content in text format * Create by * Create date * Approved by * Approved date * Delete by * Delete date * Upload by * Upload date * Drop by * Drop date. | Reporter requires Article system provide interface to search, include:   * Title in text format * Content summary in text format * Main content in text format * Create by * Create date * Approved by * Approved date * Delete by * Delete date * Upload by * Upload date * Drop by * Drop date. | |
| Reporter provides cho Article system system information of related article that need to search, include:   * Title in text format * Content summary in text format * Main content in text format * Create by * Create date * Approved by * Approved date * Upload by * Upload date | Reporter requires Article system provide giao diện để Search related articles với các thông tin có liên quan đến bản tin bao gồm:   * Title in text format * Content summary in text format * Main content in text format * Create by * Create date * Approved by * Approved date * Upload by * Upload date | |
| Reporter provides cho Article system article’s name that need to view detail, include:   * Article is created * Article waiting for approve * Article is approved * Article is deleted * Article is upload * Article is droped * Article is returned | Reporter requires Article system provide interface to view detail of article in lists, include:   * Article is created * Article waiting for approve * Article is approved * Article is deleted * Article is upload * Article is droped * Article is returned | |
| Reporter provides cho Article system article’s name that need to review. | Reporter requires Article system provide interface to review article. | |
| Reporter provides cho Article system articles that want to transfer to other. | Reporter requires Article system provide the ability to transfer article to other. | |
| Reporter provides cho Article system article HTML that need to upload on internet or intranet. | Reporter requires Article system provide the ability to upload article HTML on internet or intranet. | |
| Reporter provides cho Article system the article that want to get from list of article that waiting for approve | Reporter requires Article system provide the ability to get article from list of article that waiting for approve to edit | |
| Reporter provides cho Article system article HTML that need to drop from internet or intranet. | Reporter requires Article system provide the ability to drop article HTML from internet or intranet | |
| Reporter provides cho Article system article that want to comment and formulation | Reporter requires Article system provide interface to comment for article. | |
| Reporter provides cho Article system article that want to delete. | Reporter requires Article system provide the ability to delete article. | |
| Reporter provides cho Article system news that want to deleted permanently. | Reporter requires Article system provide the ability to delete news permanently. | |
| **Identified use cases:** | | |
| * Create article | UC01.01 | |
| * Edit article | UC01.02 | |
| * Search articles | UC01.03 | |
| * Search related articles | UC01.04 | |
| * View article | UC01.05 | |
| * Preview articles | UC01.06 | |
| * Transfer articles | UC01.07 | |
| * Upload article HTML | UC01.10.02 | |
| * Drop article HTML | UC01.11.02 | |
| * Get articles | UC01.12 | |
| * Delete articles | UC01.14 | |
| * Deleted article permanently | UC01.15 | |
| * Comment | UC01.17 | |

Table 7:Descrip entity Reporter

#### Catalog manager

|  |  |  |
| --- | --- | --- |
| **Entity Name:** Catalog manager | | **ID:E04** |
| **Description:**  Catalog manager is person who used Article system is responsible for create catalog and sort them when displey on internet or intranet. | | |
| **Provides assumptions:** | **Requires assumptions:** | |
|  | Catalog manager requires Article system provide interface to view list of catalog. | |
| Catalog manager provides cho Article system name of catalog and link of them. | Catalog manager requires Article system provide interface to create new catalog through catalog’s information such as: catalog’s name, catalog’s link. | |
| Catalog manager provides cho Article system catalog’s information include catalog’s name, catalog’s link that need to edit | Catalog manager requires Article system provide the ability to edit catalog’s information include catalog’s name, catalog’s link. | |
| Catalog manager provides cho Article system catalog’s name that want to delete. | Catalog manager requires Article system provides the ability to delete catalog. | |
| Catalog manager provides cho Article system the order of the list displayed on the internet or intranet. | Catalog manager requires Article system provide the ability to sort list catalog that displayed on the internet or intranet. | |
| **Identified use cases:** | | |
| * View catalog | UC01.18 | |
| * Create catalog | UC01.19 | |
| * Edit catalog | UC01.20 | |
| * Delete catalog | UC01.21 | |
| * Sort catalog | UC01.22 | |

Table 8:Descrip entity Catalog manager

#### Answer Department

|  |  |  |
| --- | --- | --- |
| **Entity Name: Answer Department** | | **ID: E05** |
| **Description:**  Answer Department is person who used Dictionary management system and Dictionary management system (andrioid app), Answer Department has the ability to answer the questions of users through Dictionary and Dictionary Management System Management System (andrioid app). | | |
| **Provides assumptions:** | **Requires assumptions:** | |
| Answer Department provides cho Dictionary management system information to search question include question’s content or answer’s content | Answer Department requires Dictionary management system provide interface to display list of question and answer in dictionary and the ability to search question or answer.. | |
| Answer Department provides cho Dictionary management system question’s content that want to view detail | Answer Department requires Dictionary management system provide interface to view detail of question and answer. | |
| Answer Department provides cho Dictionary management system answer’s content that want to sent for user. | Answer Department requires Dictionary management system provide interface to create answer to sent to users. | |
| Answer Department provides cho Dictionary management system content of question and answer that want to delete | Answer Department requires Dictionary management system provide the ability to delete question’s content and answer’s content that Answer Department wants. | |
| Answer Department provides cho Dictionary management system question’s content and answer’s content that need to remove to dictionary. | Answer Department requires Dictionary management system provide the ability to remove question’s content and answer’s content to dictionary. | |
| Answer Department provides cho Dictionary management system question’s content and answer’s content that want to upload on the internet. | Answer Department requires Dictionary management system provide the ability to upload question’s content and answer’s content on the internet. | |
| Answer Department provides cho Dictionary management system question’s content and answer’s content that want to drop from the internet. | Answer Department requires Dictionary management system provide the ability to drop question and answer from the internet. | |
| Answer Department provides cho Dictionary management system question’s content and answer’s content that want to restore after delete. | Answer Department requires Dictionary management system provide the ability to restore question’s content and answer’s content after delete. | |
| Answer Department provides cho Dictionary management system question’s content and answer’s content that want to edit. | Answer Department requires Dictionary management system provide the ability to edit question’s content and answer’s content. | |
| Answer Department provides cho Dictionary management system questions’s content and answer content that Answer Department want to create. | Answer department requires Dictionary management system provides the ability to create question. | |
| Answer Department provides cho Dictionary management system trên android app information to search question include question’s content or answer’s content | Answer Department requires Dictionary management system (android app) provide interface to display list of question in dictionary and the ability to search question. | |
| Answer Department provides cho Dictionary management system (andrioid app) question that want to view detail. | Answer Department requires Dictionary management system (andrioid app) provide interface to view detail of question. | |
| Answer Department provides cho Dictionary management system (andrioid app) answer’s content that want to sent for user.. | Answer Department requires Dictionary management system (andrioid app) provide interface to create answer to send to users. | |
| Answer Department provides cho Dictionary management system (andrioid app) question’s content and answer’s content that want to insert to dictionary. | Answer Department requires Dictionary management system (andrioid app) provide the ability to insert question’s content into dictionary | |
| Bộ phần trả lời provides cho Dictionary management system (andrioid app) question’s content that want to delete. | Answer Department requires Dictionary management system (andrioid app) provide the ability to delete question. | |
| Answer Department provides cho Dictionary management system (andrioid app) question’s content and answer’s content that want to restore. | Answer Department requires Dictionary management system (andrioid app) provide the ability to restore question and answer. | |
| Answer Department provides cho Dictionary management system (andrioid app) question’s content and answer’s content that want to upload on the internet. | Answer Department requires Dictionary management system (andrioid app) provide the ability to upload question’s content and answer’s content on the internet. | |
| Answer Department provides cho Dictionary management system (andrioid app) question’s content and answer’s content that want to drop from the internet. | Answer Department requires Dictionary management system (andrioid app) provide the abiliti to drop question from the internet. | |
| Answer Department provides cho Dictionary management system (andrioid app) question’s content and answer’s content that want to create. | Answer Department requires Dictionary management system (andrioid app) provide the ability to create question that Answer Department provides. | |
| **Identified use cases:** | | |
| * Search | UC02.01 | |
| * View question detail | UC02.02 | |
| * Send Mail | UC02.03 | |
| * Delete question | UC02.04.01 | |
| * Delete more question | UC02.04.02 | |
| * Restore question | UC02.05.01 | |
| * Restore more question | UC02.05.02 | |
| * Insert question into dict | UC.02.06 | |
| * Update question | UC02.07 | |
| * Upload-dict | UC02.08.01 | |
| * Upload-dict more | UC02.08.02 | |
| * Drop-dict | UC02.09.01 | |
| * Drop-dict more | UC02.09.02 | |
| * Create index | UC02.10 | |
| * Create question | UC02.12 | |
| * User config | UC02.13 | |
| * Mail config | UC02.14 | |
| * System config | UC02.15 | |
| * Help | UC02.16 | |
| * Thay đổi phân trang | UC02.17 | |
| * Search trên android app | UC04.01 | |
| * View question detail trên android app | UC04.02 | |
| * Send Mail trên android app | UC04.03 | |
| * Delete question trên android app | UC04.04 | |
| * Restore question trên android app | UC04.05 | |
| * Insert question into dict trên android app | UC04.06 | |
| * Update question trên android app | UC04.07 | |
| * Đăng câu hỏi trên internet trên android app | UC04.08 | |
| * Drop-dict trên android app | UC04.09 | |

Table 9:Descrip entity Answer Department

#### User

|  |  |  |
| --- | --- | --- |
| **Entity Name: User** | | **ID: E06** |
| **Description:**  User là người quan tâm đến thông tin tuyển sinh, họ có quyền đặt câu hỏi thông qua Dictionary display system and Dictionary display system (andrioid app).  Users is a p erson who will interested adninsion information, they can send questions by Dictionary d isplay ssystem and Dictionary s ysetm (android) | | |
| **Provides assumptions:** | **Requires assumptions:** | |
| Users provides keyword for Dictionary display system | User requires Dictionary display system provide question list interface and the ability to search data | |
| Users provides detail question for Dictionary display system | User requires Dictionary display system provide question detail interface | |
| User provides content that will send to answer department, content is sent by text format, include: user name, user email, content for Dictionary display system | User requires Dictionary display system provide create question interface | |
| User provides keyword for Dictionary display system (android app) | User requires Dictionary display system (android app) provide question list interface and the ability to search data. | |
| User provides detail question for Dictionary display system (andrioid app) | User requires Dictionary display system (andrioid app) provide question detail interface | |
| User provides content that will send to answer department, content is sent by text format, include: user name, user email, content for Dictionary display system (andrioid app) | User requires Dictionary display system (andrioid app) provide create question interface | |
|  | User requires Display article-inter provide article list that is upload on the internet | |
| User provides detail article for Display article-inter | User requires Display article-inter provide related article detail interface | |
| User provides name of related article Display article-inter | User requires Display article-inter provide article detail interface | |
|  | User requires Display article-intra provide article list that is upload on the intranet | |
| User provides name of article that user know detail information for Display article-intra | User requires Display article-intra provide article detail interface | |
| User provides name of related article Display article-intra | User requires Display article-intra provide article list that is upload on the intranet | |
| **identified use cases:** | | |
| * Search câu hỏi | UC03.01 | |
| * Xem chi tiết câu hỏi | UC03.02 | |
| * Create question | UC03.03 | |
| * Thay đổi phân trang | UC03.04 | |
| * Search câu hỏi trên android app | UC05.01 | |
| * Xem chi tiết câu hỏi trên android app | UC05.02 | |
| * Create question trên android app | UC05.03 | |

Table 10:Descrip entity User

#### Article system

|  |  |  |
| --- | --- | --- |
| **Entity Name:** Article system | | **ID: E07** |
| **Description:**  Article system supports interface that will help user create article, catalog and upload article on the internet/intranet or drop article from internet/intranet | | |
| **Provides assumptions:** | **Requires assumptions:** | |
| Article system provides for editor-in-chief, editor, reporter interface to create the article in text format, attachments in format of img, video, .doc, xls, .pdf, .ppt and the other article that relate. | Article system requires editor-in-chief, editor and reporter provide content of article in text format and attachment in format of img, video, .doc, .xls, .pdf, .ppt and related article.  *(\*Related article: is article uploaded and its content relate with content of article that is creating)* | |
| Article system provides Edit interface of article for editor-in-chief, editor and reporter | Article system requires editor-in-chief, editor and reporter provide name of article that want to edit. | |
| Article system provides interface which user can search data for editor-in-chief, editor and reporter   * Title in text format * Content summary in text format * Main content in text format * Create by * Create date * Approved by * Approved date * Delete by * Delete date * Upload by * Upload date * Drop by * Drop date. | Article system requires editor-in-chief, editor and reporter provide article information include:   * Title in text format * Content summary in text format * Main content in text format * Create by * Create date * Approved by * Approved date * Delete by * Delete date * Upload by * Upload date * Drop by * Drop date. | |
| Article system provides cho editor-in-chief, editor and reporter interface which user can search content of related article   * Title in text format * Content summary in text format * Main content in text format * Create by * Create date * Approved by * Approved date * Delete by * Delete date * Upload by * Upload date | Article system requires editor-in-chief, editor and reporter provide related article information include   * Title in text format * Content summary in text format * Main content in text format * Create by * Create date * Approved by * Approved date * Delete by * Delete date * Upload by * Upload date | |
| Article system provides for editor-in-chief, editor, reporter interface to view detail of article in lists, include:   * Article is created * Article waiting for approve * Article is approved * Article is deleted * Article is upload * Article is droped * Article is returned | Article system requires editor-in-chief, editor and reporter provide article’s name that need to view detail, include:   * Article is created * Article waiting for approve * Article is approved * Article is deleted * Article is upload * Article is droped * Article is returned | |
| Article system provides for editor-in-chief, editor and reporter interface to review article. | Article system requires editor-in-chief, editor and reporter provide article’s name that need to review. | |
| Article system provides for editor and reporter the ability to transfer articles for other people | Article system requires editor and reporter provide article content that will transfer to other | |
| Article system provides for editor-in-chief and editor the ability to approve articles from lower level. | Article system requires editor-in-chief and editor provide article that want to approve. | |
| Article system provides for editor-in-chief and editor the ability to return article | Article system requires editor-in-chief and editor provide article content that will return to lower level | |
| Article system provides cho editor-in-chief the ability to upload article on the internet/intranet | Article system requires editor-in-chief provide article that user want to upload to internet/intranet | |
| Article system provides for editor and reporter the ability to upload article HTML on the internet/intranet | Article system requires editor and reporter provide article HTML that need to upload on internet or intranet. | |
| Article system provides for editor-in-chief the ability to drop article | Article system requires editor-in-chief provide article that user want to drop from internet/intranet | |
| Article system provides cho editor and reporter the ability to drop article HTML | Article system requires editor and reporter provide article HTML that user want to drop from internet/intranet | |
| Article system provides cho editor and reporter the ability to get article from artile wait to approve list | Article system requires editor and reporter provide name of article that user want get it in article wait to approve list | |
| Article system provides for editor-in-chief, editor and reporter interface to comment for article.. | Article system requires editor-in-chief, editor and reporter provide article that want to comment and formulation | |
| Article system provides cho editor-in-chief the ability to authorize in period of time | Article system requires editor-in-chief provide name of person who is authorized in period of time | |
| Article system provides cho editor-in-chief the ability to delete authorization | Article system requires editor-in-chief provide name of person who is deleted authorization | |
| Article system provides for editor-in-chief, editor and reporter the ability to delete article. | Article system requires editor-in-chief, editor and reporter provide article that want to delete. | |
| Article system provides for editor-in-chief, editor and reporter the ability to delete news permanently. | Article system requires editor-in-chief, editor and reporter provide news that want to deleted permanently. | |
| Article system provides for editor-in-chief  sort article list interface on the internet/intranet | Article system requires editor-in-chief provide position of article that displayed on the internet/intranet | |
| Article system provides for Catalog manager catalog list interface |  | |
| Article system provides create catalog interface for Catalog manager | Article system requires Catalog manager provide new name and link of catalog | |
| Article system provides edit catalog interface include name and link of catalog for Catalog manager | Article system requires Catalog manager provide name and link of catalog that user want to edit | |
| Article system provides for Catalog manager the ability to detele catalog | Article system requires Catalog manager provide name and link of catalog that user want to delete | |
| Article system provides for Catalog manager internet hoặc intranet the ability to sort catalog on internet/intranet | Article system requires Catalog manager provide position of article that displayed on the internet/intranet | |
| Article system provides for database intranet article content, catalog content and position of catalog on intranet | Article system requires database intranet provide repository that contrain article content and position content on intranet | |
| Article system provides cho Display article-inter article content, catalog content and position of catalog on internet | Article system requires Display article-inter provide web service repository that contrain article content and position content on internet | |
| **identified use cases:** | | |
|  |  | |

Table 11: Descrip entity Article system

#### Display article-inter

|  |  |  |
| --- | --- | --- |
| **Entity Name: Display article-inter** | | **ID: E08** |
| **Description:**  Display article-inter supports to display article and catalog on the internet base on require and position of editor editor-in-chief, editor, reporter and Catalog manager | | |
| **Provides assumptions:** | **Requires assumptions:** | |
| Display article-inter provides for Article system web service receive article content and catalog that is upload on the internet | Display article-inter requires Article system provide articles, catalogs and position of them on the internet | |
| Display article-inter provides for database internet article content, catalog content and position of them on the internet | Display article-inter requires database internet provide repository articles, catalogs and position of them on the internet | |
| Display article-inter provides for user internet interface of article list that is upload on the internet |  | |
| Display article-inter provides for user interface of article detail that is upload on the internet | Display article-inter requires user provide name of article on the internet | |
| Display article-inter provides cho user interface of related article detail | Display article-inter requires user provide name of related article on the internet | |
| **identified use cases:** | | |
|  |  | |

Table 12: Descrip entity Display article-inter

#### Display article-intra

|  |  |  |
| --- | --- | --- |
| **Entity Name:** Display article-intra | | **ID: E09** |
| **Description:**  Display article-intra supports for displaying articles and catalog on the intranet base on requires of the editor-in-chief, editor, reporter and Catalog Manager | | |
| **Provides assumptions:** | **Requires assumptions:** | |
| Display article-intra provides for database intranet interface to receive article content and catalog that is upload on the intranet | Display article-intra requires database intranet provide content of articles, catalogs and position of them on the intranet | |
| Display article-intra provides for user intranet article list interface on intranet |  | |
| Display article-intra provides for user detail article interface that is upload on the internet | Display article-intra requires of user provide name of article on the intranet | |
| Display article-intra provides for user detail related article interface | Display article-intra requires user provide name of related article on the intranet | |
| **identified use cases:** | | |
|  |  | |

Table 13: Descrip entity Display article-intra

#### Dictionary management system

|  |  |  |
| --- | --- | --- |
| **Entity Name:** Dictionary management system | | **ID: E10** |
| **Description:**  Dictionary management system supports functions that allow answer department to manage questions, answer and allow answer department can insert question to dictionary and delete question to dictionary | | |
| **Provides assumptions:** | **Requires assumptions:** | |
| Dictionary management system provides for answer department interface that show question list in dictionary and the ability to search question | Dictionary management system requires answer department provide question’s information that need to search in text format. | |
| Dictionary management system provides for answer department the ability to view detail question and detail answer in dictionary | Dictionary management system requires answer department provide question or answer in dictionary. | |
| Dictionary management system provides for answer department interface that user use to answer the question by text format | Dictionary management system requires answer department provide answers content in text format | |
| Dictionary management system provides for answer department the ability to insert question to dictionary | Dictionary management system requires answer department provide question’s content and answer’s content that want to insert int dictionary. | |
| Dictionary management system provides for answer department the ability to upload question on the internet | Dictionary management system requires answer department provide question’s content and answer’s content in dictionary that want to upload on the internet. | |
| Dictionary management system provides for answer department the ability to drop question from internet | Dictionary management system requires answer department provide question’s content and answer’s content in dictionary that want to drop from internet. | |
| Dictionary management system provides for answer department the ability to edit question content and answer content | Dictionary management system requires answer department provide question’s content and answer’s content that want to edit | |
| Dictionary management system provides for answer department the ability to delete question | Dictionary management system requires answer department provide question’s content and answer’s content that want to delete | |
| Dictionary management system provides for answer department the ability to restore question. | Dictionary management system requires answer department provide question’s content and answer’s content that want to restore. | |
| Dictionary management system provides for answer department the ability create question to insert to dictionary | Dictionary management system requires answer department provide new question’s content and answer’s content | |
| Dictionary management system provides for answer department the ability to config, mail configurate system and setting users | Dictionary management system requires answer department provide config’s information | |
| Dictionary management system provides for mail server mail of user, mail of answer department and question content | Dictionary management system requires mail server provide email’s status | |
| Dictionary management system provides for Dictionary management system (andrioid app) web service to support get question list from dictionary | Dictionary management system requires Dictionary management system (andrioid app) provide question list in dictionary interface | |
| Dictionary management system provides for Dictionary management system (andrioid app) web service to support get question that user want search in dictionary | Dictionary management system requires Dictionary management system (andrioid app) provide question’s content that want to search | |
| Dictionary management system provides for Dictionary management system (andrioid app) web service to receive question content and answer content that will insert to dictionary | Dictionary management system requires Dictionary management system (andrioid app) provide question’s content and answer’s content that want to insert into dictionary. | |
| Dictionary management system provides for Dictionary management system (andrioid app) web service to receive question content and answer content that need to upload to internet | Dictionary management system requires Dictionary management system (andrioid app) provide question’s content and answer’s content that want to upload on the internet | |
| Dictionary management system provides for Dictionary management system (andrioid app) web service to receive question content and answer content that need to edit | Dictionary management system requires Dictionary management system (andrioid app) provide question content and answer content that need edit | |
| Dictionary management system provides for Dictionary management system (andrioid app) web service to receive answer content that will send to user | Dictionary management system requires Dictionary management system (andrioid app) provide answer content that will send to user | |
| Dictionary management system provides cho Dictionary management system (andrioid app) web service to receive question that need to delete | Dictionary management system requires Dictionary management system (andrioid app) provide question that need to delete | |
| Dictionary management system provides cho Dictionary management system (andrioid app) web service to receive question content that need to restore | Dictionary management system requires Dictionary management system (andrioid app) provide question content that need to restore. | |
| Dictionary management system provides cho Dictionary management system (andrioid app) web service to receive question content that need to create | Dictionary management system requires Dictionary management system (andrioid app) provide question content that need to create | |
| Dictionary management system provides cho Dictionary management system (andrioid app) web service to receive question content and answer content that will drop from internet | Dictionary management system requires Dictionary management system (andrioid app) provide question content and answer content that will drop from internet | |
| Dictionary management system provides cho database internet to receive question and answer content in dictionary | Dictionary management system requires database internet provide repository question and answer content in dictionary | |
| Dictionary management system provides cho Dictionary management system (andrioid app) web service to receive question and answer content that need to delete | Dictionary management system requires Dictionary management system (andrioid app) provide question and answer content that need to delete | |
| Dictionary management system provides cho Dictionary management system (andrioid app) web service to receive question and answer content that need to restore | Dictionary management system requires Dictionary management system (andrioid app) provide question and answer content that need to restore | |
| **identified use cases:** | | |
|  |  | |

Table 14:Descrip entity Dictionary management system

#### Dictionary display system

|  |  |  |
| --- | --- | --- |
| **Entity Name:** Dictionary display system | | **ID: E11** |
| **Description:**  Dictionary display system support for user to view the content of questions and answers already stored in the dictionary. Besides support for the user to search for pre-existing questions in the dictionary and send the question to answer department if the did not find an questions similar questions seeking. | | |
| **Provides assumptions:** | **Requires assumptions:** | |
| Dictionary display system provides cho user question list interface and the ability to search question similar to question that user want to create | Dictionary display system requires user provide question that user want to search  *(\*Question that user want to search have content similar to content of question that user want to create)* | |
| Dictionary display system provides cho user question detail interface | Dictionary display system requires Dictionary management system provide questions that user want to view detail | |
| Dictionary display system provides cho user create answer interface | Dictionary display system requires user provide answer’s content in text format | |
| Dictionary display system provides cho Dictionary display system (andrioid app) web service to support to get list question that user want to search | Dictionary display system requires Dictionary display system (andrioid app) provide question list interface that user want to search is supported by web service of Dictionary display system | |
| Dictionary display system provides cho Dictionary display system (andrioid app) web service to support to view list question that user want | Dictionary display system requires Dictionary display system (andrioid app) provide list question that user want to view | |
| Dictionary display system provides cho Dictionary display system (andrioid app) web service to support to support show detail content of question and answer | Dictionary display system requires Dictionary display system (andrioid app) provide question that want to view detail | |
| Dictionary display system provides for database internet question and answer content | Dictionary display system requires database internet provide repository that save question and answer content | |
| Dictionary display system provides for Dictionary management system question and answer interface that is uploaded on internet | Dictionary display system requires Dictionary management system provide question and answer list that is upload/drop on internet | |
| **identified use cases:** | | |
|  |  | |

Table 15: Descrip entity Dictionary display system

#### Dictionary management system (andrioid app)

|  |  |  |
| --- | --- | --- |
| **Entity Name: Dictionary management system (andrioid app)** | | **ID: E12** |
| **Description:**  Dictionary management system (andrioid app) allow answer department to manage questions and answers. It allow answer department insert question to dictionary or drop question in dictionary | | |
| **Provides assumptions:** | **Requires assumptions:** | |
| Dictionary management system (andrioid app) provides for answer department user the ability to search data | Dictionary management system (andrioid app) requires answer department provides  information of question that users want search by text format | |
| Dictionary management system (andrioid app) provides for answer department detail answer interface | Dictionary management system (andrioid app) requires answer department provides information of question that user nesed show detail | |
| Dictionary management system (andrioid app) provides cho answer department answer interface by text format | Dictionary management system (andrioid app) requires answer department provides answer content by text format | |
| Dictionary management system (andrioid app) provides for answer department delete answer interface | Dictionary management system (andrioid app) requires answer department provides question content that user need delete | |
| Dictionary management system (andrioid app) provides cho answer department question restore interface | Dictionary management system (andrioid app) requires answer department provides question content that user need restore | |
| Dictionary management system (andrioid app) provides for answer department create question and answer interface | Dictionary management system (andrioid app) requires answer department provides question content that user need new creation | |
| Dictionary management system (andrioid app) provides for answer department insert and drop question interface | Dictionary management system (andrioid app) requires answer department provides question content that user need insert to dictionary | |
| Dictionary management system (andrioid app) provides for answer department upload question interface | Dictionary management system (andrioid app) requires answer department provides question content that user need upload to internet | |
| Dictionary management system (andrioid app) provides for answer department edit question interface | Dictionary management system (andrioid app) requires answer department provides nội dung câu hỏi and câu trả lời cần chỉnh sửa. | |
| Dictionary management system (andrioid app) provides for web service thuộc Dictionary management system interface where show detail question and answer | Dictionary management system (andrioid app) requires Dictionary management system provides web servoce to get question list | |
| Dictionary management system (andrioid app) provides for Dictionary management system question and answer content by web service of Dictionary management system | Dictionary management system (andrioid app) requires web service of Dictionary management system provides the ability to search question by text format | |
| Dictionary management system (andrioid app) provides for Dictionary management system question and anser content that is inserted to dictionary by web service of dictionary management system | Dictionary management system (andrioid app) requires web service of Dictionary management system provides the ability insert question to dictionary | |
| Dictionary management system (andrioid app) provides for Dictionary management system question and anser content that is upload to internet by web service of dictionary management system | Dictionary management system (andrioid app) requires web service of Dictionary management system the ability to upload question and answer content on internet | |
| Dictionary management system (andrioid app) provides for Dictionary management system nội dung câu hỏi and question and anser content that is drop on internet by web service of dictionary management system | Dictionary management system (andrioid app) requires web service thuộc Dictionary management system the ability drop question content and answer content on internet | |
| Dictionary management system (andrioid app) provides for Dictionary management system question nad answer content that need edit by web service | Dictionary management system (andrioid app) requires web service of Dictionary management system the aibility to edit question content and answer content | |
| Dictionary management system (andrioid app) provides for Dictionary management system question content that need delete by web service | Dictionary management system (andrioid app) requires web service of Dictionary management system the ability to delete question | |
| Dictionary management system (andrioid app) provides cho Dictionary management system question content that restore delete by web service | Dictionary management system (andrioid app) requires web service of Dictionary management system the ability to restore question that is deleted | |
| **identified use cases:** | | |
|  |  | |

Table 16: Descrip entity Dictionary management system (andrioid app)

#### Dictionary display system (andrioid app)

|  |  |  |
| --- | --- | --- |
| **Entity Name: Dictionary display system (andrioid app)** | | **ID: E13** |
| **Description:**  Display dictionary system(android) get information of question from Dictionary dictionary system to show and manage question by devices android | | |
| **Provides assumptions:** | **Requires assumptions:** | |
| Dictionary display system (andrioid app) provides for user list interface that is inseart on dictionary and the ability to search question | Dictionary display system (andrioid app) requires user provides keyword | |
| Dictionary display system (andrioid app) provides for user interface to view detail of question and answer that is inserted to dictionary | Dictionary display system (andrioid app) need user provides content of question that user want show detail question | |
| Dictionary display system (andrioid app) provides create question interface for user | Dictionary display system (andrioid app) requires user provides content of question by text format and information of user, include: user name, user email and content of question | |
| Dictionary display system (andrioid app) provides for web service of Dictionary display system provides question list interface that is inserted to dictionary by webservice | Dictionary display system (andrioid app) requires web service thuộc Dictionary display system provides question list that is inserted to dictionary | |
| Dictionary display system (andrioid app) provides cho web service of Dictionary display system question that need insert to dictionary | Công cụ hiển bộ từ điển trên android app requires web service of Dictionary display system provides the ability insert question to dictionary | |
| Dictionary display system (andrioid app) provides for web service of Dictionary display system question that need drop on dictionary | Dictionary display system (andrioid app) requires web service thuộc Dictionary display system provides the ability to drop question on dictionary | |
| **identified use cases:** | | |
|  |  | |

Table 17: Descrip entity Dictionary display system (andrioid app)

#### Mail server

|  |  |  |
| --- | --- | --- |
| **Entity Name: Mail Server** | | **ID: E14** |
| **Description:**  Mail server support answer department to send mail to users | | |
| **Provides assumptions:** | **Requires assumptions:** | |
| Mail server provides for Dictionary management system the ability to send mail to users | Mail server requires Dictionary management system provides address of user, email address of answer department and answer content by text format | |
| **identified use cases:** | | |
|  |  | |

Table 18: Descrip entity Mail server

#### Database intranet

|  |  |  |
| --- | --- | --- |
| **Entity Name: Database intranet** | | **ID:E15** |
| **Description:**  Database intranet contain data that is provided from Article system and support data of article and catalog | | |
| **Provides assumptions:** | **Requires assumptions:** | |
| Database intranet provides for Article system nơi lưu trữ dữ liệu | Database intranet requires Article system provides data of article and catalog that need save to database | |
| Database intranet provides for Display article-intra article content and catalog content and position of them on internet | Database intranet requires dictionary display system provices article list and catalog list interface and position of them on internet | |
| **identified use cases:** | | |
|  |  | |

Table 19: Descrip entity Database intranet

#### Database internet

|  |  |  |
| --- | --- | --- |
| **Entity Name: Database internet** | | **ID:E16** |
| **Description:**  Database internet contain data that is provided from Display article-inter and Dictionary management system, And support save data which relate to content of question and answer of dictionary | | |
| **Provides assumptions:** | **Requires assumptions:** | |
| Database internet provides for Display article-inter repository of article that is uploaded to internet | Database internet requires Display article-inter provides content of article and catalog that need show on internet | |
| Database internet provides for Dictionary management system user repository of answer that need send to users | Database internet requires Dictionary management system provides content of answer that need send to user | |
| Database internet provides for Dictionary display system content of question and answer on dictionary | Database internet requires Dictionary display system provides interface that can show content of question and answer on dictionary | |
| **identified use cases:** | | |
|  |  | |

Table 20: Descrip entity Database internet

#### User management

|  |  |  |
| --- | --- | --- |
| **Entity Name: User management** | | **ID:E17** |
| **Description:**  User management is person who used User management module support to Article system and Dictionary management system in manage information of users | | |
| **Provides assumptions:** | **Requires assumptions:** | |
| User management provides for module User management name of user who need authorize | User management requires User management module provides the ability to edit authorization of users | |
| User management provides for module User management name of user who need hide on system | User management requires User management module provides the ability to hide user | |
| **identified use cases:** | | |
| * Create Account | UC06.01 | |
| * Show detail information | UC06.02 | |
| * Change Password | UC06.03 | |

Table 21: Descrip entity User management

#### User management module

|  |  |  |
| --- | --- | --- |
| **Entity Name: User management module** | | **ID:E14** |
| **Description:**  User management module support users manager to manage information of user and it is intergrate to Article system or Dictionary management system to support authorize | | |
| **Provides assumptions:** | **Requires assumptions:** | |
| User management module provides for user management the ability to edit authorization of user | User management module requires user management provides information of user that user manager need edit authorization | |
| User management module provides cho user management the ability to hide user | User management module requires user management provides name of user who need hide | |
| **identified use cases:** | | |
|  |  | |

Table 22: Descrip entity User management module

## Use Case List

|  |  |  |  |
| --- | --- | --- | --- |
| **ID** | **Use Case** | **Entities liên quan** | **Môi trường** |
| Article system | | | |
| [UC01.01](#_Tạo_bản_tin) | Create article | E01  E02  E03  E07  E15 | - Web application |
| [UC01.02](#_Chỉnh_sửa_bản) | Edit article | E01  E02  E03  E07  E15 | - Web application |
| [UC01.03](#_Tìm_kiếm_bản) | Search articles | E01  E02  E03  E07  E15 | - Web application |
| [UC01.04](#_Tìm_kiếm_bản_1) | Search related articles | E01  E02  E03  E07  E15 | - Web application |
| [UC01.05](#_Xem_nội_dung) | View article | E01  E02  E03  E07  E15  E16 | - Web application |
| [UC01.06](#_Xem_trước_bản) | Preview articles | E01  E02  E03  E07 | - Web application |
| [UC01.07](#_Chuyển_tin) | Transfer articles | E02  E03  E07  E15 | * Web application |
| [UC01.08](#_Duyệt_tin) | Approve articles | E01  E02  E07  E15 | - Web application |
| [UC01.09](#_Trả_tin) | Return article | E01  E02  E07  E15 | - Web application |
| [UC01.10.01](#_Đăng_tin) | Đăng tin | E01  E07  E15  E16 | - Web application |
| [UC01.10.02](#_Đăng_tin_HTML) | Upload article HTML | E02  E03  E07  E15  E16 | - Web application |
| [UC01.11.01](#_Hạ_tin) | Hạ tin | E01  E07  E15  E16 | - Web application |
| [UC01.11.02](#_Hạ_tin_HTML) | Drop article HTML | E02  E03  E07  E16  E15 | - Web application |
| [UC01.12](#_Lấy_về) | Get articles | E02  E03  E07  E15 | - Web application |
| [UC01.13.01](#_Ủy_quyền) | Ủy quyền | E01  E07  E15 | - Web application |
| [UC01.13.02](#_Hủy_ủy_quyền) | Hủy ủy quyền | E01  E07  E15 | - Web application |
| [UC01.14](#_Xóa_tin) | Delete articles | E01  E02  E03  E07  E15 | - Web application |
| [UC01.15](#_Xóa_vĩnh_viễn) | Deleted article permanently | E01  E02  E03  E07  E15 | - Web application |
| [UC01.16](#_Sắp_xếp_tin) | Sort articles | E01  E07  E15  E16 | - Web application |
| [UC01.17](#_Ý_kiến) | Comment | E01  E02  E03  E07  E15 | - Web application |
| [UC01.18](#_Xem_danh_sách) | View catalog | E05  E07  E15 | - Web application |
| [UC01.19](#_Tạo_danh_mục) | Create catalog | E05  E07  E15  E16 | - Web application |
| [UC01.20](#_Chỉnh_sửa_danh) | Edit catalog | E05  E07  E15  E16 | - Web application |
| [UC01.21](#_Xóa_danh_mục) | Delete catalog | E05  E07  E15  E16 | - Web application |
| [UC01.22](#_Sắp_xếp_danh) | Sort catalog | E05  E07  E15  E16 | - Web application |
| Dictionary management system | | | |
| [UC02.01](#_Tìm_kiếm) | Search | E05  E10  E15 | - Web application |
| [UC02.02](#_Xem_nội_dung_1) | View question detail | E05  E10  E15 | - Web application |
| [UC02.03](#_Tạo_câu_hỏi) | Send Mail | E05  E10  E14  E15 | - Web application |
| [UC02.04.01](#_Xóa_câu_hỏi) | Delete question | E05  E10  E15 | - Web application |
| [UC02.04.02](#_Xóa_nhiều_câu) | Delete more question | E05  E10  E15 | - Web application |
| [UC03.05.01](#_Khôi_phục_câu) | Restore question | E05  E10  E15 | - Web application |
| [UC03.05.02](#_Khôi_phục_nhiều) | Restore more question | E05  E10  E15 | - Web application |
| [UC02.06](#_Đưa_vào_từ) | Insert question into dict | E05  E10  E15 | - Web application |
| [UC02.07](#_Chỉnh_sửa_câu) | Update question | E05  E10  E15 | - Web application |
| [UC02.08.01](#_Đăng_câu_hỏi) | Upload-dict | E05  E10  E15  E16 | - Web application |
| [UC02.08.02](#_Đăng_nhiều_câu) | Upload-dict more | E05  E10  E15  E16 | - Web application |
| [UC02.09.01](#_Hạ_câu_hỏi) | Drop-dict | E05  E10  E15  E16 | - Web application |
| [UC02.09.02](#_Hạ_nhiều_câu) | Drop-dict more | E05  E10  E15  E16 | - Web application |
| [UC02.10](#_Tạo_index) | Create index | E05  E10  E15 | - Web application |
| [UC02.11](#_Tạo_câu_hỏi_1) | Create question | E05  E10  E15 | - Web application |
| [UC02.12](#_Cấu_hình_người) | User config | E05  E10  E15 | - Web application |
| [UC02.13](#_Cấu_hình_mail) | Mail config | E05  E10  E15 | - Web application |
| [UC02.14](#_Cấu_hình_hệ) | System config | E05  E10  E15 | - Web application |
| [UC02.15](#_Trợ_giúp) | Help | E05  E10 | - Web application |
| [UC02.16](#_Thay_đổi_phân) | Thay đổi phân trang | E05  E10 | - Web application |
| Dictionary display system | | | |
| [UC03.01](#_Tìm_kiếm_câu) | Search question | E06  E11  E16 | - Web application |
| [UC03.02](#_Xem_chi_tiết) | Xem chi tiết câu hỏi | E06  E11  E16 | - Web application |
| [UC03.03](#_Tạo_câu_hỏi_2) | Create question | E06  E11  E15 | - Web application |
| [UC03.04](#_Thay_đổi_phân_1) | Thay đổi phân trang | E06  E11 | - Web application |
| **Dictionary management system (andrioid app)** | | | |
| [UC04.01](#_Tìm_kiếm_trên) | Tìm kiếm trên android app | E05  E12  E15 | - Android application |
| [UC04.02](#_Xem_nội_dung_2) | View question detail trên android app | E05  E12  E15 | - Android application |
| [UC04.03](#_Tạo_câu_trả) | Send Mail trên android app | E05  E12  E14  E15 | - Android application |
| [UC04.04](#_Xóa_câu_hỏi_1) | Delete question trên android app | E05  E12  E15  E16 | - Android application |
| [UC04.05](#_Khôi_phục_câu_1) | Restore question trên android app | E05  E12  E15  E16 | - Android application |
| [UC04.06](#_Đưa_vào_từ_1) | Insert question into dict trên android app | E05  E12  E15  E16 | - Android application |
| [UC04.07](#_Chỉnh_sửa_câu_1) | Update question trên android app | E05  E12  E15  E16 | - Android application |
| [UC04.08](#_Đăng_câu_hỏi_1) | Upload-dict trên android app | E05  E12  E15  E16 | - Android application |
| [UC04.09](#_Hạ_câu_hỏi_1) | Drop-dict trên android app | E05  E12  E15  E16 | - Android application |
| [UC04.10](#_4.3.1.4.10._Tạo_câu) | Create question trên android app | E05  E12  E15 | - Android application |
| **Dictionary display system (andrioid app)** | | | |
| [UC05.01](#_Tìm_kiếm_trên) | Tìm kiếm trên android app hiển thị | E06  E13  E16 | - Android application |
| [UC05.02](#_Xem_nội_dung_3) | Xem chi nội dung câu hỏi trên android app hiển thị | E06  E13  E16 | - Android application |
| [UC05.03](#_Tạo_câu_hỏi_3) | Create question trên android app hiển thị | E06  E13  E15 | - Android application |
| **Tính năng quản trị người dung** | | | |
| [UC06.01](#_Tạo_tài_khoản) | Tạo tài khoản | E04  E07  E10  E15 | - Web application |
| [UC06.02](#_Xem_thông_tin) | Xem thông tin tài khoản | E04  E07  E10  E15 | - Web application |
| [UC06.03](#_Đổi_mật_khẩu) | Đổi mật khẩu | E04  E07  E10  E15 | - Web application |
| **Hệ thống** | | | |
| [UC07.01](#_Đăng_nhập_công) | Đăng nhập Article system | E01  E02  E03  E04  E07  E12  E15 | - Web application |
| [UC07.02](#_Đăng_xuất_công) | Đăng xuất Article system | E01  E02  E03  E04  E07  E12  E15 | - Web application |
| [UC07.03](#_Đăng_nhập_công_1) | Đăng nhập Dictionary management system | E05  E10  E15 | - Web application |
| [UC07.04](#_Đăng_xuất_công_1) | Đăng xuất Dictionary management system | E05  E10  E15 | - Web application |
| [UC07.05](#_Đăng_nhập_android) | Đăng nhập android app | E05  E12  E15 | - Android application |
| [UC07.06](#_Đăng_xuất_android) | Đăng xuất android app | E05  E12  E15 | - Android application |

Table 23: Danh sách usecase

### Descrip usecase

#### Article system

##### Create article

|  |  |  |  |
| --- | --- | --- | --- |
| **Usecase** | Create article | **Usecase ID** | UC01.01 |
| **Description** | Allow Editor-in-chief (**E01**), Editor (**E02**), Reporter (**E03**) to create new article by Article system (**E07**) and new article will save to database intranet (**E15**) | | |
| **Entities Involves** | * Editor-in-chief (**E01**) * Editor (**E02**) * Reporter (**E03**) * Article system (**E07**) * Database intranet (**E15**) | | |
| **Business rules** |  | | |
| **Preconditions** | * **E07, E15** is running * **E01, E02, E03** created account to login to **E07** * **E01, E02, E03** login to **E07** * **E01, E02, E03** want create new article * New article haven’t to exist **E15** | | |
| **Main flow** | 1. **E01, E02, E03** choose creation article interface 2. **E01, E02, E03** choose **Tạo tin** 3. **E07** show creation article interface 4. **E01, E02, E03** input information of article 5. **E01, E02, E03** choose **Lưu** 6. **E07** save information of article to **E15** 7. **E15** saved content of article 8. **E07** show message box the article is saved and wait to apporve | | |
| **Post conditions** | Bản tin đã được tạo mới nhằm phục vụ cho công việc của **E01, E02, E03**  Article is created to support to the work of **E01, E02, E03** | | |
| **Alternate flows** | **Case A4:** | | |
| **A4.1. Thông tin không đầy đủ**   1. **E01, E02, E03** input information of article (information is not enough) 2. **E01, E02, E03** choose **Lưu** 3. **E07** show message-box information of artile is not enough and requires input information is enough 4. **E01, E02, E03** input information of article again(information is enough) 5. **E01, E02, E03** choose **Lưu** 6. **E07** save article to **E15** 7. **E15** saved information of article 8. **E07** show message box the article is saved and wait to apporve | | |
| **Case A5:** | | |
| 1. **Lưu tạm** 2. **E01, E02, E03** choose **Lưu tạm.** 3. **E07** save article to **E15.** 4. **E15** save information of article 5. **E07** show message box the article is saved | | |
| 1. **Hủy tạo tin** 2. **E01, E02, E03** choose **Hủy** 3. **E07** show message to confirm cancle artile 4. **E01, E02, E03** choose **Đồng ý** 5. **E07** return to creation article interface | | |
| **Exceptional flow** | **Case Ex01: Mất kết nối máy chủ khi lưu** | | |
| 1. **E01, E02, E03** choose creation article 2. **E01, E02, E03** choose **Tạo tin** 3. **E07** show creation article interface 4. **E01, E02, E03** input information of article 5. **E07** show message server not found and require cancle 6. **E01, E02, E03** choose **Đồng ý** 7. **E07** save information of article to **E15** 8. **E15** saved information of article 9. **E07** return to creation article interface 10. **E01, E02, E03** choose artile that is saving temporary 11. **E07** show detail of article 12. **E01, E02, E03** choose edit 13. **E07** show Editor article interface | | |
| **Case Ex02: Nhấn F5** | | |
| 1. **E01, E02, E03** choose creation article 2. **E01, E02, E03** choose **Tạo tin** 3. **E07** show creation article interface 4. **E01, E02, E03**  input information of article 5. **E01, E02, E03** choose **F5** 6. **E07** saved information of article to **E15** 7. **E07** return to creation article interface 8. **E01, E02, E03** choose artile that is saving temporary 9. **E07** show detail of article 10. **E01, E02, E03** choose edit 11. **E07** show Editor article interface | | |
| **Case Ex03: Time out** | | |
| 1. **E01, E02, E03** choose creation article 2. **E01, E02, E03** choose **Tạo tin** 3. **E07** show creation article interface 4. **E01, E02, E03**  input information of article 5. **E07** show message **Request time out** 6. **E07** saved information of article to **E15** 7. **E01, E02, E03** choose **F5** 8. **E07** return to creation article interface 9. **E01, E02, E03** choose artile that is saving temporary 10. **E07** show detail of article 11. **E01, E02, E03** choose edit 12. **E07** show Editor article interface | | |

Table 24: Descrip usecase Create article

##### Edit article

|  |  |  |  |
| --- | --- | --- | --- |
| **Usecase** | Edit article | **Usecase ID** | UC01.02 |
| **Description** | Allow Editor-in-chief (**E01**), Editor (**E02**), Reporter (**E03**) to edit article by Article system (**E07**) and information of article that is edited is saved to database intranet (**E15**) | | |
| **Entities Involves** | * Editor-in-chief (**E01**) * Editor (**E02**) * Reporter (**E03**) * Article system (**E07**) * Database intranet (**E15**) | | |
| **Business rules** |  | | |
| **Preconditions** | * **E07, E15** is running * **E01**, **E02**, **E03** must have a account **E07** * **E01, E02, E03** login to **E07** * **E01, E02, E03** want edit article * Article that neeed edit have to created and saved to **E15** | | |
| **Main flow** | 1. **E01, E02, E03** choose creation article 2. **E01, E02, E03** choose **Danh sách bài viết** 3. **E07** show article list 4. **E01, E02, E03** choose article which need edit 5. **E01, E02, E03** choose **Chỉnh sửa** 6. **E07** show edit article interface 7. **E01, E02, E03** edit content of article 8. **E01, E02, E03** choose **Lưu** 9. **E07** save information of article to **E15** 10. **E15** saved information of article 11. **E07** show message-box the article is saved and wait to approve | | |
| **Post conditions** | Article have to edited and saved to **E15** to support to work of **E01** or **E02** | | |
| **Alternate flows** | **Case A7:** | | |
| **A7.1. Inforrmation is not enough**   * + 1. **E01, E02, E03** edit content of article information is not enough)     2. **E01, E02, E03** choose **Lưu**     3. **E07** show message information of article is not enough and requires input enough information     4. **E01, E02, E03** edit content of article (information is enough)     5. **E01, E02, E03** choose **Lưu**     6. **E07** save information of article to **E15**     7. **E15** saved information of article     8. **E07** show message-box the article is saved and wait to approve | | |
| **Case A8:** | | |
| **A8.1. Lưu tạm**   1. **E01, E02, E03** choose **Lưu tạm** 2. **E07** save information of article to **E15** 3. **E15** saved information of article 4. **E07** show message-box the article is saved. | | |
| **A8.2. Hủy chỉnh sửa**   * + 1. **E01, E02, E03** choose **Hủy**     2. **E07** show message-box to confirm cancle     3. **E01, E02, E03** choose **Đồng ý**     4. **E07** return edit article interface | | |
| **Exceptional flow** |  | | |

Table 25: Descrip usecase Edit article

##### Search articles

|  |  |  |  |
| --- | --- | --- | --- |
| **Usecase** | Search articles | **Usecase ID** | UC01.03 |
| **Description** | Allow Editor-in-chief (**E01**), Editor (**E02**), Reporter (**E03**) to search articles by Article system (**E07**) | | |
| **Entities Involves** | * Editor-in-chief (**E01**) * Editor (**E02**) * Reporter (**E03**) * Article system (**E07**) * Database intranet (**E15**) | | |
| **Business rules** |  | | |
| **Preconditions** | * **E07, E15** is running * **E01**, **E02**, **E03** must have a account **E07** * **E01, E02, E03** login to **E07** * **E01, E02, E03** want search articles. * Article that **E01, E02, E03** want search is created and saved to**E15** | | |
| **Main flow** | 1. **E01, E02, E03** choose creation article interface 2. **E07** show article list 3. **E01, E02, E03** input keyword 4. **E01, E02, E03** choose **Search** 5. **E07** show result | | |
| **Post conditions** | Article that is searched support to work of **E01, E02, E03** | | |
| **Alternate flows** |  | | |
| **Exceptional flow** | **Case Ex01: article is not found** | | |
| 1. **E01, E02, E03** choose creation article interface 2. **E07** show article list 3. **E01, E02, E03** input keyword 4. **E01, E02, E03** choose **Search** 5. **E07** show message box article is not found | | |

Table 26: Descrip usecase Search articles

##### Search related articles

|  |  |  |  |
| --- | --- | --- | --- |
| **Usecase** | Search related articles | **Usecase ID** | UC01.04 |
| **Description** | Allow Editor-in-chief (**E01**), Editor (**E02**), Reporter (**E03**) to search related articles by Article system (**E07**) | | |
| **Entities Involves** | * Editor-in-chief (**E01**) * Editor (**E02**) * Reporter (**E03**) * Article system (**E07**) * Database intranet (**E15**) | | |
| **Business rules** |  | | |
| **Preconditions** | * **E07, E15** is running * **E01**, **E02**, **E03** must have a account **E07** * **E01, E02, E03** login to **E07** * **E01, E02, E03** want to search related articles * Related Article have to created and saved to **E15** | | |
| **Main flow** | 1. **E01, E02, E03** choose creation article interface 2. **E01, E02, E03** choose **Search related articles** 3. **E07** show search related articles interface 4. **E01, E02, E03** input keyword 5. **E01, E02, E03** choose **Search** 6. **E07** show result in result list of related articles interface. 7. **E01, E02, E03** choose name of related article that need search 8. **E01, E02, E03** choose **Chọn** 9. **E07** return creation article interface | | |
| **Post conditions** | Article is searched and add to related article list support to work of **E01, E02, E03** | | |
| **Alternate flows** |  | | |
| **Exceptional flow** | **Case Ex01: Related Article is not found** | | |
| 1. **E01, E02, E03** choose creation article interface 2. **E01, E02, E03** choose **Search related articles** 3. **E07** show search related articles interface 4. **E01, E02, E03** input keyword 5. **E01, E02, E03** choose **Search** 6. **E07** show message-box related article is not found | | |

Table 27: Descrip usecase Search related articles

##### View article

|  |  |  |  |
| --- | --- | --- | --- |
| **Usecase** | View article | **Usecase ID** | UC01.05 |
| **Description** | Allow Editor-in-chief (**E01**), Editor (**E02**), Reporter (**E03**) to preview articles before upload article to internet or intranet by Article system (**E07**) | | |
| **Entities Involves** | * Editor-in-chief (**E01**) * Editor (**E02**) * Reporter (**E03**) * Article system (**E07**) * Database intranet (**E15**) * Database internet (**E16**) | | |
| **Business rules** |  | | |
| **Preconditions** | * **E07, E15** is running * **E01**, **E02**, **E03** must have a account **E07** * **E01, E02, E03** login to **E07** * **E01, E02, E03** want to show content of article that is created and saved to **E15** hoặc **E16** before upload on internet | | |
| **Main flow** | 1. **E01, E02, E03** choose creation article interface 2. **E01, E02, E03** choose **Danh sách bài viết** 3. **E07** show article list 4. **E01, E02, E03** choose name of article 5. **E01, E02, E03** choose **Xem** 6. **E07** show detail of article intermation | | |
| **Post conditions** | Content of article is show to support to work of **E01, E02, E03** | | |
| **Alternate flows** |  | | |
| **Exceptional flow** |  | | |

Table 28: Descrip usecase View article

##### Preview articles

|  |  |  |  |
| --- | --- | --- | --- |
| **Usecase** | Preview articles | **Usecase ID** | UC01.06 |
| **Description** | Allow Editor-in-chief (**E01**), Editor (**E02**), Reporter (**E03**) to preview articles before upload to internet or intranet by Article system (**E07**) | | |
| **Entities Involves** | * Editor-in-chief (**E01**) * Editor (**E02**) * Reporter (**E03**) * Article system (**E07**) * Database intranet (**E15**) | | |
| **Business rules** |  | | |
| **Preconditions** | * **E07, E15** is running * **E01**, **E02**, **E03** must have a account **E07** * **E01, E02, E03** login to **E07** * **E01, E02, E03** want to preview content of article * Article that want preview have to created and saved tô **E15** | | |
| **Main flow** | 1. **E01, E02, E03** choose creation article interface 2. **E01, E02, E03** choose **Danh sách bài viết** 3. **E07** show article list 4. **E01, E02, E03** choose name of article that need preview 5. **E01, E02, E03** choose **Xem trước** 6. **E07** show choosen position to preview interface 7. **E01, E02, E03** choose **Intranet** 8. **E01, E02, E03** choose **Xem** 9. **E07** show content of article that neeed preview by preview interface of internet | | |
| **Post conditions** | Content of article have to show preview interface of intranet to support to work of **E01, E02, E03** | | |
| **Alternate flows** | **Case A7:** | | |
| **A7.1. Preview articles on internet**   1. **E01, E02, E03** choose **Internet** 2. **E01, E02, E03** choose **Xem** 3. **E07** show content of article on preview interface of internet | | |
| **Exceptional flow** |  | | |

Table 29: Descrip usecase Preview articles

##### Transfer articles

|  |  |  |  |
| --- | --- | --- | --- |
| **Usecase** | Transfer articles | **Usecase ID** | UC01.07 |
| **Description** | Allow Editor (**E02**), Reporter (**E03**) to transfer articles to colleague by Article system (**E07**) | | |
| **Entities Involves** | * Editor (**E02**) * Reporter(**E03**) * Article system (**E07**) * Database intranet (**E15**) | | |
| **Business rules** |  | | |
| **Preconditions** | * **E07, E15** is running * **E02**, **E03** must have a account **E07** * **E02, E03** login to **E07** * **E02, E03** want to transfer articles * Article that need transfer have to created and saved to **E15** | | |
| **Main flow** | 1. **E02, E03** choose creation article interface 2. **E02, E03** choose **Danh sách bài viết** 3. **E07** show article list 4. **E02, E03** choose article that need transfer 5. **E02, E03** choose **Chuyển bản tin** 6. **E07** show transfer articles interface 7. **E02, E03** choose recipient 8. **E02, E03** choose **Chuyển** 9. **E07** show message box to confirm 10. **E02, E03** choose **Đồng ý** to confirm transfer articles 11. **E07** update information of article to **E15** 12. **E15** saved information that is changed | | |
| **Post conditions** | Article is transferred to other people to support to create and approve article | | |
| **Alternate flows** | **Case A10:** | | |
| **A10.1. Choose Hủy in message-box**   1. **E02, E03** choose **Hủy** to refuse 2. **E07** return transfer article interface | | |
| **Exceptional flow** |  | | |

Table 30: Descrip usecase Transfer articles

##### Approve articles

|  |  |  |  |
| --- | --- | --- | --- |
| **Usecase** | Approve articles | **Usecase ID** | UC01.08 |
| **Description** | Allow Editor-in-chief (**E01**), Editor (**E02**) to review and approve by Article system (**E07**) | | |
| **Entities Involves** | * Editor-in-chief (**E01**) * Editor (**E02**) * Article system (**E07**) * Database intranet (**E15**) | | |
| **Business rules** |  | | |
| **Preconditions** | * **E07** is running * **E01**, **E02** must have a account **E07** * **E01, E02** login to **E07** * **E01, E02** want to review and approve article * Article have to created and saved to **E15** | | |
| **Main flow** | 1. **E01, E02** choose creation article interface 2. **E01, E02** choose **Danh sách bài viết chờ duyệt** 3. **E07** waiting approve article interface 4. **E01, E02** choose article 5. **E07** show detail article 6. **E01, E02** choose **Xác nhận** 7. **E07** message-box to approve article 8. **E01, E02** choose **Đồng ý** to approve articles 9. **E07** show message confirmation is success 10. **E07** update information of article to **E15** 11. **E15** saved information of article | | |
| **Post conditions** | Article is moved to **Danh sách bài viết đã duyệt** to support work of **E01, E02** | | |
| **Alternate flows** | **Case A8:** | | |
| **A8.1. Cancle approve articles**   1. **E01, E02** Choose **Hủy** to cancle approve article 2. **E07** return article list interface | | |
| **Exceptional flow** |  | | |

Table 31: Descrip usecase Approve articles

##### Return article

|  |  |  |  |
| --- | --- | --- | --- |
| **Usecase** | Return article | **Usecase ID** | UC01.09 |
| **Description** | Allow Editor-in-chief (**E01**), Editor (**E02**) to return article for sender by Article system (**E07**) | | |
| **Entities Involves** | * Editor-in-chief (**E01**) * Editor (**E02**) * Article system (**E07**) * Database intranet (**E15**) | | |
| **Business rules** |  | | |
| **Preconditions** | * **E07, E15** is running * **E01**, **E02** must have a account **E07** * **E01, E02** login to **E07** * **E01, E02** want to return article for sender * Article have to move to **Danh sách bài viết chờ duyệt** and saved to **E15** | | |
| **Main flow** | 1. **E01, E02** choose creation article interface 2. **E01, E02** choose **Danh sách bài viết chờ duyệt** 3. **E07** show article that is waiting approve 4. **E01, E02** choose article that need return 5. **E07** show content of article that is choosed 6. **E01, E02** choose **Trả bản tin** 7. **E07** show **Lý do trả tin** interface 8. **E01, E02** input reason to return article 9. **E01, E02** choose **Trả bản tin** to confirm return article 10. **E07** show message-box return article is success 11. **E07** update information of article **E15** 12. **E15** saved information of article | | |
| **Post conditions** | Article have to return to **Danh sách bài viết** | | |
| **Alternate flows** | **Case A6:** | | |
| **A6.1. Choose Hủy**   1. **E01, E02** choose **Hủy** 2. **E07** show article list | | |
| **Case A9:** | | |
| **A9.1. Choose Hủy when save the return article reason**   * + 1. **E01, E02** choose **Hủy**     2. **E07** return to **Danh sách bài viết chờ duyệt interface** | | |
| **Exceptional flow** |  | | |

Table 32: Descrip usecase Return article

##### Upload Article

|  |  |  |  |
| --- | --- | --- | --- |
| **Usecase** | Đăng tin | **Usecase ID** | UC01.10.01 |
| **Description** | Allow Editor-in-chief (**E01**) to upload article to internet or intranet by Article system (**E07**) | | |
| **Entities Involves** | * Editor-in-chief (**E01**) * Article system (**E07**) * Display article-inter (**E08**) * Display article-intra (**E09**) * Database intranet (**E15**) * Database internet (**E16**) | | |
| **Business rules** |  | | |
| **Preconditions** | * **E07, E08, E09, E15, E16** is running * **E01** must have a account **E07** * **E01** login to **E07** * **E01** want to upload to internet or intranet * Article have to approved and moved to **Danh sách bài viết đã duyệt** and saved to **E15** | | |
| **Main flow** | 1. **E01** choose creation article interface 2. **E01** choose **Danh sách bài viết đã duyệt** 3. **E07** approved article list 4. **E01** choose article 5. **E07** show detail article 6. **E01** choose **Đăng tin intranet** 7. **E07** show message-box to confirm 8. **E01** choose **Đồng ý** to confirm 9. **E07** update information of article that is uploaded to **E15** 10. **E15** save information of article 11. **E07** create index and send by webservice 12. Webservice save information index 13. **E07** show message-box upload is success | | |
| **Post conditions** | Article that is upload to intranet is success | | |
| **Alternate flows** | **Case A6:** | | |
| A6.1. upload to internet   * + 1. **E01** choose **Đăng tin internet**     2. **E07** show message-box to confirm     3. **E01** choose **Đồng ý** to confirm     4. **E07** update information to webservice of **E08** and **E16**     5. Webservice of **E08** update index | | |
| **Case A8:** | | |
| **A8.1. Choose Hủy to confirm**   1. **E01** choose **Hủy** to cancle upload article 2. **E07** show detail article that need upload | | |
| **Exceptional flow** |  | | |

Table 33: Descrip usecase Đăng tin

##### Upload article HTML

|  |  |  |  |
| --- | --- | --- | --- |
| **Usecase** | Upload article HTML | **Usecase ID** | UC01.10.02 |
| **Description** | Allow Editor (**E02**), Reporter (**E03**) to upload article HTML on internet by intranet which didn’t need approve articles thông qua Article system (**E07**) | | |
| **Entities Involves** | * Editor (**E02**) * Reporter (**E03**) * Article system (**E07**) * Display article-inter (**E08**) * Display article-intra (**E09**) * Database intranet (**E15**) * Databse internet (**E16**) | | |
| **Business rules** |  | | |
| **Preconditions** | * **E07, E08, E09, E15, E16** is running * **E02, E03** must have a account **E07** * **E02, E03** login to **E07** * **E02, E03** want to upload article HTML to internet to intranet * Article HTML want to internet or intranet have to moved to **Danh sách bài viết**, and saved to **E15** | | |
| **Main flow** | 1. **E02**, **E03** choose creation article interface 2. **E02**, **E03** choose **Danh sách bài viết** 3. **E07** show article list 4. **E02**, **E03** choose article HTML that need upload 5. **E07** show detail article content that is choosed 6. **E02**, **E03** chọn **Đăng bản tin HTML** 7. **E07** show message to confirm 8. **E02**, **E03** choose **Đồng ý** to confirm upload article HTML 9. **E07** update information of Article that is upload to **E15** 10. **E15** saved to Article is upload 11. **E07** create index and send to webservice 12. Webservice upload index 13. **E07** show message upload article HTML is success | | |
| **Post conditions** | Article HTML is uploaded on internet | | |
| **Alternate flows** | **Case A6:** | | |
| **A6.1: Upload article HTML on internet**   1. **E02, E03** choose **Upload article HTML on internet** 2. **E07** show message-box confirm 3. **E02, E03** choose **Đồng ý** to confirm upload article HTML 4. **E07** update information of article by **E08** and **E16** 5. Webservice of E08 update index | | |
| **Case A8:** | | |
| **A8.1: Choose Hủy when confirm article**   1. **E02**, **E03** chọn **Hủy** to cancle upload article HTML 2. **E07** show article HTML list that are need upload | | |
| **Exceptional flow** |  | | |

Table 34: Descrip usecase Upload article HTML

##### Drop article

|  |  |  |  |
| --- | --- | --- | --- |
| **Usecase** | Hạ tin | **Usecase ID** | UC01.11.01 |
| **Description** | Allow Editor-in-chief (**E01**) to drop article on internet or intranet by Article system (**E07**) | | |
| **Entities Involves** | * Editor-in-chief (**E01**) * Article system (**E07**) * Database intranet (**E15**) * Database intranet (**E16**) | | |
| **Business rules** |  | | |
| **Preconditions** | * **E07, E15, E16** is running * **E01** must have a account **E07** * **E01** login to **E07** * **E01** want to drop article from internet or intranet * Article that want drop from internet of intranet have to created and uploaded on internet or intranet | | |
| **Main flow** | 1. **E01** choose creation article interface 2. **E01** choose **Danh sách bài viết đã đăng** 3. **E07** show article list 4. **E01** choose article that need drop 5. **E07** show detail article 6. **E01** choose **Hạ tin intranet** 7. **E07** show message-box drop article 8. **E01** choose **Đồng ý** to confirm article 9. **E07** update information of article that need drop to **E15** 10. **E15** saved information of article 11. **E07** send requires update index by webservice 12. Webservice update index file 13. **E07** show message-box drop article is success | | |
| **Post conditions** | Article have to droped and content of article have to saved on **Danh sách bài viết đã hạ** | | |
| **Alternate flows** | **Case A6:** | | |
| **A6.1: Drop article to internet**   1. **E01** choose **Drop internet** 2. **E07** show message-box to confirm 3. **E01** choose **Đồng ý** to confirm drop article 4. **E07** update information of drop article **E15, E16** 5. **E15, E16** save information of drop article 6. **E07** send requires update index by webservice **E08** 7. Webservice **E08** update index of article that is droped 8. **E07** show message-box article drop is success. | | |
| **Case A8:** | | |
| **A8.1: Choose Hủy to confirm drop article**   1. **E01** choose **Hủy** to cancle drop article 2. **E07** show drop article list | | |
| **Exceptional flow** |  | | |

Table 35: Descrip usecase Hạ tin

##### Drop article HTML

|  |  |  |  |
| --- | --- | --- | --- |
| **Usecase** | Drop article HTML | **Usecase ID** | UC01.11.02 |
| **Description** | Allow Editor (**E02**) và Reporter (**E03**) to drop article HTML that is uploaded on internet or intranet by Article system (**E07**) | | |
| **Entities Involves** | * Editor (**E02**) * Reporter (**E03**) * Article system (**E07**) * Database intranet (**E15**) * Database internet (**E16**) | | |
| **Business rules** |  | | |
| **Preconditions** | * **E07, E15, E16** is running * **E02, E03** đã must have a account **E07** * **E02, E03** login to **E07** * **E02, E03** want to drop article HTML from internet or intranet * Article HTML want to drop internet or intranet | | |
| **Main flow** | 1. **E02, E03** choose creation article interface 2. **E02, E03** choose **Danh sách bài viết đã đăng** 3. **E07** show article HTML list 4. **E02, E03** choose article HTML 5. **E07** show content of article HTML 6. **E02, E03** choose **Drop article HTML intranet** 7. **E07** show message-box to confirm drop article HTML 8. **E02, E03** choose **Đồng ý** to confirm drop article HTML 9. **E07** update information of article HTML **E15** 10. **E15** saved article HTML 11. **E07** send requires update index by webservice 12. Webservice update index 13. **E07** show message-box drop article HTML is success | | |
| **Post conditions** | Article is drop on internet or intranet, content of article have saved in **Danh sách bài viết đã hạ** | | |
| **Alternate flows** | **Case A6:** | | |
| **A6.1: Drop article HTML on internet**   1. **E02, E03** choose **Drop article HTML on internet** 2. **E07** show message-box to confirm drop article HTML 3. **E02, E03** choose **Đồng ý** to confirm drop article HTML 4. **E07** update information of drop article **E15, E16** 5. **E15, E16** saved information of article 6. **E07** send requires update index by webservice **E08** 7. Webservice **E08** update index 8. **E07** hiển thị thông báo drop article HTML thành công | | |
| **Case A8:** | | |
| **A8.1: Choose Hủy to confirm drop article HTML**   1. **E02, E03** choose **Hủy** to cancle drop article HTML 2. **E07** show detail of article HTML | | |
| **Exceptional flow** |  | | |

Table 36: Descrip usecase Drop article HTML

##### Get articles

|  |  |  |  |
| --- | --- | --- | --- |
| **Usecase** | Get articles | **Usecase ID** | UC01.12 |
| **Description** | Allow Editor (**E02**), Reporter (**E03**) to get article that is waiting approve by Article system (**E07**) | | |
| **Entities Involves** | * Editor (**E02**) * Reporter (**E03**) * Article system (**E07**) * Database intranet (**E15**) | | |
| **Business rules** |  | | |
| **Preconditions** | * **E07, E15** is running * **E02, E03** must have a account **E07** * **E02, E03** login to **E07** * **E02, E03** want to get article that is waiting approve * Article is saving in **E15** and waiting approve | | |
| **Main flow** | 1. **E02**, **E03** choose creation article interface 2. **E02**, **E03** choose **Danh sách bài viết chờ duyệt** 3. **E07** show article that is waiting list 4. **E02**, **E03** choose article 5. **E07** show content of article 6. **E02**, **E03** choose **Lấy lại bản tin** 7. **E07** show message-box to confirm 8. **E02**, **E03** choose **Đồng ý** to confirm get articles 9. **E07** update information to **E15** 10. **E15** saved information 11. **E07** hiển thị thông báo lấy bản tin về thành công | | |
| **Post conditions** | Artile have to get and saved in **Danh sách bài viết** to support to work of **E02, E03** | | |
| **Alternate flows** | **Case A8:** | | |
| **A8.1: Choose Hủy when confirm**   1. **E02**, **E03** choose **Hủy** to confirm get articles 2. **E07** show detail content of article. | | |
| **Exceptional flow** |  | | |

Table 37: Descrip usecase Get articles

##### Ủy quyền

|  |  |  |  |
| --- | --- | --- | --- |
| **Usecase** | Ủy quyền | **Usecase ID** | UC01.13.01 |
| **Description** | Allow Editor-in-chief (**E01**) to authorize for other people on period of time by Article system (**E07**) | | |
| **Entities Involves** | * Editor-in-chief (**E01**) * Article system (**E07**) * Database intranet (**E15**) | | |
| **Business rules** |  | | |
| **Preconditions** | * **E07, E15** is running * **E01** must have a account **E07** * **E01** login to **E07** * **E01** want to authorize for other people * Person who is authorized have to account **E07** | | |
| **Main flow** | 1. **E01** choose created article interface 2. **E01** choose **Ủy quyền** 3. **E07** show authorization interface 4. **E01** choose person who will authorize, set time of authorization 5. **E01**choose **Ủy quyền.** 6. **E07** show message-box to authorize 7. **E01** choose **Đồng ý** to confirm authorize 8. **E07** update information of person who is authorized **E15** 9. **E15** save information of authorization 10. **E07** show message-box authorization is success | | |
| **Post conditions** | All authorization of  **E01** is transfer for other to support work of **E01** | | |
| **Alternate flows** | **Case A7:** | | |
| **A7.1: Choose Hủy when confirm**   1. **E01** choose **Hủy** to cancle authorize 2. **E07** show authorization interface | | |
| **Exceptional flow** |  | | |

Table 38: Descrip usecase Ủy quyền

##### Cancle Authorization

|  |  |  |  |
| --- | --- | --- | --- |
| **Usecase** | Hủy ủy quyền | **Usecase ID** | UC01.13.02 |
| **Description** | Allow Editor-in-chief (**E01**) to to cancle authorization by Article system (**E07**) | | |
| **Entities Involves** | * Editor-in-chief (**E01**) * Article system (**E07**) * Database intranet (**E15**) | | |
| **Business rules** |  | | |
| **Preconditions** | * **E07, E15** is running * **E01** must have a account **E07** * **E01** is login to **E07** * **E01** want to authorization * Authoruzation of **E01** is authorizing for other person and haven’t deadline | | |
| **Main flow** | 1. **E01** choose created article interface 2. **E01** choose **Hủy ủy quyền** 3. **E07** show Cancle Authorization interface 4. **E01** choose **Hủy ủy quyền** 5. **E07** message-box cancle article 6. **E01** choose **Đồng ý** to confirm cancle 7. **E07** save information to **E15** 8. **E15** saved information 9. **E07** show message Cancle Authorization is success | | |
| **Post conditions** | Authorization of other person is cancle | | |
| **Alternate flows** | **Case A6:** | | |
| **A6.1: Choose Hủy when confirm authorize**   1. **E01** choose **Hủy** 2. **E07** return created article interface | | |
| **Exceptional flow** |  | | |

Table 39: Descrip usecase Hủy ủy quyền

##### Delete articles

|  |  |  |  |
| --- | --- | --- | --- |
| **Usecase** | Delete articles | **Usecase ID** | UC01.14 |
| **Description** | Allow Editor-in-chief (**E01**), Editor (**E02**), Reporter (**E03**) to delete articleby Article system (**E07**) | | |
| **Entities Involves** | * Editor-in-chief (**E01**) * Editor (**E02**) * Reporter (**E03**) * Article system (**E07**) * Database intranet (**E15**) | | |
| **Business rules** |  | | |
| **Preconditions** | * **E07, E15** is running * **E01, E02, E03** must have a account **E07** * **E01, E02, E03** login to **E07** * **E01, E02, E03** want delete article * Article is delete have to update in **E15** | | |
| **Main flow** | 1. **E01**, **E02**, **E03** choose created article interface 2. **E01**, **E02**, **E03** choose **Danh sách bài viết** 3. **E07** show artilce list 4. **E01**, **E02**, **E03** name of article that want to delete. 5. **E07** show detail content of article 6. **E01**, **E02**, **E03** choose **Xóa** 7. **E07** show message-box to confirm delete 8. **E01**, **E02**, **E03** choose **Đồng ý** to confirm delete 9. **E07** update information of article **E15** 10. **E15** saved information of article 11. **E07** show message-box delete article is success | | |
| **Post conditions** | Article is delete on **Danh sách bài viết** and saved **Danh sách bài viết đã xóa** | | |
| **Alternate flows** | **Case A8:** | | |
| **A8.1: Choose Hủy to confirm delete**   * + 1. **E01**, **E02**, **E03** choose **Hủy** to cancle confirm     2. **E07** show detail content of article | | |
| **Exceptional flow** |  | | |

Table 40: Descrip usecase Delete articles

##### Deleted article permanently

|  |  |  |  |
| --- | --- | --- | --- |
| **Usecase** | Deleted article permanently | **Usecase ID** | UC01.15 |
| **Description** | Allow Editor-in-chief (**E01**), Editor (**E02**), Reporter (**E03**) to delete article by Article system (**E07**) | | |
| **Entities Involves** | * Editor-in-chief (**E01**) * Editor (**E02**) * Reporter (**E03**) * Article system (**E07**) * Database intranet (**E15**) | | |
| **Business rules** |  | | |
| **Preconditions** | * **E07, E15** is running * **E01, E02, E03** must have a account **E07** * **E01, E02, E03** login to **E07** * **E01, E02, E03** want to delete article * Article that need deleted article permanently in **E15** | | |
| **Main flow** | 1. **E01**, **E02**, **E03** choose create article interface 2. **E01**, **E02**, **E03** choose **Danh sách bài viết đã xóa** 3. **E07** show delete article list 4. **E01**, **E02**, **E03** choose name of deleted article permanently 5. **E07** show detail content of article 6. **E01**, **E02**, **E03** choose **Deleted article permanently** 7. **E07** show message-box to confirm 8. **E01**, **E02**, **E03** choose **Đồng ý** to confirm 9. **E07** update information to **E15** 10. **E15** saved information 11. **E07** show message-box delete article is success | | |
| **Post conditions** | Deleted article permanently to **Danh sách bài viết đã xóa** and **E07** | | |
| **Alternate flows** | **Case A8:** | | |
| **A8.1: Choose Hủy to confirm**   1. **E01**, **E02**, **E03** choose **Hủy** to confirm cancel 2. **E07** show detail content of article | | |
| **Exceptional flow** |  | | |

Table 41: Descrip usecase Deleted article permanently

##### Sort Article

|  |  |  |  |
| --- | --- | --- | --- |
| **Usecase** | Sắp xếp tin | **Usecase ID** | UC01.16 |
| **Description** | Allow to Editor-in-chief (**E01**) to sort article that is uploaded to internet or intranet by Article system (**E07**) | | |
| **Entities Involves** | * Editor-in-chief (**E01**) * Article system (**E07**) * Database intranet (**E15**) | | |
| **Business rules** |  | | |
| **Preconditions** | * **E07, E15** is running * **E01** must have a account **E07** * **E01** login to **E07** * **E01** want to sort article that is uploaded to internet or intranet. * Article that need sort have to created and saved to **E15** | | |
| **Main flow** | 1. **E01** choose created article interface 2. **E01** choose **Danh sách bài viết đã đăng** 3. **E07** show article that is upload list 4. **E01** choose **Sắp xếp intranet** 5. **E07** sort article interface 6. **E01** sort articles that is uploaded on intranet 7. **E01** choose **Lưu** 8. **E07** show message-box to confirm 9. **E01** choose **Đồng ý** to confirm save 10. **E07** update information to **E15** 11. **E15** saved information of sort article 12. **E07** show message-box sort article is success | | |
| **Post conditions** | Posiion of article that is uploaded have to sort by position which editor-in-chief is designed. | | |
| **Alternate flows** | **Case A4:** | | |
| **A4.1: Sort position of article on internet**   1. **E01** choose **Sắp xếp intranet** 2. **E07** sort article interface 3. **E01** sort position of article on intranet 4. **E01** choose **Lưu** 5. **E07** show message-box to confirm 6. **E01** choose **Đồng ý** to confirm 7. **E07** update information **E15** 8. **E15**  saved information of sort position 9. **E07** show message-box sort position is success | | |
| **Case A9:** | | |
| **A9.1: Choose Hủy to cancle sort article**   1. **E01** choose **Hủy** to cancle sort 2. **E07** return original position | | |
| **Exceptional flow** |  | | |

Table 42: Descrip usecase Sắp xếp tin

##### Comment

|  |  |  |  |
| --- | --- | --- | --- |
| **Usecase** | Comment | **Usecase ID** | UC01.17 |
| **Description** | Allow Editor-in-chief (**E01**), Editor (**E02**) and Reporter (**E03**) to comment by Article system (**E07**) | | |
| **Entities Involves** | * Editor-in-chief (**E01**) * Editor (**E02**) * Reporter (**E03**) * Article system (**E07**) * Database intranet (**E15**) | | |
| **Business rules** |  | | |
| **Preconditions** | * **E07, E15** is running * **E01, E02, E03** must have to account **E07** * **E01, E02, E03** login to **E07** * **E01, E02, E03** want to comment any article * Article have to created and saved to **E15** | | |
| **Main flow** | 1. **E01, E02, E03** choose created article interface 2. **E01, E02, E03** choose **Danh sách bài viết** 3. **E07** show article list 4. **E01, E02, E03** choose name of article that need comment 5. **E07** show comment interface 6. **E01, E02, E03** comment to comment area 7. **E01, E02, E03** choose **Lưu** 8. **E07** update information to **E15** 9. **E07** show message-box comment is success | | |
| **Post conditions** | **Information of article is updated comment to support work of E01**, **E02**, **E03** | | |
| **Alternate flows** | **Case A7:** | | |
| **A7.1: Choose Hủy when comment**   1. **E01, E02, E03** choose Hủy 2. **E07** return article list | | |
| **Exceptional flow** |  | | |

Table 43: Descrip usecase Comment

##### View catalog

|  |  |  |  |
| --- | --- | --- | --- |
| **Usecase** | View catalog | **Usecase ID** | UC01.18 |
| **Description** | Allow Catalog manager (**E04**) to view catalog through Article system (**E07**) | | |
| **Entities Involves** | * Catalog manager (**E04**) * Article system (**E07**) * Database intranet (**E15**) | | |
| **Business rules** |  | | |
| **Preconditions** | * **E07, E15** is running * **E04** must have a account **E07** * **E04** login to **E07** * **E04** want view catalog. * Catalog have to created and saved to **E15** | | |
| **Main flow** | 1. **E04** choose created article interface 2. **E04** choose **Danh mục** 3. **E07** catalog list interface | | |
| **Post conditions** | Catalog list have to showed | | |
| **Alternate flows** |  | | |
| **Exceptional flow** |  | | |

Table 44: Descrip usecase View catalog

##### Create catalog

|  |  |  |  |
| --- | --- | --- | --- |
| **Usecase** | Create catalog | **Usecase ID** | UC01.19 |
| **Description** | Allow Catalog manager (**E04**) to create new catalog by Article system (**E07**) | | |
| **Entities Involves** | * Catalog manager (**E04**) * Article system (**E07**) * Database intranet (**E15**) | | |
| **Business rules** |  | | |
| **Preconditions** | * **E07, E15** is running * **E04** must have a account **E07** * **E04** login to **E07** * **E04** want to create new catalog . * Catalog havev’t to exist **E15** | | |
| **Main flow** | 1. **E04** choose create article interface 2. **E04** choose **Danh mục** 3. **E04** choose **Tạo** 4. **E07** show **Create catalog interface** 5. **E04** input information of catalog 6. **E04** choose **Lưu** 7. **E07** save information of catalog to **E15** 8. **E15** saved information of catalog 9. **E07** show message-box create catalog is success | | |
| **Post conditions** | Catalog have to created and saved to **E15** | | |
| **Alternate flows** | **Case A5:** | | |
| **A5.1: Information is not enough or invalid:**   1. **E04** input information (information is not enough) 2. **E04** choose **Lưu** 3. **E07** show message-box information is not enough and require add information 4. **E04** add information (enough) 5. **E04** choose **Lưu** 6. **E07** save information to **E15** 7. **E15** saved information 8. **E07** show message-box create new catalog is success | | |
| **Case A6:** | | |
| **A6.1: Choose Hủy create new catalog**   1. **E04** choose **Hủy** 2. **E07** show message-box to confirm cancle 3. **E04** choose **Đồng ý** 4. **E07** return to create catalog interface | | |
| **Exceptional flow** | **Case Ex01: Catalog is exissting** | | |
| 1. **E04** choose create article interface 2. **E04** choose **Danh mục** 3. **E04** choose **Tạo** 4. **E07** show interface of **Create catalog** 5. **E04** input information of catalog 6. **E04** choose **Lưu** 7. **E07** save information to **E15** 8. **E15** save information of catalog 9. **E07** show message-box catalog is existing | | |
| **Case Ex02: Server not found** | | |
| 1. **E04** choose create article interface 2. **E04** choose **Danh mục** 3. **E04** choose **Tạo** 4. **E07** show **Create catalog interface** 5. **E04** input information of catalog 6. **E04** choose **Lưu** 7. **E07** show message-box server not found and confirm cancle 8. **E04** choose **Đồng ý** to confirm cancle 9. **E07** return to **Create catalog interface** | | |
| **Case E03: Catalog manager chọn F5** | | |
| 1. **E04** choose create article interface 2. **E04** choose **Danh mục** 3. **E04** choose **Create catalog** 4. **E07** show **Create catalog interface** 5. **E04** input information of catalog 6. **E04** choose **F5** 7. **E07** show messge-box to confirm cancle 8. **E04** choose **Đồng ý** to confirm cancle 9. **E07** return to **Create catalog interface** | | |

Table 45: Descrip usecase Create catalog

##### Edit catalog

|  |  |  |  |
| --- | --- | --- | --- |
| **Usecase** | Edit catalog | **Usecase ID** | UC01.20 |
| **Description** | Allow Catalog manager (**E04**) to edit information of catalog by Article system (**E07**) | | |
| **Entities Involves** | * Catalog manager (**E04**) * Article system (**E07**) * Database intranet (**E15**) | | |
| **Business rules** |  | | |
| **Preconditions** | * **E07, E15** is running * **E04** must have a account **E07** * **E04** login to **E07** * **E04** want edit catalog. * Catalog have to created and saved to **E15** | | |
| **Main flow** | 1. **E04** choose created article interface 2. **E04** choose **Danh mục** 3. **E07** show catalog list 4. **E04** choose name of catalog 5. **E07** show detail information of catalog 6. **E04** choose **Chỉnh sửa** 7. **E07** show edit catalog interface 8. **E04** Edit information 9. **E04** choose **Lưu** 10. **E07** update information to**E15** 11. **E15** saved information 12. **E07** hiển thị thông báo danh mục được chỉnh sửa thành công | | |
| **Post conditions** | Edit catalog is success | | |
| **Alternate flows** | **Case A8:** | | |
| **A8.1: Information is not enough or invalid**   1. **E04** edit information of catalog (not enough) 2. **E04** choose **Lưu** 3. **E07** show message information is not enough and requires add information 4. **E04** add information (enough) 5. **E04** choose **Lưu** 6. **E07** update information to **E15** 7. **E15** saved information of catalog 8. **E07** show message catalog is edited | | |
| **Case A9:** | | |
| **A9.1: Choose Hủy edit catalog:**   1. **E04** choose **Hủy** 2. **E07** show message to confirm cancle 3. **E04** choose **Đồng ý** to confirm cancle 4. **E07** return to catalog list interface | | |
| **Exceptional flow** |  | | |

Table 46: Descrip usecase Chỉnh sửa danh mục

##### Delete catalog

|  |  |  |  |
| --- | --- | --- | --- |
| **Usecase** | Delete catalog | **Usecase ID** | UC01.18 |
| **Description** | Allow Catalog manager (**E04**) to delete catalog by Article system (**E07**) | | |
| **Entities Involves** | * Catalog manager (**E04**) * Article system (**E07**) * Database intranet (**E15**) | | |
| **Business rules** |  | | |
| **Preconditions** | * **E07, E15** is running * **E04** must have a account **E07** * **E04** login to **E07** * **E04** want to delete catalog * Catalog that need delete have to created and saved to **E15** | | |
| **Main flow** | 1. **E04** choose created article interface 2. **E04** choose **Danh mục** 3. **E07** show catalog list 4. **E04** choose name of catalog that neeed delete 5. **E04** choose **Xóa** 6. **E07** show message to confirm delete 7. **E04** choose **Đồng ý** to confirm delete 8. **E07** update information of catalog to **E15** 9. **E15** saved information 10. **E07** show message delete catalog is success | | |
| **Post conditions** | Catalog is deleted | | |
| **Alternate flows** | **Case A7:** | | |
| **A7.1: Hủy delete catalog**   1. **E04** choose **Hủy** to confirm cancle 2. **E07** return to catalog list | | |
| **Exceptional flow** |  | | |

Table 47: Descrip usecase Delete catalog

##### Sort catalog

|  |  |  |  |
| --- | --- | --- | --- |
| **Usecase** | Sort catalog | **Usecase ID** | UC01.22 |
| **Description** | Allow Catalog manager (**E04**) to sort position of catalog by Article system (**E07**) | | |
| **Entities Involves** | * Catalog manager (**E04**) * Article system (**E07**) * Database intranet (**E15**) | | |
| **Business rules** |  | | |
| **Preconditions** | * **E07** is running * **E04** must have a account **E07** * **E04** login to **E07** * **E04** want to sort catalog * Catalog have to created and saved **E15** | | |
| **Main flow** | 1. **E04** choose created article interface 2. **E04** choose **Danh mục** 3. **E04** choose **Sắp xếp** 4. **E07** show **Sort catalog interface** 5. **E04** choose sort catalog by position that **E04** want 6. **E04** choose **Lưu** 7. **E07** show message to confirm 8. **E04** choose **Đồng ý** to confirm 9. **E07** update information to **E15** 10. **E15** saved information of catalog 11. **E07** show message sort catalog is success | | |
| **Post conditions** | Catalog is sorted by position that **E04** want | | |
| **Alternate flows** | **Case A8:** | | |
| **A8.1: Hủy sort catalog:**   1. **E04** choose **Hủy** 2. **E07** show message to confirm cancle 3. **E04** choose **Đồng ý** to confirm cancle 4. **E07** reutnr to catalog list | | |
| **Exceptional flow** |  | | |

Table 48: Descrip usecase Sort catalog

#### Dictionary management system

##### Search

|  |  |  |  |
| --- | --- | --- | --- |
| **Usecase** | Search | **Usecase ID** | UC02.01 |
| **Description** | Allow Answer Department (**E05**) to search question in question list of Dictionary management system (**E10**) | | |
| **Entities Involves** | * Answer Department (**E05**) * Dictionary management system (**E10**) * Database intranet (**E15**) | | |
| **Business rules** |  | | |
| **Preconditions** | * **E10, E15** is running * **E05** must have a account **E10** * **E05** login to **E10** * **E05** want to search question * Question have to saved **E15** | | |
| **Main flow** | 1. **E05** question list interface 2. **E10** show question list 3. **E05** input keyword 4. **E05** choose **Search** or Enter 5. **E10** show results | | |
| **Post conditions** | Show result that have content same keyword **E05** | | |
| **Alternate flows** | **Case A5 :** | | |
| **A5.1: Question that need search not found.**   * + 1. **E05** press **Enter** to search     2. **E10** show message question not found | | |
| **Exceptional flow** |  | | |

Table 49: Descrip usecase Search

##### View question detail

|  |  |  |  |
| --- | --- | --- | --- |
| **Usecase** | View question detail | **Usecase ID** | UC02.02 |
| **Description** | Allow Answer Department (**E05**) to view detail questionby Dictionary management system (**E10**) | | |
| **Entities Involves** | * Answer Department (**E05**) * Dictionary management system (**E10**) * Database intranet (**E15**) | | |
| **Business rules** |  | | |
| **Preconditions** | * **E10, E15** is running * **E05** must have a account **E10** * **E05** login to **E10** * **E05** want to view detail question * Question have to saved to **E15** | | |
| **Main flow** | 1. **E05** login to Dictionary management system 2. **E10** show question list 3. **E05** choose question that need view detail 4. **E10** hiển thị nội dung câu hỏi được chọn. | | |
| **Post conditions** | Content of question is showed | | |
| **Alternate flows** |  | | |
| **Exceptional flow** |  | | |

Table 50: Descrip usecase View question detail

##### Send Mail

|  |  |  |  |
| --- | --- | --- | --- |
| **Usecase** | Send Mail | **Usecase ID** | UC02.03 |
| **Description** | Allow Answer Department (**E05**) to send mail to user by Dictionary management system (**E10**) | | |
| **Entities Involves** | * Answer Department (**E05**) * Dictionary management system (**E10**) * Mail Server (**E14)** * Data intranet (**E15)** | | |
| **Business rules** |  | | |
| **Preconditions** | * **E10, E15** is running * **E05** must have a account **E10** * **E05** login to **E10** * **E05** want to send mail to user | | |
| **Main flow** | 1. **E05** login to Dictionary management system 2. **E10** show question not replied list 3. **E05** select a question 4. **E10** show answer interface 5. **E05** reply . 6. **E05** choose **Gửi** 7. **E10** save answer to **E15** 8. **E15** saved answer 9. **E10** send answer to **E14** 10. **E14** send answer to user 11. **E10** show message send mail is success | | |
| **Post conditions** | Answer is created, send to user and saved **Danh sách đã trả lời** to support work of **E05**. | | |
| **Alternate flows** | **Case A5:** | | |
| **A5.1 Information is not enough**   1. **E05** don’t input answer 2. **E05** send mail**.** 3. **E10** show message information is not enough and require add information | | |
| **Case A6:** | | |
| **A6.1: Chọn Lưu tạm**   1. **E05** choose **Lưu.** 2. **E10** save question to **E15** 3. **E15** saved question to **Danh sách lưu tạm** 4. **E10** show message save question is success | | |
| **Exceptional flow** |  | | |

Table 51: Descrip usecase Create question

##### Delete question

|  |  |  |  |
| --- | --- | --- | --- |
| **Usecase** | Delete question | **Usecase ID** | UC02.04.01 |
| **Description** | Allow Answer Department (**E05**) to delete question ton question list by Dictionary management system (**E10**). | | |
| **Entities Involves** | * Answer Department (**E05**) * Dictionary management system (**E10**) * Data intranet (**E15)** | | |
| **Business rules** |  | | |
| **Preconditions** | * **E10, E15** đã is running * **E05** must have a account **E10** * **E05** login to **E10** * **E05** want to delete question * Question have to created and saved to**E15** | | |
| **Main flow** | 1. **E05** login to Dictionary management system 2. **E05** choose kind of question list (**Danh sách chưa trả lời , Danh sách lưu, Danh sách đã trả lời, Bộ từ điển**). 3. **E10** show question list 4. **E05** choose question 5. **E10** show question content 6. **E05** choose **Xóa** 7. **E10** send require delete question to **E15** 8. **E15** execute delete question 9. **E10** show message delete question is success | | |
| **Post conditions** | Question is deleted and saved to **Danh sách đã xóa** | | |
| **Alternate flows** |  | | |
| **Exceptional flow** |  | | |

Table 52: Descrip usecase Delete question

##### Delete more question

|  |  |  |  |
| --- | --- | --- | --- |
| **Usecase** | Delete more question | **Usecase ID** | UC02.04.02 |
| **Description** | Allow Answer Department (**E05**) to delete more question on question list by Dictionary management system (**E10**). | | |
| **Entities Involves** | * Answer Department (**E05**) * Dictionary management system (**E10**) * Data intranet (**E15)** | | |
| **Business rules** |  | | |
| **Preconditions** | * **E10, E15** is running * **E05** must have a account **E10** * **E05** login to **E10** * **E05** want tô delete question * Question have to created and saved to **E15** | | |
| **Main flow** | 1. **E05** login to Dictionary management system 2. **E05** choose kind of question list (**Danh sách chưa trả lời , Danh sách lưu, Danh sách đã trả lời, Bộ từ điển**). 3. **E10** show question list 4. **E05** click checkbox before delete questions 5. **E05** choose **Xóa** 6. **E10** message to confirm delete questions 7. **E05** choose **Đồng ý** to confirm delete questions 8. **E10** send require to delete questions **E15** 9. **E15** execute delete questions 10. **E10** show message delete questions is success | | |
| **Post conditions** | Question have to deleted and sent to **Danh sách đã xóa** | | |
| **Alternate flows** |  | | |
| **Exceptional flow** |  | | |

Table 53: Descrip usecase Delete more question

##### Restore question

|  |  |  |  |
| --- | --- | --- | --- |
| **Usecase** | Restore question | **Usecase ID** | UC02.05.01 |
| **Description** | Allow Answer Department (**E05**) to restore question on question list by Dictionary management system (**E10**). | | |
| **Entities Involves** | * Answer Department (**E05**) * Dictionary management system (**E10**) * Data intranet (**E15)** | | |
| **Business rules** |  | | |
| **Preconditions** | * **E10, E15** is running * **E05** must have a account **E10** * **E05** login to **E10** * **E05** want restore question * Question is restored and return to original list | | |
| **Main flow** | 1. **E05** login to Dictionary management system 2. **E05** choose **Danh sách đã xóa** (delete question list) 3. **E10** show deleted-question list 4. **E05** choose question that want restore 5. **E05** choose **Khôi phục** 6. **E10** send requires restore question to **E15** 7. **E15** execute restore question to original list 8. **E10** show message restored question is success | | |
| **Post conditions** | Question is restored and moved to original list | | |
| **Alternate flows** |  | | |
| **Exceptional flow** |  | | |

Table 54: Descrip usecase Restore question

##### Restore more question

|  |  |  |  |
| --- | --- | --- | --- |
| **Usecase** | Restore more question | **Usecase ID** | UC02.05.01 |
| **Description** | Allow Answer Department (**E05**) to on question list by Dictionary management system (**E10**). | | |
| **Entities Involves** | * Answer Department (**E05**) * Dictionary management system (**E10**) * Data intranet (**E15)** | | |
| **Business rules** |  | | |
| **Preconditions** | * **E10, E15** is running * **E05** must have a account **E10** * **E05** login to **E10** * **E05** want to restore question * Question havet o created, moved to **Danh sách đã xóa** | | |
| **Main flow** | 1. **E05** login to Dictionary management system 2. **E05** choose **Danh sách đã xóa** (deleted question list) 3. **E10** show deleted question list 4. **E05** choose checkbox before restore questions 5. **E05** choose **Khôi phục** 6. **E10** show message to confirm 7. **E05** choose **Đồng ý** to confirm 8. **E10** send requires to restore question to **E15** 9. **E15** execute restore questions and returnal questions to original list 10. **E10** show message restored questions is success | | |
| **Post conditions** | Questions is restored and return to original list | | |
| **Alternate flows** |  | | |
| **Exceptional flow** |  | | |

Table 55: Descrip usecase Restore more question

##### Insert question into dict

|  |  |  |  |
| --- | --- | --- | --- |
| **Usecase** | Insert question into dict | **Usecase ID** | UC02.06 |
| **Description** | Allow Answer Department (**E05**) to insert question to dictionaryby Dictionary management system (**E10**) | | |
| **Entities Involves** | * Answer Department (**E05**) * Dictionary management system (**E10**) * Database intranet (**E15**) | | |
| **Business rules** |  | | |
| **Preconditions** | * **E10, E15** is running * **E05** must have a account **E10** * **E05** login to **E10** * Question that need insert have to created and saved to **E15** | | |
| **Main flow** | 1. **E05** choose **Danh sách đã trả lời** 2. **E10** show **Danh sách đã trả lời**(replied question list). 3. **E05** choose a question 4. **E10** show detail of question 5. **E05** choose **Đưa câu hỏi vào từ điển.** 6. **E10** send requires insert question to dictionary to **E15** 7. **E15** saved information of question 8. **E10** update index 9. **E10** show message insertd question is success | | |
| **Post conditions** | Question is insertd to dictionary | | |
| **Alternate flows** |  | | |
| **Exceptional flow** |  | | |

Table 56: Descrip usecase Insert question into dict

##### Update question

|  |  |  |  |
| --- | --- | --- | --- |
| **Usecase** | Update question | **Usecase ID** | UC02.07 |
| **Description** | AllowAnswer Department (**E05**) to update questionby Dictionary management system (**E10**) | | |
| **Entities Involves** | * Answer Department (**E05**) * Dictionary management system (**E10**) * Database intranet (**E15**) | | |
| **Business rules** |  | | |
| **Preconditions** | * **E10, E15** is running * **E05** must have a account **E10** * **E05** login to **E10** * Question have to created and saved to **E15** | | |
| **Main flow** | 1. **E05** choose **Danh sách đã trả lời** 2. **E10** show question list 3. **E05** choose question 4. **E10** show detail question 5. **E05** choose **Chỉnh sửa.** 6. **E10** show edit question interface 7. **E05** show question and answer 8. **E05** choose **Lưu** 9. **E10** send requires update question to **E15** 10. **E15** update information of question 11. **E10** update index 12. **E10** show message updated question is success | | |
| **Post conditions** | Question is updated | | |
| **Alternate flows** |  | | |
| **Exceptional flow** |  | | |

Table 57: Descrip usecase Update question

##### Upload-dict

|  |  |  |  |
| --- | --- | --- | --- |
| **Usecase** | Upload-dict | **Usecase ID** | UC02.08.01 |
| **Description** | Allow Answer Department (**E05**) to upload question in dictionary to internet by Dictionary management system (**E10**) | | |
| **Entities Involves** | * Answer Department (**E05**) * Dictionary management system (**E10**) * Database intranet (**E15**) * Database internet (**E16**) | | |
| **Business rules** |  | | |
| **Preconditions** | * **E10, E15, E16** is running * **E05** must have a account **E10** * **E05** login to **E10** * **E05** have to admin * **E05** want upload-dict * Question that need upload to internet have to saved to **E15** | | |
| **Main flow** | 1. **E05** choose **Bộ từ điển** 2. **E10** show available question list 3. **E05** choose question 4. **E10** show content of question 5. **E05** choose **Đăng câu hỏi** 6. **E10** send requires to save content to **E15,** **E16** 7. **E15, E16** saved information of question 8. **E10** update index 9. **E10** show message upload question is success | | |
| **Post conditions** | Question is uploaded | | |
| **Alternate flows** |  | | |
| **Exceptional flow** | **Case Ex01: Upload question is fail** | | |
| 1. **E05** choose **Bộ từ điển** 2. **E10** show available question list 3. **E05** choose checkbox before upload question to internet 4. **E05** choose **Đăng câu hỏi** 5. **E10** show message to confirm 6. **E05** choose **Đồng ý** to confirm upload 7. **E10** send requires to save question to **E15,** **E16** 8. **E15, E16** save information of system 9. **E10** update index 10. **E10** message upload question is fail | | |

Table 58: Descrip usecase Upload-dict

##### Upload-dict more

|  |  |  |  |
| --- | --- | --- | --- |
| **Usecase** | Upload-dict more | **Usecase ID** | UC02.08.02 |
| **Description** | Allow Answer Department (**E05**) to upload a lots question by Dictionary management system (**E10**) | | |
| **Entities Involves** | * Answer Department (**E05**) * Dictionary management system (**E10**) * Database intranet (**E15**) * Database internet (**E16**) | | |
| **Business rules** |  | | |
| **Preconditions** | * **E10, E15, E16** is running * **E05** must have a account **E10** * **E05** login **E10** * **E05** have to admin * **E05** want to upload a lots question * Questions have to created and saved **E15** | | |
| **Main flow** | 1. **E05** choose **Bộ từ điển** 2. **E10** show available question list 3. **E05** choose checkbox before upload questions to internet 4. **E05** choose **Đăng câu hỏi** 5. **E10** show message to confirm 6. **E05** choose **Đồng ý** to confirm upload 7. **E10** send requires to save question to **E15,** **E16** 8. **E15, E16** save information of questions 9. **E10** update index 10. **E10** message upload questions is success | | |
| **Post conditions** | Questions is upload | | |
| **Alternate flows** | **Case A6.1.** | | |
| **A6.1: Choose Hủy**   * 1. **E05** choose **Hủy** to cancle upload questions   2. **E10** return to available question list | | |
| **Exceptional flow** | **Case Ex01: Upload question is fail** | | |
| 1. **E05** choose **Bộ từ điển** 2. **E10** show available question list 3. **E05** choose checkbox before upload questions to internet 4. **E05** choose **Đăng câu hỏi** 5. **E10** show message to confirm 6. **E05** choose **Đồng ý** to confirm upload 7. **E10** send requires to save question to **E15,** **E16** 8. **E15, E16** save information of questions 9. **E10** update index 10. **E10** message upload questions is fail | | |

Table 59: Descrip usecase Upload-dict more

##### Drop-dict

|  |  |  |  |
| --- | --- | --- | --- |
| **Usecase** | Drop-dict | **Usecase ID** | UC02.09.01 |
| **Description** | Allow Answer Department (**E05**) to drop question on dictionary by Dictionary management system (**E10**) | | |
| **Entities Involves** | * Answer Department (**E05**) * Dictionary management system (**E10**) * Database intranet (**E15**) * Database internet (**E16**) | | |
| **Business rules** |  | | |
| **Preconditions** | * **E10, E15, E16** is running * **E05** must have a account **E10** * **E05** login to **E10** * **E05** have to admin * **E05** want to drop question * Question have to uploaded on internet | | |
| **Main flow** | 1. **E05** choose **Bộ từ điển** 2. **E05** choose **Đã đăng** (recent question list) 3. **E10** show recent question list 4. **E05** choose question that need drop on internet 5. **E05** choose **Hạ câu hỏi.** 6. **E10** update question to **E15, E16** 7. **E15, E16** update information of question 8. **E10** update index 9. **E10** show message drop question is success | | |
| **Post conditions** | Question is droped | | |
| **Alternate flows** |  | | |
| **Exceptional flow** | **Case Ex01: Drop question is fail** | | |
| 1. **E05** choose **Bộ từ điển** 2. **E05** choose **Đã đăng** (recent question list) 3. **E10** show recent question list 4. **E05** choose question that need drop on internet 5. **E05** choose **Hạ câu hỏi.** 6. **E10** update question to **E15, E16** 7. **E15, E16** update information of question 8. **E10** update index 9. **E10** show message drop question is fail | | |

Table 60: Descrip usecase Drop-dict

##### Drop-dict more

|  |  |  |  |
| --- | --- | --- | --- |
| **Usecase** | Drop-dict more | **Usecase ID** | UC02.09.02 |
| **Description** | Allow Answer Department (**E05**)to drop a lot of question by Dictionary management system (**E10**) | | |
| **Entities Involves** | * Answer Department (**E05**) * Dictionary management system (**E10**) * Database intranet (**E15**) * Database internet (**E16**) | | |
| **Business rules** |  | | |
| **Preconditions** | * **E10, E15, E16** is running * **E05** must have a account **E10** * **E05** login to **E10** * **E05** have to admin * **E05** want to drop a lot of question * Question that need drop have to uploaded on internet | | |
| **Main flow** | 1. **E05** choose **Bộ từ điển** 2. **E05** choose **Đã đăng**  (recent question list) 3. **E10** show recent list 4. **E05** choose checkbox before drop question on internet 5. **E05** choose **Hạ câu hỏi.** 6. **E10** show message to confirm drop question 7. **E05** choose **Đồng ý** to confirm drop question 8. **E10** send require update information of questions **E15, E16** 9. **E15, E16** updated information of questions 10. **E10** show message drop question is success | | |
| **Post conditions** | Question is droped | | |
| **Alternate flows** | **Case A7:** | | |
| **A7.1: Choose Hủy**   1. **E05** choose **Hủy** to cancle drop question 2. **E10** return to recent question list | | |
| **Exceptional flow** | **Case Ex01: Drop a lots question is fail** | | |
| 1. **E05** choose **Bộ từ điển** 2. **E05** choose **Đã đăng** (recent question list) 3. **E10** show recent question list 4. **E05** choose checkbox before drop question on internet 5. **E05** choose **Hạ câu hỏi.** 6. **E10** show message to confirm 7. **E05** choose **Đồng** to confirm drop question 8. **E10** send require update information of questions **E15, E16** 9. **E15, E16** updated information of questions 10. **E10** show message drop question is fail | | |

Table 61: Descrip usecase Drop-dict more

##### Create index

|  |  |  |  |
| --- | --- | --- | --- |
| **Usecase** | Create index | **Usecase ID** | UC02.10 |
| **Description** | Allow Answer Department (**E05**) to create index by Dictionary management system (**E10**) | | |
| **Entities Involves** | * Answer Department (**E05**) * Dictionary management system (**E10**) | | |
| **Business rules** |  | | |
| **Preconditions** | * **E10** đã is running * **E05** must have a account **E10** * **E05** login to **E10** * **E05** have to admin * **E05** want to create index | | |
| **Main flow** | 1. **E05** login to system 2. **E05** choose **Create index** 3. **E10** execute create index 4. **E10** show messge create index is success | | |
| **Post conditions** | Index file is created | | |
| **Alternate flows** |  | | |
| **Exceptional flow** |  | | |

Table 62: Descrip usecase Create index

##### Create question

|  |  |  |  |
| --- | --- | --- | --- |
| **Usecase** | Create question. | **Usecase ID** | UC02.11 |
| **Description** | Allow Answer Department (**E05**) to create question and answer by Dictionary management system (**E10**) and saved this question to (**E15)** | | |
| **Entities Involves** | * Answer Department (**E05**) * Dictionary management system (**E10**) * Data intranet (**E15)** | | |
| **Business rules** |  | | |
| **Preconditions** | * **E10, E15** is running * **E05** must have a account **E10** * **E05** login to **E10** * **E05** want to create question | | |
| **Main flow** | 1. **E05** choose Dictionary management system 2. **E05** choose **create question**. 3. **E10** show create question interface. 4. **E05** input content of question and answer 5. **E05** choose **Lưu** 6. **E10** send require to save question to **E15** 7. **E15** execute save question 8. **E10** show message create question is success | | |
| **Post conditions** | Câu hỏi và câu trả lời của câu hỏi được tạo và lưu vào danh sách có sẵn trong bộ từ điển thành công.  Question have to created and insertd to dictionary | | |
| **Alternate flows** |  | | |
| **Exceptional flow** |  | | |

Table 63: Descrip usecase Taọ câu hỏi

##### User config

|  |  |  |  |
| --- | --- | --- | --- |
| **Usecase** | User config | **Usecase ID** | UC02.12 |
| **Description** | Allow Answer Department (**E05**) to configuratein system management by Dictionary management system (**E10**) | | |
| **Entities Involves** | * Answer Department (**E05**) * Dictionary management system (**E10**) * Data intranet (**E15**) | | |
| **Business rules** |  | | |
| **Preconditions** | * **E10, E15** is running * **E05** must have a account **E10** * **E05** login to **E10** * **E05** have to admin * **E05** want to configurate | | |
| **Main flow** | 1. **E05** go to configuration interface 2. **E10** show configuration interface 3. **E05** choose **User config.** 4. **E10** show users configuration interface 5. **E05** choose user who need configurate 6. **E05** edit information 7. **E05** choose **Lưu**. 8. **E10** save information of user to **E15** 9. **E15** saved information 10. **E10** show message configuration is success | | |
| **Post conditions** | Configuration is changed | | |
| **Alternate flows** | **Case A6** | | |
| **A6.1: Information is not enough**   * + 1. **E05** don’t enter information     2. **E05** choose **Lưu**     3. **E10** show message require input information is enough | | |
| **Exceptional flow** |  | | |

Table 64: Descrip usecase User config

##### Mail config

|  |  |  |  |
| --- | --- | --- | --- |
| **Usecase** | Mail config | **Usecase ID** | UC02.13 |
| **Description** | Allow Answer Department (**E05**) to mail configurate email in system mamagement by Dictionary management system (**E10**) | | |
| **Entities Involves** | * Answer Department (**E05**) * Dictionary management system (**E10**) * Data intranet (**E15**) | | |
| **Business rules** |  | | |
| **Preconditions** | * **E10** đã is running * **E05** must have a account **E10** * **E05** login to **E10** * **E05** have to admin * **E05** want to configurate email system | | |
| **Main flow** | 1. **E05** go to configuration interface 2. **E10** show configuration interface 3. **E05** choose **Mail config.** 4. **E10** show email configuration interface. 5. **E05** input information of email system 6. **E05** choose **Lưu.** 7. **E10** save information of email system to **E15** 8. **E15** saved information 9. **E10** show message configuration is success | | |
| **Post conditions** | Email configuration is changed | | |
| **Alternate flows** | **Case A5** | | |
| **A5.1: Information is not enough**   1. **E05** don’t input information 2. **E05** choose **Lưu** 3. **E10** show message require input information is enough | | |
| **Exceptional flow** |  | | |

Table 65: Descrip usecase Mail config

##### System config

|  |  |  |  |
| --- | --- | --- | --- |
| **Usecase** | System config | **Usecase ID** | UC02.14 |
| **Description** | Allow Answer Department (**E05**) to configurate system by Dictionary management system (**E15**) | | |
| **Entities Involves** | * Answer Department (**E05**) * Dictionary management system (**E10**) * Data intranet (**E15**) | | |
| **Business rules** |  | | |
| **Preconditions** | * **E10, E15** is running * **E05** must have a account **E10** * **E05** login to**E10** * **E05** have to admin * **E05** want to configurate system | | |
| **Main flow** | 1. **E05** go to configuration interface 2. **E10** show configuration interface 3. **E05** choose **System config.** 4. **E10** show system configuration interface 5. **E05** input information of system 6. **E05** choose **Lưu** 7. **E10** save information of system to **E15** 8. **E15** saved information 9. **E10** show message configuration is success | | |
| **Post conditions** | System Configuration is changed | | |
| **Alternate flows** | **Case A5:** | | |
| **A5.1: Lack of configuration information**   1. **E05** input information is not enough 2. **E05** choose **Lưu** 3. **E10** show message require input information is not enough | | |
| **Exceptional flow** |  | | |

Table 66: Descrip usecase System config

##### Help

|  |  |  |  |
| --- | --- | --- | --- |
| **Usecase** | Help | **Usecase ID** | UC02.15 |
| **Description** | Allow Answer Department (**E05**) to see help by Dictionary management system (**E10**). | | |
| **Entities Involves** | * Answer Department (**E05**) * Dictionary management system (**E10**) | | |
| **Business rules** |  | | |
| **Preconditions** | * **E10** is running * **E05** must have a account **E10**. * **E05** login to **E10** * **E05** want to see help | | |
| **Main flow** | 1. **E05** login to system 2. **E05** choose **Help**. 3. **E10** show help of Dictionary management system. | | |
| **Post conditions** | Help page is showed | | |
| **Alternate flows** |  | | |
| **Exceptional flow** |  | | |

Table 67: Descrip usecase Help

##### Setting Paging

|  |  |  |  |
| --- | --- | --- | --- |
| **Usecase** | Setting Paging | **Usecase ID** | UC02.16 |
| **Description** | Allow Answer Department (**E05**) to setting paging of each list by Dictionary management system (**E10**). | | |
| **Entities Involves** | * Answer Department (**E05**) * Dictionary management system (**E10**) | | |
| **Business rules** |  | | |
| **Preconditions** | * **E10** is running * **E05** must have a account **E10**. * **E05** login to **E10** * **E05** want to setting paging | | |
| **Main flow** | 1. **E05** login to Dictionary management system 2. **E05** choose icon of setting 3. **E10** show popup to setting paging 4. **E05** change setting paging 5. **E05** choose **Lưu**. 6. **E10** return to list | | |
| **Post conditions** | Execute setting paging is success | | |
| **Alternate flows** |  | | |
| **Exceptional flow** |  | | |

Table 68: Descrip usecase Thay đổi phân trang

#### Dictionary display system

##### Search question

|  |  |  |  |
| --- | --- | --- | --- |
| **Usecase** | Search question | **Usecase ID** | UC03.01 |
| **Description** | Allow User (**E06**) to search question in any question list by Dictionary display system (**E11**). | | |
| **Entities Involves** | * User (**E06**) * Dictionary display system (**E11**) * Database internet (**E16**) | | |
| **Business rules** |  | | |
| **Preconditions** | * **E11, E16** is running * **E06** want to search question * Question that need search have to saved to **E16** | | |
| **Main flow** | 1. **E06** login to Dictionary display system 2. **E11** show any question list 3. **E06** input leyword 4. **E11** choose **Search** 5. **E11** send requires to search to **E16** 6. **E16** return result to **E11** 7. **E11** show results | | |
| **Post conditions** | Question that have content is same keyword was showed | | |
| **Alternate flows** | **Case A7:** | | |
| **A7.1: Question not found**   1. **E06** show message question not found | | |
| **Exceptional flow** |  | | |

Table 69: Descrip usecase Search question

##### Xem chi tiết câu hỏi

|  |  |  |  |
| --- | --- | --- | --- |
| **Usecase** | Xem chi tiết câu hỏi | **Usecase ID** | UC03.02 |
| **Description** | Allow User (**E06**) to view detail of question by Dictionary display system (**E11**). | | |
| **Entities Involves** | * User (**E06**) * Dictionary display system (**E11**) * Database internet (**E16**) | | |
| **Business rules** |  | | |
| **Preconditions** | * **E11** is running * **E06** want to show detail of question * Question have to created and saved to **E16** | | |
| **Main flow** | 1. **E06** go to Dictionary display system 2. **E11** show question list 3. **E06** choose a question. 4. **E11** show detail content of question | | |
| **Post conditions** | Content of question is showed | | |
| **Alternate flows** |  | | |
| **Exceptional flow** |  | | |

Table 70: Descrip usecase Xem chi tiết câu hỏi

##### Create question

|  |  |  |  |
| --- | --- | --- | --- |
| **Usecase** | Create question | **Usecase ID** | UC03.03 |
| **Description** | Allow User (**E06**) to create question by Dictionary display system (**E11)** | | |
| **Entities Involves** | * User (**E06**) * Dictionary display system (**E11**) * Dictionary management system (**E10**) * Database intranet (**E15**) | | |
| **Business rules** |  | | |
| **Preconditions** | * **E11, E15** is running * Email of **E06** is exiting * **E06** want create question. | | |
| **Main flows** | 1. **E06** go to Dictionary display system 2. **E11** question list and create question area 3. **E06** input information of question 4. **E06** choose **Gửi** 5. **E11** send question to **E10** 6. **E10** save question to **E15** 7. **E15** saved question 8. **E11** show message send question is success | | |
| **Post conditions** | Question is sent to **E15** support for **E05** can track and answer **E06**. | | |
| **Alternate flows** | **Case A3:** | | |
| **A3.1: Information is fail**   1. **E06** go to Dictionary display system 2. **E11** question list and create question area 3. **E06** input information of question 4. **E06** choose **Gửi** 5. **E11** send question to **E10** 6. **E10** save question to **E15** 7. **E15** saved question 8. show message send question is fail | | |
| **Exceptional flow** |  | | |

Table 71: Descrip usecase Create question

##### Setting Paging

|  |  |  |  |
| --- | --- | --- | --- |
| **Usecase** | Thay đổi phân trang | **Usecase ID** | UC03.04 |
| **Description** | Allow users (**E06**) to setting paging on Dictionary Display system (**E11**) | | |
| **Entities Involves** | * User (**E06**) * Dictionary display system (**E11**) | | |
| **Business rules** |  | | |
| **Preconditions** | * **E11** is running * **E06** want to setting paging | | |
| **Main flow** | 1. **E06** go to Dictionary display system 2. **E05** choose **Cấu hình** 3. **E10** show popup setting paging 4. **E05** input number of record and maximum paging 5. **E05** choose **Lưu** 6. **E10** page is changed | | |
| **Post conditions** | Configuration paging is changed | | |
| **Alternate flows** |  | | |
| **Exceptional flow** |  | | |

Table 72: Descrip usecase Thay đổi phân trang

#### Dictionary management system (andrioid app)

##### Tìm kiếm trên android app

|  |  |  |  |
| --- | --- | --- | --- |
| **Usecase** | Tìm kiếm trên android app | **Usecase ID** | UC04.01 |
| **Description** | Cho phép Answer Department (**E05**) search câu hỏi trong các danh sách câu hỏi thông qua Dictionary management system (andrioid app) (**E12**) | | |
| **Entities Involves** | * Answer Department (**E05**) * Dictionary management system (**E10**) * Dictionary management system (andrioid app) (**E12**) * Database intranet (**E15**) | | |
| **Business rules** |  | | |
| **Preconditions** | * **E10, E12, E15** đã sẵn sàng để sử dụng * **E05** đã có tài khoản đăng nhập vào **E12** * **E05** đã đăng nhập vào **E12** * **E05** muốn search câu hỏi * Câu hỏi cần search đã được tạo và lưu trong **E16** | | |
| **Main flow** | 1. **E05** vào giao diện danh sách câu hỏi 2. **E12** hiển thị danh sách câu hỏi 3. **E05** chọn **Search** 4. **E12** hiển thị giao diện search câu hỏi 5. **E05** nhập thông tin câu hỏi cần search 6. **E05** chọn **Search.** 7. **E12** tương tác với **E10** thông qua web service lấy dữ liệu câu hỏi. 8. **E12** hiển thị danh sách câu hỏi liên quan theo từ khóa search | | |
| **Post conditions** | Câu hỏi cần search được hiển thị | | |
| **Alternate flows** | **Case A3 :** | | |
| **A3.1: Câu hỏi cần search không tồn tại.**   * + 1. **E05** chọn **Search**     2. **E12** tương tác với **E10** thông qua web service lấy dữ liệu câu hỏi     3. **E12** hiển thị thông báo danh sách trống | | |
| **Exceptional flow** |  | | |

Table 73: Descrip usecase Tìm kiếm trên android app

##### View question detail trên android app

|  |  |  |  |
| --- | --- | --- | --- |
| **Usecase** | View question detail trên android app | **Usecase ID** | UC04.02 |
| **Description** | Cho phép Answer Department (**E05**) xem nội dung chi tiết câu hỏi trong các danh sách câu hỏi thông qua Dictionary management system (andrioid app) (**E12**). | | |
| **Entities Involves** | * Answer Department (**E05**) * Dictionary management system (andrioid app) (**E12**) * Dictionary management system (**E10**) * Database intranet (**E15**) | | |
| **Business rules** |  | | |
| **Preconditions** | * **E10, E12, E15** đã sẵn sàng để sử dụng * **E05** đã có tài khoản đăng nhập vào **E12** * **E05** đã đăng nhập vào **E12** * **E05** muốn View question detail * Nội dung câu hỏi cần xem đã được tạo và lưu trong **E15** | | |
| **Main flow** | 1. **E05** vào giao diện danh sách câu hỏi 2. **E12** tương tác với **E15** thông qua web service trên **E10** lấy dữ liệu câu hỏi 3. **E12** hiển thị danh sách câu hỏi 4. **E05** chọn câu hỏi cần xem nội dung chi tiết 5. **E12** hiển thị nội dung câu hỏi được chọn. | | |
| **Post conditions** | Nội dung chi tiết câu hỏi được hiển thị | | |
| **Alternate flows** |  | | |
| **Exceptional flow** |  | | |

Table 74: Descrip usecase View question detail trên android app

##### Send mail trên android app

|  |  |  |  |
| --- | --- | --- | --- |
| **Usecase** | Send mail trên android app | **Usecase ID** | UC04.03 |
| **Description** | Cho phép Answer Department (**E05**) send mail trên Dictionary management system (andrioid app) (**E12**) và gửi mail đến cho user. | | |
| **Entities Involves** | * Answer Department (**E05**) * Dictionary management system (andrioid app) (**E12**) * Dictionary management system (**E10**) * Database intranet (**E15**) | | |
| **Business rules** |  | | |
| **Preconditions** | * **E10, E12, E15** đã sẵn sàng để sử dụng * **E05** đã có tài khoản đăng nhập vào **E12** * **E05** đã đăng nhập vào **E12** * **E05** muốn send mail | | |
| **Main flow** | 1. **E05** vào giao diện danh sách câu hỏi chưa trả lời 2. **E12** tương tác với **E10** thông qua web service lấy dữ liệu câu hỏi 3. **E12** hiển thị danh sách câu hỏi chưa trả lời 4. **E05** chọn câu hỏi muốn trả lời 5. **E12** hiển thị giao diện trả lời 6. **E05** chọn **Gửi** 7. **E12** tương tác với **E10** thông qua webservice để gửi requires gửi mail và lưu câu trả lời xuống **E10** 8. **E10** cập nhật lại nội dung câu hỏi vào **E15** 9. **E15** lưu thông tin cập nhật 10. **E12** hiển thị thông báo gửi mail thành công. | | |
| **Post conditions** | Câu trả lời được tạo thành công | | |
| **Alternate flows** | **Case A6:** | | |
| **A6.1 Lưu tạm**   1. **E05** chọn **Lưu.** 2. **E12** cập nhật lại nội dung câu hỏi vào **E15** thông quá **E10** 3. **E15** lưu thông tin cập nhật 4. **E12** hiển thị thông báo lưu thành công. | | |
| **Exceptional flow** |  | | |

Table 75: Descrip usecase Send mail trên android app

##### Delete question trên android app

|  |  |  |  |
| --- | --- | --- | --- |
| **Usecase** | Delete question trên android app | **Usecase ID** | UC04.04 |
| **Description** | Cho phép Answer Department (**E05**) delete question trên các danh sách câu hỏi ở Dictionary management system (andrioid app) (**E12**) thông qua Dictionary management system (**E10**). | | |
| **Entities Involves** | * Answer Department (**E05**) * Dictionary management system (**E10**) * Dictionary management system (andrioid app) (**E12**) * Data intranet (**E15)** | | |
| **Business rules** |  | | |
| **Preconditions** | * **E10, E12, E15** đã sẵn sàng để sử dụng * **E05** đã có tài khoản đăng nhập vào **E12** * **E05** đã đăng nhập vào **E12** * **E05** muốn delete question * Câu hỏi muốn xóa đã được tạo và lưu trong **E15** | | |
| **Main flow** | 1. **E05** đăng nhập vào **E12** 2. **E05** chọn danh sách câu hỏi (chưa trả lời,lưu tạm,đã trả lời,bộ từ điển,đã xóa). 3. **E12** tương tác với **E10** thông qua web service lấy danh sách câu hỏi đã trả lời 4. **E12** hiển thị danh sách câu hỏi. 5. **E05** chọn câu hỏi muốn xóa 6. **E12** hiển thị nội dung của câu hỏi vừa chọn 7. **E05** chọn **Xóa** 8. **E12** gửi yêu câu delete question xuống **E15** thông qua **E10** 9. **E15** thực hiện delete question 10. **E12** hiển thị thông báo đã xóa thành công | | |
| **Post conditions** | Câu hỏi/ kèm câu trả lời được xóa thành công và được luu | | |
| **Alternate flows** |  | | |
| **Exceptional flow** |  | | |

Table 76: Descrip usecase Delete question trên android app

##### Khôi phục câu hỏi trên android app

|  |  |  |  |
| --- | --- | --- | --- |
| **Usecase** | Khôi phục câu hỏi trên android app | **Usecase ID** | UC04.05 |
| **Description** | Cho phép Answer Department (**E05**) khôi phục câu hỏi trên danh sách câu hỏi đã xóa ở Dictionary management system (andrioid app) (**E12**) thông qua Dictionary management system (**E10**). | | |
| **Entities Involves** | * Answer Department (**E05**) * Dictionary management system (**E10**) * Data intranet (**E15)** | | |
| **Business rules** |  | | |
| **Preconditions** | * **E10, E15** đã sẵn sàng để sử dụng * **E05** đã có tài khoản đăng nhập vào **E10** * **E05** đã đăng nhập vào **E10** * **E05** muốn khôi phục câu hỏi đã xóa * Câu hỏi muốn khôi phục đã được tạo và lưu trong danh sách đã xóa của **E15** | | |
| **Main flow** | 1. **E05** đăng nhập vào Dictionary management system 2. **E05** chọn danh sách câu hỏi đã xóa 3. **E10** hiển thị danh sách câu hỏi đã xóa 4. **E05** chọn vào câu hỏi muốn khôi phục 5. **E05** chọn **Khôi phục** 6. **E10** gửi requires khôi phục câu hỏi xuống **E15** 7. **E15** thực hiện khôi phục câu hỏi về đúng danh sách trước khi xóa 8. **E10** hiển thị thông báo đã khôi phục thành công | | |
| **Post conditions** | Câu hỏi/ kèm câu trả lời được khôi phục thành công. | | |
| **Alternate flows** |  | | |
| **Exceptional flow** |  | | |

Table 77: Descrip usecase Khôi phục câu hỏi trên android app

##### Insert question into dict trên android app

|  |  |  |  |
| --- | --- | --- | --- |
| **Usecase** | Insert question into dict trên android app | **Usecase ID** | UC04.04 |
| **Description** | Cho phép Answer Department (**E05**) đưa câu hỏi vào từ điển thông qua Dictionary management system (andrioid app) (**E12**) | | |
| **Entities Involves** | * Answer Department (**E05**) * Dictionary management system (**E10**) * Dictionary management system (andrioid app) (**E12**) * Database intranet (**E15**) | | |
| **Business rules** |  | | |
| **Preconditions** | * **E10, E12, E15** đã sẵn sàng để sử dụng * **E05** đã có tài khoản đăng nhập vào **E12** * **E05** đã đăng nhập vào **E12** * **E05** muốn đưa câu hỏi vào bộ từ điển * Câu hỏi và nội dung câu trả lời của câu hỏi đã được lưu trong **E15** | | |
| **Main flow** | 1. **E05** vào giao diện danh sách câu hỏi đã trả lời 2. **E12** tương tác với **E10** thông qua web service lấy danh sách câu hỏi đã trả lời 3. **E12** hiển thị danh sách câu hỏi. 4. **E05** chọn câu hỏi 5. **E05** chọn **Insert question into dict** 6. **E12** gửi requires đưa câu hỏi vào bộ từ điển xuống **E15** thông qua webservice trên **E10** 7. **E15** lưu thông tin câu hỏi 8. **E12** hiển thị thông báo đã đưa vào bộ từ điển thành công. | | |
| **Post conditions** | Câu hỏi được đưa vào bộ từ điển | | |
| **Alternate flows** |  | | |
| **Exceptional flow** |  | | |

Table 78: Descrip usecase Insert question into dict trên android app

##### Update question trên android app

|  |  |  |  |
| --- | --- | --- | --- |
| **Usecase** | Update question trên android app | **Usecase ID** | UC04.07 |
| **Description** | Cho phép Answer Department (**E05**) update question ở Dictionary management system (andrioid app) (**E12**) thông qua Dictionary management system (**E10**) | | |
| **Entities Involves** | * Answer Department (**E05**) * Dictionary management system (**E10**) * Dictionary management system (andrioid app) (**E12**) * Database intranet (**E15**) | | |
| **Business rules** |  | | |
| **Preconditions** | * **E10, E12, E15** đã sẵn sàng để sử dụng * **E05** đã có tài khoản đăng nhập vào **E12** * **E05** đã đăng nhập vào **E12** * Câu hỏi cần đưa chỉnh sửa đã được lưu trong **E15** | | |
| **Main flow** | 1. **E05** vào giao diện **E12** 2. **E12** tương tác với **E10** thông qua web service lấy danh sách câu hỏi đã trả lời 3. **E12** hiển thị danh sách câu hỏi. 4. **E05** chọn câu hỏi 5. **E12** hiển thị nội dung chi tiết câu hỏi 6. **E05** chọn **Chỉnh sửa.** 7. **E12** hiển thị giao diện chỉnh sửa câu hỏi 8. **E05** chỉnh sửa thông tin câu hỏi và câu trả lời 9. **E05** chọn **Lưu** 10. **E12** gửi requires lưu nội dung câu hỏi và câu trả lời xuống **E15** thông qua **E10** 11. **E15** lưu thông tin câu hỏi 12. **E12** hiển thị thông báo đã chỉnh sửa câu hỏi thành công. | | |
| **Post conditions** | Câu hỏi được chỉnh sửa thành công | | |
| **Alternate flows** |  | | |
| **Exceptional flow** |  | | |

Table 79: Descrip usecase Update question trên android app

##### Upload-dict trên android app

|  |  |  |  |
| --- | --- | --- | --- |
| **Usecase** | Upload-dict trên android app | **Usecase ID** | UC04.08 |
| **Description** | Cho phép Answer Department (**E05**) upload-dict ở Dictionary management system (andrioid app) (**E12**) thông qua Dictionary management system (**E10**) | | |
| **Entities Involves** | * Answer Department (**E05**) * Dictionary management system (**E10**) * Dictionary management system (andrioid app) (**E12**) * Database intranet (**E15**) * Database internet (**E16**) | | |
| **Business rules** |  | | |
| **Preconditions** | * **E10, E12, E15, E16** đã sẵn sàng để sử dụng * **E05** đã có tài khoản đăng nhập vào **E12** * **E05** đã đăng nhập vào **E12** * **E05** phải có quyền admin * **E05** muốn upload-dict * Câu hỏi cần đăng lên internet đã được lưu trong **E15** | | |
| **Main flow** | 1. **E05** vào giao diện **E12** 2. **E12** tương tác với **E10** thông qua web service lấy danh sách câu hỏi đã trả lời 3. **E12** hiển thị danh sách câu hỏi có sẵn trong bộ từu điển 4. **E05** chọn câu hỏi 5. **E12** hiển thị nội dung chi tiết câu hỏi 6. **E05** chọn **Đăng câu hỏi** 7. **E12** gửi requires lưu nội dung câu hỏi và câu trả lời xuống **E15,** **E16** thông qua **E10** 8. **E15, E16** lưu thông tin câu hỏi 9. **E12** hiển thị thông báo đã đăng câu hỏi thành công. | | |
| **Post conditions** | Câu hỏi được đăng thành công | | |
| **Alternate flows** |  | | |
| **Exceptional flow** | **Case Ex01: Đăng câu hỏi không thành công** | | |
| 1. **E05** vào giao diện **Bộ từ điển** 2. **E10** hiển thị danh sách câu hỏi có sẵn trong bộ từu điển 3. **E05** chọn checkbox trước các câu hỏi cần đăng lên internet 4. **E05** chọn **Đăng câu hỏi** 5. **E10** gửi requires lưu nội dung câu hỏi và câu trả lời xuống **E15,** **E16** thông qua **E10** 6. **E15, E16** lưu thông tin câu hỏi 7. **E10** hiển thị thông báo đã đăng câu hỏi thất bại. | | |

Table 80: Descrip usecase Đăng câu hỏi trên internet trên android app

##### Drop-dict trên android app

|  |  |  |  |
| --- | --- | --- | --- |
| **Usecase** | Drop-dict trên android app | **Usecase ID** | UC04.09 |
| **Description** | Cho phép Answer Department (**E05**) drop-dict ở Dictionary management system (andrioid app) (**E12**) thông qua Dictionary management system (**E10**) | | |
| **Entities Involves** | * Answer Department (**E05**) * Dictionary management system (**E10**) * Dictionary management system (andrioid app) (**E12**) * Database intranet (**E15**) * Database internet (**E16**) | | |
| **Business rules** |  | | |
| **Preconditions** | * **E10, E12, E15, E16** đã sẵn sàng sử dụng * **E05** đã có tài khoản đăng nhập vào **E12** * **E05** đã đăng nhập vào **E12** * **E05** phải có quyền admin * **E05** muốn drop-dict * Câu hỏi cần hạ đang được đăng trên internet | | |
| **Main flow** | 1. **E05** vào giao diện **E12** 2. **E05** chọn danh sách **Đã đăng** 3. **E12** tương tác với **E10** thông qua web service lấy danh sách câu hỏi đã trả lời 4. **E12** hiển thị danh sách câu hỏi. 5. **E05** chọn câu hỏi cần hạ khỏi internet 6. **E05** chọn **Hạ câu hỏi.** 7. **E12** lưu requires drop-dict xuống **E15, E16** thông qua **E10** 8. **E15, E16** lưu thông tin loại câu hỏi 9. **E12** hiển thị thông báo thành công. | | |
| **Post conditions** | Câu hỏi được loại khỏi internet thành công | | |
| **Alternate flows** |  | | |
| **Exceptional flow** | **Case Ex01: Hạ câu hỏi không thành công** | | |
| 1. **E05** vào giao diện **E12** 2. **E05** chọn danh sách **Đã đăng** 3. **E12** tương tác với **E10** thông qua web service lấy danh sách câu hỏi đã trả lời 4. **E12** hiển thị danh sách câu hỏi. 5. **E05** chọn câu hỏi cần hạ khỏi internet 6. **E05** chọn **Hạ câu hỏi.** 7. **E12** lưu requires drop-dict xuống **E15, E16** thông qua **E10** 8. **E15, E16** lưu thông tin loại câu hỏi 9. **E12** hiển thị thông báo không thành công. | | |

Table 81: Descrip usecase Drop-dict trên android app

##### Create question trên android app

|  |  |  |  |
| --- | --- | --- | --- |
| **Usecase** | Create question trên android app | **Usecase ID** | UC04.10 |
| **Description** | Cho phép Answer Department (**E05**) create question ở Dictionary management system (andrioid app) (**E12**) thông qua Dictionary management system (**E10**) | | |
| **Entities Involves** | * Answer Department (**E05**) * Dictionary management system (**E10**) * Dictionary management system (andrioid app) (**E12**) * Database intranet (**E15**) * Database internet (**E16**) | | |
| **Business rules** |  | | |
| **Preconditions** | * **E10, E12, E15, E16** đã sẵn sàng sử dụng * **E05** đã có tài khoản đăng nhập vào **E12** * **E05** đã đăng nhập vào **E12** * **E05** muốn create question | | |
| **Main flow** | 1. **E05** vào giao diện **E12** 2. **E05** chọn create question 3. **E12** hiển thị giao diện create question. 4. **E05** nhập thông tin câu hỏi 5. **E05** chọn **Lưu** 6. **E12** lưu câu hỏi xuống **E15, E16** thông qua **E10** 7. **E15, E16** lưu thông tin câu hỏi 8. **E12** hiển thị thông báo thành công. 9. **E12** hiển thị giao diện danh sách câu hỏi | | |
| **Post conditions** | Câu hỏi được tạo thành công | | |
| **Alternate flows** |  | | |
| **Exceptional flow** |  | | |

Table 82: Descrip usecase Create question trên android app

#### Dictionary display system (andrioid app)

##### Tìm kiếm trên android app hiển thị

|  |  |  |  |
| --- | --- | --- | --- |
| **Usecase** | Tìm kiếm trên android app hiển thị | **Usecase ID** | UC05.01 |
| **Description** | Cho phép User (**E06**) search question trong danh sách câu hỏi thông qua Dictionary display system (andrioid app) (**E13**) | | |
| **Entities Involves** | * User (**E06**) * Dictionary display system (**E11**) * Dictionary display system (andrioid app) (**E13**) * Database internet (**E16**) | | |
| **Business rules** |  | | |
| **Preconditions** | * **E11, E13, E16** đã sẵn sàng để sử dụng * **E06** muốn search question * Câu hỏi cần search đã được lưu trong **E16** | | |
| **Main flow** | 1. **E06** vào giao diện danh sách câu hỏi 2. **E13** tương tác với **E11** thông qua web service lấy danh sách câu hỏi 3. **E13** hiển thị danh sách câu hỏi. 4. **E06** nhập nội dung cần search vào khung search 5. **E06** chọn **Search** 6. **E13** gửi requires search câu hỏi xuống **E16** thông qua webservice trên **E11** 7. **E13** hiển thị những câu hỏi liên quan theo từ khóa search | | |
| **Post conditions** | Câu hỏi cần search được hiển thị theo từ khóa liên quan | | |
| **Alternate flows** | **Case A5:** | | |
| **A5.1: Câu hỏi cần search không tồn tại.**   1. **E06** chọn **Search** 2. **E13** gửi requires search câu hỏi xuống **E16** thông qua webservice trên **E11** 3. **E13** hiển thị thông báo câu hỏi không tồn tại. | | |
| **Exceptional flow** |  | | |

Table 83: Descrip usecase Tìm kiếm trên android app hiển thị

##### View question detail trên android app hiển thị

|  |  |  |  |
| --- | --- | --- | --- |
| **Usecase** | View question detail trên android app hiển thị | **Usecase ID** | UC05.02 |
| **Description** | Cho phép User (**E06**) xem nội dung chi tiết câu hỏi trong danh sách câu hỏi thông qua Dictionary display system (andrioid app) (**E13**) | | |
| **Entities Involves** | * User (**E06**) * Dictionary display system (**E11**) * Dictionary display system (andrioid app) (**E13**) * Database intranet (**E15**) * Database internet (**E16**) | | |
| **Business rules** |  | | |
| **Preconditions** | * **E11, E13** đã sẵn sàng để sử dụng * **E06** muốn xem chi tiết câu hỏi * Câu hỏi muốn xem chi tiết đã được tạo và lưu trong **E16** | | |
| **Main flow** | 1. **E06** vào giao diện danh sách câu hỏi 2. **E13** tương tác với **E16** thông qua webservice trên **E11** để lấy dữ liệu danh sách câu hỏi 3. **E13** hiển thị danh sách câu hỏi 4. **E06** chọn câu hỏi cần xem nội dung. 5. **E13** hiển thị nội dung câu hỏi kèm câu trả lời được chọn. | | |
| **Post conditions** | Nội dung câu hỏi được hiển thị | | |
| **Alternate flows** |  | | |
| **Exceptional flow** |  | | |

Table 84: Descrip usecase View question detail trên android app hiển thị

##### Create question trên android app hiển thị

|  |  |  |  |
| --- | --- | --- | --- |
| **Usecase** | Create question trên android app | **Usecase ID** | UC05.03 |
| **Description** | Cho phép User (**E06**) gửi câu hỏi đến cho Answer Department thông qua Dictionary display system (andrioid app) (**E13**) | | |
| **Entities Involves** | * User (**E06**) * Dictionary display system (**E11**) * Dictionary display system (andrioid app) (**E13**) * Database intranet (**E15**) | | |
| **Business rules** |  | | |
| **Preconditions** | * **E11, E13, E15** đã sẵn sàng để sử dụng * **E06** muốn create question * Email của **E06** tồn tại | | |
| **Main flows** | 1. **E06** vào giao diện danh sách câu hỏi 2. **E13** tương tác với **E16** thông qua webservice trên **E11** để lấy dữ liệu danh sách câu hỏi 3. **E13** hiển thị danh sách câu hỏi 4. **E06** nhập những thông tin requires (tên, email, tiêu đề và nội dung) 5. **E06** chọn **Gửi** 6. **E13** lưu câu hỏi xuống **E15** thông qua webservice trên **E11** 7. **E15** lưu câu hỏi 8. **E13** hiển thị thông báo đã gửi thành công | | |
| **Post conditions** | Câu hỏi được gửi **vào danh sách câu hỏi chưa trả lời** phục vụ cho **E05** có thể theo dõi và gửi câu trả lời đến cho user | | |
| **Alternate flows** | **Case A4:** | | |
| **A4.1: Thông tin không đầy đủ**   1. **E06** nhập những thông tin requires (tên, email, tiêu đề và nội dung) (thông tin không đầy đủ) 2. **E06** chọn **Gửi** 3. **E13** hiển thị thông báo thông tin không đầy đủ 4. **E06** nhập những thông tin requires (tên, email, tiêu đề và nội dung) (thông tin không đầy đủ) 5. **E06** chọn **Gửi** 6. **E13** lưu câu hỏi xuống **E15** thông qua webservice trên **E11** 7. **E15** lưu câu hỏi 8. **E13** hiển thị thông báo đã gửi thành công | | |
| **Exceptional flow** |  | | |

Table 85: Descrip usecase Create question trên android app hiển thị

#### User management module

##### Tạo tài khoản

|  |  |  |  |
| --- | --- | --- | --- |
| **Usecase** | Tạo tài khoản | **Usecase ID** | UC06.01 |
| **Description** | Cho phép Answer Department (**E05**) tạo được tài khoản mới thông qua Dictionary management system (**E10**) | | |
| **Entities Involves** | * Answer Department (**E05**) * Dictionary management system (**E10**) * Database intranet (**E15**) | | |
| **Business rules** |  | | |
| **Preconditions** | * **E10, E15** đã sẵn sàng để sử dụng * **E05** có tài khoản đăng nhập vào **E10** * **E05** đã đăng nhập vào **E10** * **E05** muốn tạo tài khoản mới | | |
| **Main flows** | 1. **E06** vào truy cập vào liên kết của **E10** 2. **E06** chọn **Đăng ký** 3. **E10** hiển thị giao diện đăng kí tài khoản mới 4. **E05** nhập thông tin tài khoản mới 5. **E05** chọn **Đăng ký** 6. **E10** lưu thông tin xuống **E15** 7. **E15** lưu thông tin 8. **E10** hiển thị thông báo lưu thành công | | |
| **Post conditions** | Tài khoản mới đã được tạo thành công | | |
| **Alternate flows** | **Case A4:** | | |
| **A4.1: Thông tin không đầy đủ**   1. **E06** nhập những thông tin requires (thông tin không đầy đủ) 2. **E06** chọn **Đăng ký** 3. **E10** hiển thị thông báo thông tin không đầy đủ 4. **E06** nhập những thông tin requires (thông tin không đầy đủ) 5. **E06** chọn **Đăng ký** 6. **E10** lưu thông tin xuống **E15** 7. **E15** lưu thông tin 8. **E10** hiển thị thông báo đã thành công | | |
| **Exceptional flow** |  | | |

Table 86: Descrip usecase Tạo tài khoản

##### Xem thông tin tài khoản

|  |  |  |  |
| --- | --- | --- | --- |
| **Usecase** | Xem thông tin tài khoản | **Usecase ID** | UC06.02 |
| **Description** | Cho phép Answer Department (**E05**) xem được thông tin tài khoản thông qua Dictionary management system (**E10**) | | |
| **Entities Involves** | * Answer Department (**E05**) * Dictionary management system (**E10**) * Database intranet (**E15**) | | |
| **Business rules** |  | | |
| **Preconditions** | * **E10, E15** đã sẵn sàng để sử dụng * **E05** có tài khoản đăng nhập vào **E10** * **E05** đã đăng nhập vào **E10** * **E05** muốn xem thông tin tài khoản | | |
| **Main flows** | 1. **E06** vào giao diện **E10** 2. **E10** hiển thị danh sách câu hỏi 3. **E05** chọn tên tài khoản 4. **E10** hiển thị giao diện thông tin tài khoản | | |
| **Post conditions** | Thông tin tài khoản được hiển thị thành công | | |
| **Alternate flows** |  | | |
| **Exceptional flow** |  | | |

Table 87: Descrip usecase Xem thông tin tài khoản

##### Đổi mật khẩu

|  |  |  |  |
| --- | --- | --- | --- |
| **Usecase** | Đổi mật khẩu | **Usecase ID** | UC06.02 |
| **Description** | Cho phép Answer Department (**E05**) xem được thông tin tài khoản thông qua Dictionary management system (**E10**) | | |
| **Entities Involves** | * Answer Department (**E05**) * Dictionary management system (**E10**) * Database intranet (**E15**) | | |
| **Business rules** |  | | |
| **Preconditions** | * **E10, E15** đã sẵn sàng để sử dụng * **E05** có tài khoản đăng nhập vào **E10** * **E05** đã đăng nhập vào **E10** * **E05** muốn xem thông tin tài khoản | | |
| **Main flows** | 1. **E06** vào giao diện **E10** 2. **E10** hiển thị danh sách câu hỏi 3. **E05** chọn **Đổi mật khẩu** 4. **E10** hiển thị giao diện đổi mật khẩu 5. **E05** nhập thông tin 6. **E05** chọn **Lưu** 7. **E10** lưu thông tin xuống **E15** 8. **E15** lưu thông tin 9. **E10** hiển thị thông báo lưu thành công | | |
| **Post conditions** | Mật khẩu được thay đổi thành công | | |
| **Alternate flows** |  | | |
| **Exceptional flow** |  | | |

Table 88: Descrip usecase Đổi mật khẩu

#### Hệ thống

##### Đăng nhập Article system

|  |  |  |  |
| --- | --- | --- | --- |
| **Usecase** | Đăng nhập Article system | **Usecase ID** | UC07.01 |
| **Description** | Cho phép Editor-in-chief (**E01**), Editor (**E02**), Reporter (**E03**), Catalog manager (**E04**) đăng nhập được vào Article system (**E07**) | | |
| **Entities Involves** | * Editor-in-chief (**E01**) * Editor (**E02**) * Reporter (**E03**) * Catalog manager (**E04**) * Article system (**E07**) * Database intranet (**E15**) | | |
| **Business rules** |  | | |
| **Preconditions** | * **E07, E15** đã sẵn sàng để sử dụng * **E01, E02, E03, E04** có tài khoản đăng nhập vào **E07** * **E01, E02, E03, E04** muốn đăng nhập vào **E07** | | |
| **Main flows** | 1. **E01, E02, E03, E04** truy cập vào liên kết Article system (**E07**) 2. **E10** hiển thị giao diện đăng nhập 3. **E01, E02, E03, E04** nhập thông tin đăng nhập 4. **E01, E02, E03, E04** chọn **Đăng nhập** 5. **E07** hiển thị giao diện danh sách bản tin | | |
| **Post conditions** | **E01, E02, E03, E04** đăng nhập thành công | | |
| **Alternate flows** | **Case A3:** | | |
| **A3.1. Nhập thông tin sai**   1. **E01, E02, E03, E04** nhập thông tin đăng nhập (thông tin sai) 2. **E01, E02, E03, E04** chọn **Đăng nhập** 3. **E07** hiển thị thông báo thông tin sai 4. **E01, E02, E03, E04** nhập lại thông tin (thông tin đúng) 5. **E01, E02, E03, E04** chọn **Đăng nhập** 6. **E07** hiển thị giao diện danh sách bản tin | | |
| **Exceptional flow** |  | | |

Table 89: Descrip usecase Đăng nhập Article system

##### Đăng xuất Article system

|  |  |  |  |
| --- | --- | --- | --- |
| **Usecase** | Đăng xuất Article system | **Usecase ID** | UC07.02 |
| **Description** | Cho phép Editor-in-chief (**E01**), Editor (**E02**), Reporter (**E03**), Catalog manager (**E04**) đăng xuất khỏi Article system (**E07**) | | |
| **Entities Involves** | * Editor-in-chief (**E01**) * Editor (**E02**) * Reporter (**E03**) * Catalog manager (**E04**) * Article system (**E07**) * Database intranet (**E15**) | | |
| **Business rules** |  | | |
| **Preconditions** | * **E07, E15** đã sẵn sàng để sử dụng * **E01, E02, E03, E04** có tài khoản đăng nhập vào **E07** * **E01, E02, E03, E04** muốn đăng xuất khỏi **E07** * **E01, E02, E03, E04** đang đăng nhập vào **E07** | | |
| **Main flows** | 1. **E01, E02, E03, E04** chọn đăng xuất 2. **E07** hiển thị giao diện đăng nhập | | |
| **Post conditions** | **E01, E02, E03, E04** đăng xuất thành công | | |
| **Alternate flows** |  | | |
| **Exceptional flow** |  | | |

Table 90: Descrip usecase Đăng xuất Article system

##### Đăng nhập Dictionary management system

|  |  |  |  |
| --- | --- | --- | --- |
| **Usecase** | Đăng nhập Dictionary management system | **Usecase ID** | UC07.03 |
| **Description** | Cho phép Answer Department (**E05**) đăng nhập đươợc vào Dictionary management system (**E10**) | | |
| **Entities Involves** | * Answer Department (**E05**) * Dictionary management system (**E10**) * Database intranet (**E15**) | | |
| **Business rules** |  | | |
| **Preconditions** | * **E10, E15** đã sẵn sàng để sử dụng * **E05** có tài khoản đăng nhập vào **E10** * **E05** muốn đăng nhập vào **E10** | | |
| **Main flows** | 1. **E05** truy cập vào liên kết Dictionary management system (**E10**) 2. **E10** hiển thị giao diện đăng nhập 3. **E05** nhập thông tin đăng nhập 4. **E05** chọn **Đăng nhập** 5. **E10** hiển thị giao diện danh sách câu hỏi | | |
| **Post conditions** | **E05** đăng nhập thành công | | |
| **Alternate flows** | **Case A3:** | | |
| **A3.1. Nhập thông tin sai**   1. **E05** nhập thông tin đăng nhập (thông tin sai) 2. **E05** chọn **Đăng nhập** 3. **E10** hiển thị thông báo thông tin sai 4. **E05** nhập lại thông tin (thông tin đúng) 5. **E05** chọn **Đăng nhập** 6. **E10** hiển thị giao diện danh sách bản tin | | |
| **Exceptional flow** |  | | |

Table 91: Descrip usecase Đăng nhập Dictionary management system

##### Đăng xuất Dictionary management system

|  |  |  |  |
| --- | --- | --- | --- |
| **Usecase** | Đăng xuất Dictionary management system | **Usecase ID** | UC07.04 |
| **Description** | Cho phép Answer Department (**E05**) đăng xuất khỏi Dictionary management system (**E10**) | | |
| **Entities Involves** | * Answer Department (**E05**) * Dictionary management system (**E10**) * Database intranet (**E15**) | | |
| **Business rules** |  | | |
| **Preconditions** | * **E10, E15** đã sẵn sàng để sử dụng * **E05** có tài khoản đăng nhập vào **E10** * **E05** muốn đăng xuất khỏi **E10** * **E05** đang đăng nhập vào **E10** | | |
| **Main flows** | 1. **E05** chọn đăng xuất 2. **E10** hiển thị giao diện đăng nhập | | |
| **Post conditions** | **E05** đăng xuất thành công | | |
| **Alternate flows** |  | | |
| **Exceptional flow** |  | | |

Table 92: Descrip usecase Đăng xuất Dictionary management system

##### Đăng nhập android app

|  |  |  |  |
| --- | --- | --- | --- |
| **Usecase** | Đăng nhập công cụ android app | **Usecase ID** | UC07.05 |
| **Description** | Cho phép Answer Department (**E05**) đăng nhập được vào Dictionary management system (andrioid app) (**E12**) | | |
| **Entities Involves** | * Answer Department (**E05**) * Dictionary management system (**E12**) * Database intranet (**E15**) | | |
| **Business rules** |  | | |
| **Preconditions** | * **E12, E15** đã sẵn sàng để sử dụng * **E05** có tài khoản đăng nhập vào **E12** * **E05** muốn đăng nhập vào **E12** | | |
| **Main flows** | 1. **E05** truy cập vào liên kết Dictionary management system (andrioid app) (**E12**) 2. **E12** hiển thị giao diện đăng nhập 3. **E05** nhập thông tin đăng nhập 4. **E05** chọn **Đăng nhập** 5. **E12** hiển thị giao diện danh sách câu hỏi | | |
| **Post conditions** | **E05** đăng nhập thành công | | |
| **Alternate flows** | **Case A3:** | | |
| **A3.1. Nhập thông tin sai**   1. **E05** nhập thông tin đăng nhập (thông tin sai) 2. **E05** chọn **Đăng nhập** 3. **E10** hiển thị thông báo thông tin sai 4. **E05** nhập lại thông tin (thông tin đúng) 5. **E05** chọn **Đăng nhập** 6. **E10** hiển thị giao diện danh sách bản tin | | |
| **Exceptional flow** |  | | |

Table 93: Descrip usecase Đăng nhập android app

##### Đăng xuất android app

|  |  |  |  |
| --- | --- | --- | --- |
| **Usecase** | Đăng xuất Dictionary management system (andrioid app) | **Usecase ID** | UC07.06 |
| **Description** | Cho phép Answer Department (**E05**) đăng xuất khỏi Dictionary management system (andrioid app) (**E12**) | | |
| **Entities Involves** | * Answer Department (**E05**) * Dictionary management system (**E10**) * Database intranet (**E15**) | | |
| **Business rules** |  | | |
| **Preconditions** | * **E12, E15** đã sẵn sàng để sử dụng * **E05** có tài khoản đăng nhập vào **E12** * **E05** muốn đăng xuất khỏi **E12** * **E05** đang đăng nhập vào **E12** | | |
| **Main flows** | 1. **E05** chọn đăng xuất 2. **E12** hiển thị giao diện đăng nhập | | |
| **Post conditions** | **E05** đăng xuất thành công | | |
| **Alternate flows** |  | | |
| **Exceptional flow** |  | | |

Table 94: Descrip usecase Đăng xuất android app

# **Kịch bản chất lượng**

## Danh sách thuộc tính chất lượng

|  |  |
| --- | --- |
| **ID** | **Title of scenarios** |
| **Performance** | |
| [QAP01](#_Tìm_kiếm_bản_2) | Search articles on intranet |
| [QAP02](#_Tìm_kiếm_bản_3) | Search question on the intranet |
| [QAP03](#_Tìm_kiếm_câu_1) | Search question on the internet |
| [QAP04](#_Lưu_bản_tin) | Lưu bản tin trên intranet |
| [QAP05](#_Đăng_tin_internet) | Đăng tin lên internet |
| [QAP06](#_Đáp_ứng_1000) | Đáp ứng 1000 người truy cập với ít nhất là 2 giây |
| **Integrity** | |
| [QAI01](#_Tự_động_lưu) | Tự động lưu bản tin khi mất kết nối |
| **Security** | |
| [QAS01](#_Mã_hóa_mật) | Mã hóa mật khẩu |
| **Usability** | |
| [QAU01](#_Cấu_hình) | Cấu hình tập trung/phân tán |
| [QAU02](#_Giao_diện_trực) | Giao diện trực quan |
| **Modifiability** | |
| [QAM01](#_Thực_hiện_trên) | Thực hiện sang iOS |
| **Scalability** | |
| [QASc01](#_Mở_rộng_những) | Mở rộng tập trung/phân tán |
| **Reliability** | |
| [QAR01](#_Trả_về_nội) | Trả về nội dung tương ứng với từ khóa tìm kiếm |

Table 95: Danh sách thuộc tính chất lượng

## Kịch bản chất lượng

### Performance

#### Search articles on intranet

|  |  |
| --- | --- |
| **Title of scenario:**  **Search articles on intranet** | **ID: QAP01** |
| **Quality Attribute:**  Performance | **Characterization ID**: QAP |
| **Context** | Editor-in-chief, editor, reporter khi đưa nội dung Search articles, tại thời điểm đó Article system sẽ phản hồi những tin liên quan theo từ khóa được tìm kiếm ít nhất là 2 giây với số lượng ít hơn 10000 bản ghi trong database intranet |
| **Describe stakeholder role proposing the description:** Khách hàng và Kiến trúc sư trưởng | |
| **Stimulus** | Thực hiện chức năng tìm kiếm tại Article system |
| **Source(s) of the stimulus** | Phóng viên, editor, editor-in-chief |
| **Environment** | Article system đang hoạt động  Tộc độ đường truyền ổn dịnh: 100KB/s 🡪 200KB/s  Tình trạng kết nối ổn định |
| **Artifact stimulated** | Article system  Database intranet |
| **Response** | Hiển thị những tin cần tìm kiếm theo từ khóa liên quan |
| **Response measure(s)** | Chậm nhất là 2 giây với số lượng ít hơn 10000 bản ghi trong database intranet |
| **Associated risks** | Nếu không kết nối được intranet, Article system không thể sử dụng |

Table 96: Kịch bản chất lượng Search articles on intranet

#### Search articles on internet

|  |  |
| --- | --- |
| **Title of scenario:**  **Search question on the intranet** | **ID: QAP02** |
| **Quality Attribute:**  Performance | **Characterization ID**: QAP |
| **Context** | Chức năng tìm kiếm thông tin câu hỏi trên Dictionary management system cho phép answer department thực hiện chức năng tim kiếm ít nhất là 1 giây với số lượng ít hơn 10000 mẫu tin trong database intranet |
| **Describe stakeholder role proposing the description:** Khách hàng và Kiến trúc sư trưởng | |
| **Stimulus** | Thực hiện chức năng tìm kiếm trên Dictionary management system |
| **Source(s) of the stimulus** | Answer Department  Database intranet |
| **Environment** | Tình trạng kết nối ổn định  Tộc độ đường truyền ổn dịnh: 100KB/s 🡪 200KB/s  Dictionary management system đang hoạt động. |
| **Artifact stimulated** | Dictionary display system |
| **Response** | Hiển thị nội dung liên quan theo từ khóa tìm kiếm. |
| **Response measure(s)** | Chậm nhất là 1 giây với số lượng ít hơn 10000 mẫu tin trong database intranet |
| **Associated risks** | Nếu không kết nối được intranet, Dictionary management system không thể sử dụng |

Table 97: Kịch bản chất lượng Search articles on internet

#### Search question on the internet

|  |  |
| --- | --- |
| **Title of scenario:**  **Search question** | **ID: QAP03** |
| **Quality Attribute:**  Performance | **Characterization ID**: QAP |
| **Context** | Chức năng tìm kiếm thông tin câu hỏi trên Dictionary display system cho phép user thực hiện chức năng tim kiếm ít nhất là 2 giây với số lượng ít hơn 10000 mẫu tin trong danh sách index được tạo và ít hơn 1000 người truy cập. |
| **Describe stakeholder role proposing the description:** Khách hàng và Kiến trúc sư trưởng | |
| **Stimulus** | Thực hiện chức năng tìm kiếm trên Dictionary display system |
| **Source(s) of the stimulus** | User |
| **Environment** | Tình trạng kết nối ổn định  Tộc độ đường truyền ổn dịnh: 10MB  Dictionary display system đang hoạt động |
| **Artifact stimulated** | Dictionary display system |
| **Response** | Hiển thị nội dung liên quan theo từ khóa tìm kiếm. |
| **Response measure(s)** | Chậm nhất là 2 giây với số lượng ít hơn 10000 câu hỏi kèm câu trả lời trong database internet và ít hơn 1000 người truy cập |
| **Associated risks** | Nếu không kết nối được internet, hiển thị bộ từ điển không thể sử dụng |

Table 98: Kịch bản chất lượng Search question on the internet

#### Lưu bản tin intranet

|  |  |
| --- | --- |
| **Title of scenario:**  **Lưu bản tin trên intranet** | **ID: QAP03** |
| **Quality Attribute:**  Performance | **Characterization ID**: QAP |
| **Context** | Editor-in-chief, editor hay reporter create article và khi lưu xuống Article system trên intranet ít nhất là 2 giây. |
| **Describe stakeholder role proposing the description:** Khách hàng và Kiến trúc sư trưởng | |
| **Stimulus** | Thực hiện chức lưu bản tin xuống Article system |
| **Source(s) of the stimulus** | Editor-in-chief, editor, reporter |
| **Environment** | Article system đang hoạt động  Tình trạng kết nối ổn định  Tộc độ đường truyền ổn dịnh: 10MB |
| **Artifact stimulated** | Article system  Database intranet |
| **Response** | Hiển thị thông báo lưu thành công |
| **Response measure(s)** | Chậm nhất là 2 giây  Kích thước gói tin <= 10MB |
| **Associated risks** | - Nếu không kết nối được intranet, Article system không thể sử dụng |

Table 99: Kịch bản chất lượng Lưu bản tin intranet

#### Đăng tin internet

|  |  |
| --- | --- |
| **Title of scenario:**  **Đăng tin lên internet** | **ID: QAP04** |
| **Quality Attribute:**  Performance | **Characterization ID**: QAP |
| **Context** | Editor-in-chief thực hiện chức năng đăng tin từ Article system lên Display article-inter ít nhất là 5 giây. |
| **Describe stakeholder role proposing the description:** Khách hàng và Kiến trúc sư trưởng | |
| **Stimulus** | Thực hiện chức năng đăng tin từ Article system lên Display article-inter |
| **Source(s) of the stimulus** | Editor-in-chief |
| **Environment** | Article system đang hoạt động  Công cụ hiển thị bải viết trên internet đang hoạt động  Web service trên Display article-inter đang hoạt động  Tình trạng kết nối ổn định  Tộc độ đường truyền ổn dịnh: 10MB |
| **Artifact stimulated** | Article system  Web service trên Display article-inter  Display article-inter |
| **Response** | Hiển thị thông báo đã đăng tin thành công |
| **Response measure(s)** | Ít nhất là 5 giây  Kích thước gói tin <= 10MB |
| **Associated risks** | - Nếu không kết nối được internet, công cụ soan tin không thể sử dụng |

Table 100: Kịch bản chất lượng Đăng tin internet

#### Đáp ứng 1000 người truy cập trong 2 giây

|  |  |
| --- | --- |
| **Title of scenario:**  **Đáp ứng 1000 truy cập với ít nhất là 2 giây** | **ID: QAP05** |
| **Quality Attribute:**  Performance | **Characterization ID**: QAP |
| **Context** | Dictionary display system phải đáp ứng được 1000 người truy cập với tốc độ hiển thị danh sách câu hỏi ít nhất là 2 giây |
| **Describe stakeholder role proposing the description:** Khách hàng và Kiến trúc sư trưởng | |
| **Stimulus** | Khi người dung truy cập Dictionary display system |
| **Source(s) of the stimulus** | User |
| **Environment** | Công cụ hiển thị bộ từ điển đang hoạt động  Tình trạng kết nối ổn định  Tộc độ đường truyền ổn dịnh: 10MB |
| **Artifact stimulated** | Dictionary display system  Database internet |
| **Response** | Đáp ứng được 1000 người truy cập. |
| **Response measure(s)** | Hiển thị danh sách câu hỏi ít nhất là 2 giây và ít hơn 1000 người  Trung bình trang hiển thị danh sách câu hỏi cho 1 người là 10kbs |
| **Associated risks** | - Nếu không kết nối được internet, toàn bộ Dictionary display system không thể sử dụng |

Table 101: Kịch bản chất lượng Đáp ứng 1000 người truy cập trong 2 giây

### Security

#### Mã hóa mật khẩu

|  |  |
| --- | --- |
| **Title of scenario:**  **Mã hóa mật khẩu** | **ID: QAS01** |
| **Quality Attribute:**  Security | **Characterization ID**: QAS |
| **Context** | Tất cả users sử dụng Article system, Dictionary management system và công cụ quản trị bộ từ điển trên android, mật khẩu của họ phải được mã hóa (MD5) và được lưu xuống database intranet sau khi thực hiện chức năng đăng kí người dùng trên module user management. |
| **Describe stakeholder role proposing the description:** Khách hàng và Kiến trúc sư trưởng | |
| **Stimulus** | Đăng kí tài khoản người dùng trên module User management. |
| **Source(s) of the stimulus** | Quản trị hệ thống |
| **Environment** | User management module đang hoạt động.  Tình trạng kết nối ổn định  Tộc độ đường truyền ổn dịnh: 100KB/s 🡪 200KB/s |
| **Artifact stimulated** | Module quản trị hệ thống  Database intranet |
| **Response** | Mật khẩu được mã hóa (MD5) và được lưu xuống database intranet |
| **Response measure(s)** | Trả về mật khẩu dạng MD5 |
| **Associated risks** | - Nếu không kết nối được intranet, chức năng tạo user trên user management module không thể sử dụng. |

Table 102: Kịch bản chất lượng Mã hóa mật khẩu

### Integrity

#### Tự động lưu bản tin khi mất kết nối

|  |  |
| --- | --- |
| **Title of scenario:**  **Tự động lưu khi bị mất kết nối** | **ID: QAI01** |
| **Quality Attribute:**  Integrity | **Characterization ID**: QAI |
| **Context** | User đang thao tác tạo bản tin/ send mail trên Article system hay công công quản trị bộ từ điển thì bị mất kết nối, nội dung bản tin và câu hỏi sẽ được tự động lưu vào danh sách đã lưu. |
| **Describe stakeholder role proposing the description:** Khách hàng và Kiến trúc sư trưởng | |
| **Stimulus** | Đang thực hiện chức năng soạn bản tin/câu trả lời thì mất kết nối |
| **Source(s) of the stimulus** | Editor-in-chief, editor, phòng viên, answer department |
| **Environment** | Công cụ quản trị bộ từ điển hay công cụ soan tin đang hoạt động  Tình trạng mất kết nối |
| **Artifact stimulated** | Công cụ quản trị bộ từ điển  Công cụ soan tin  Database intranet |
| **Response** | Hiển thị thông báo mất kết nối và bản tin/ câu trả lời đã được lưu vào danh sách đã lưu |
| **Response measure(s)** | Mẫu tin/câu trả lời được lưu lại với tính toàn vẹn 60% - 100% mẫu tin/câu trả lời. |
| **Associated risks** | Nếu bị mất điện thì Dictionary management system/Article system không đảm bảo thuộc tính chất lượng này. |

Table 103: Kịch bản chất lượng Tự động lưu bản tin khi mất kết nối

### Usability

#### Cấu hình

|  |  |
| --- | --- |
| **Title of scenario:**  **Cấu hình** | **ID: QAU01** |
| **Quality Attribute:**  Usability | **Characterization ID**: QAU |
| **Context** | User có khả năng tự cấu hình cho Dictionary management system và Dictionary display system chạy tập trung hoặc phân tán. |
| **Describe stakeholder role proposing the description:** Khách hàng và Kiến trúc sư trưởng | |
| **Stimulus** | Cấu hình cho Dictionary management system và Dictionary display system chạy tập trung và phấn tán |
| **Source(s) of the stimulus** | User |
| **Environment** | Dictionary display system đang hoạt động  Dictionary management system đang hoạt động  Tình trạng kết nối ổn định  Tộc độ đường truyền ổn dịnh: 100KB/s 🡪 200KB/s |
| **Artifact stimulated** | Dictionary display system  Dictionary management system |
| **Response** | Hiển thị kết quả cấu hình thành công |
| **Response measure(s)** |  |
| **Associated risks** |  |

Table 104: Kịch bản chất lượng Cấu hình

#### Giao diện trực quan

|  |  |
| --- | --- |
| **Title of scenario:**  **Giao diện trực quan** | **ID: QAU02** |
| **Quality Attribute:**  Usability | **Characterization ID**: QAU |
| **Context** | User thực hiện chức năng soạn thảo bản tin/send mail với giao diện trực quan dễ sử dụng (được thực hiện với công cụ FCKeditor). |
| **Describe stakeholder role proposing the description:** Khách hàng và Kiến trúc sư trưởng | |
| **Stimulus** | Thực hiện soạn thảo bản tin hay send mail với giao diện trực quan. |
| **Source(s) of the stimulus** | Editor-in-chief, editor, reporter, answer department |
| **Environment** | Article system đang hoạt động  Dictionary management system đang hoạt động  Tình trạng kết nối ổn định  Tộc độ đường truyền ổn dịnh: 100KB/s 🡪 200KB/s |
| **Artifact stimulated** | Dictionary display system  Dictionary management system |
| **Response** | User dễ dàng soạn thảo bản tin/câu trả lời |
| **Response measure(s)** | Trực quan như trên Microsoft Word |
| **Associated risks** |  |

Table 105: Kịch bản chất lượng Giao diện trực quan

### Modifiability

#### Thực hiện trên iOS app

|  |  |
| --- | --- |
| **Title of scenario:**  **Chuyển đối sang iOS** | **ID: QAM01** |
| **Quality Attribute:**  Modifiability | **Characterization ID**: QAM |
| **Context** | Người sở hữu sản phẩm mong muốn khi mà thực hiện ứng dụng quản trị bộ từ điển và quản trị bộ từ điển trên Android sang iOS thì mất 3 tuần với 6 thành viên. |
| **Describe stakeholder role proposing the description:** Khách hàng | |
| **Stimulus** | Mong muốn ứng dụng quản trị bộ từ điển/hiển thị bộ từ điển chạy trên hệ điều hành iOS |
| **Source(s) of the stimulus** | Khách hàng |
| **Environment** | Tại thời điểm thiết kế |
| **Artifact stimulated** | Dictionary management system và hiển thị bộ từ điển |
| **Response** | Đáp ứng việc thực hiện sang nền tảng iOS |
| **Response measure(s)** | 3 tuần (1 ngày - 8 tiếng)  6 thành viên trong đội ngủ phát triển |
| **Associated risks** | - Nếu không đủ 6 thành viên trong đội phát triển hoặc những người ngoài đội không nắm rõ kỹ thuật hoặc đặc tả kiến trúc sẽ có thể mất hơn 3 tuần. |

Table 106: Kịch bản chất lượng Thực hiện iOS app

### Scalability

#### Mở rộng những chức năng trên các công cụ

|  |  |
| --- | --- |
| **Title of scenario:**  **Khả năng mở rộng** | **ID: QASc01** |
| **Quality Attribute:**  Scalability | **Characterization ID**: QASc |
| **Context** | Hệ thống hiện tại có khả năng phân tán thành các component ( Article system, Dictionary management system, Dictionary display system) thành các component độc lập và có thể chạy trên các máy khác nhau. |
| **Describe stakeholder role proposing the description:** Khách hàng và Kiến trúc sư trưởng | |
| **Stimulus** | Phân tán thành các component ( Article system, Dictionary management system, Dictionary display system) thành các component độc lập và có thể chạy trên các máy khác nhau. |
| **Source(s) of the stimulus** | Khách hàng |
| **Environment** | Các công cụ đang hoạt động bình thường. |
| **Artifact stimulated** | Dictionary management system  Dictionary display system  Article system |
| **Response** | Phân tán các công cụ thành các components độc lập |
| **Response measure(s)** |  |
| **Associated risks** |  |

Table 107: Kịch bản chất lượng Mở rộng những chức năng trên các công cụ

### Reliability

#### Trả về nội dung tương ứng với từ khóa cần tìm kiếm

|  |  |
| --- | --- |
| **Title of scenario:**  **Trả về nội dung tương ứng với từ khóa tìm kiếm** | **ID: QAR01** |
| **Quality Attribute:**  Reliability | **Characterization ID**: QAR |
| **Context** | Users nhập từ khóa tìm kiếm trên các Dictionary display system, quản trị bộ từ điển và soạn tin. Các công cụ trả về nội dung tương ứng với từ khóa cần tìm kiếm với độ tin cậy hơn 80% từ khóa liên quan trong danh sách index được tạo |
| **Describe stakeholder role proposing the description:** Khách hàng và Kiến trúc sư trưởng | |
| **Stimulus** | Nhập từ khóa cần tìm kiếm, các công cụ trả về nội dung tương ứng với từ khóa cần tìm kiếm với độ tin cậy trả về hơn 80% từ khóa liên quan trong danh sách index được tạo |
| **Source(s) of the stimulus** | Editor-in-chief, editor, reporter, User, answer department |
| **Environment** | Dictionary display system đang hoạt động  Dictionary management system đang hoạt động  Công cụ soan tin đang hoạt động |
| **Artifact stimulated** | Dictionary management system  Dictionary display system  Article system |
| **Response** | Các công cụ trả về nội dung liên quan với từ khóa tìm kiếm |
| **Response measure(s)** | Độ tin cậy hơn 80% những từ khóa liên quan trong danh sách index được tạo |
| **Associated risks** | - Nếu không kết nối được internet/intranet, các công cụ không thể sử dụng |

Table 108: Kịch bản chất lượng Trả về nội dung tương ứng với từ khóa cần tìm kiếm

# **Độ ưu tiên**

## Tham khảo

Tiêu chí đánh độ ưu tiên của các bên liên quan:

|  |  |
| --- | --- |
| **Mức độ ưu tiên** | **Description** |
| **High** | Tính năng và chất lượng được yêu cầu phát triển bởi khách hàng  Những yêu cầu chức năng và thuộc tính chất lượng được yêu cầu phát triển bởi khách hàng |
| **Medium** | Những yêu cầu chức năng và thuộc tính chất lượng đề xuất và được khách hàng duyệt. |
| **Low** | Những yêu cầu chức năng và thuộc tính chất lượng mà khách hàng có ý định phát triển không nằm trong kế hoạch dự án |

Table 109: Tiêu chí đánh độ ưu tiên của các bên liên quan

Tiêu chí đánh độ ưu tiên của Team phát triển:

|  |  |
| --- | --- |
| **Mức độ ưu tiên** | **Description** |
| **Hard** | Khi mà đội ngủ phát triển không chắc chắn cách thực hiện các trình điều khiển (Architectural Drivers) hoặc họ không có thông tin hay kinh nghiệm chuyên môn về các vấn đề, lĩnh vực họ đang thực hiện |
| **Challenging** | Khi mà đội ngủ phát triển hiểu được khái quát chung về cách thực hiện các trình điều khiển (Architectural drivers), họ nhận diện được những vấn đề và có ý niệm để giải quyết, nó như một thách thức đối với đội ngủ phát triển. |
| **Easy** | Khi mà đội ngủ phát triển có kinh nghiệm hay biết rất rõ về cách thực hiện, đáp ứng các trình điều khiển (Architectural drivers). |

Table 110: Tiêu chí đánh độ ưu tiên của Team

## Đánh độ ưu tiên

### Đánh độ ưu tiên usecase

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ID** | **Use Case** | **Stakeholder priority** | **Difficulty ranking** | **Final Priority** |
| Article system | | | | |
| UC01.01 | Create article | High | Hard | High |
| UC01.02 | Edit article | High | Challenging | Medium |
| UC01.03 | Search articles | Medium | Challenging | Medium |
| UC01.04 | Search related articles | Medium | Challenging | Medium |
| UC01.05 | View article | High | Challenging | Medium |
| UC01.06 | Preview articles | High | Challenging | Medium |
| UC01.07 | Transfer articles | High | Challenging | Medium |
| UC01.08 | Approve articles | High | Hard | High |
| UC01.09 | Return article | High | Hard | High |
| UC01.10.01 | Đăng tin | High | Challenging | Medium |
| UC01.10.02 | Upload article HTML | High | Challenging | Medium |
| UC01.11.01 | Hạ tin | High | Hard | High |
| UC01.11.02 | Drop article HTML | Medium | Hard | Medium |
| UC01.12 | Get articles | Medium | Challenging | Medium |
| UC01.13.01 | Ủy quyền | Medium | Hard | Medium |
| UC01.13.02 | Hủy ủy quyền | Medium | Hard | Medium |
| UC01.14 | Delete articles | High | Hard | High |
| UC01.15 | Deleted article permanently | Medium | Hard | Medium |
| UC01.16 | Sắp xếp tin | High | Challenging | Medium |
| UC01.17 | Comment | High | Challenging | Medium |
| UC01.18 | View catalog | High | Challenging | Medium |
| UC01.19 | Create catalog | Medium | Challenging | Medium |
| UC01.20 | Chỉnh sửa danh mục | High | Hard | High |
| UC01.21 | Delete catalog | High | Challenging | Medium |
| UC01.22 | Sort catalog | Medium | Challenging | Medium |
| UC01.23 | Create index cho bản tin | High | Hard | High |
| Dictionary management system | | | | |
| UC02.01 | Tìm kiếm | Medium | Hard | Medium |
| UC02.02 | View question detail | High | Challenging | Medium |
| UC02.03 | Send mail | High | Challenging | Medium |
| UC02.04.01 | Delete question | High | Challenging | Medium |
| UC02.04.02 | Delete more question | Medium | Challenging | Medium |
| UC03.05.01 | Khôi phục câu hỏi | Medium | Challenging | Medium |
| UC03.05.02 | Restore more question | High | Challenging | Medium |
| UC02.06 | Insert question into dict | Medium | Challenging | Medium |
| UC02.07 | Update question | Medium | Challenging | Medium |
| UC02.08.01 | Upload-dict | High | Hard | Medium |
| UC02.08.02 | Upload-dict more | High | Hard | Medium |
| UC02.09.01 | Drop-dict | High | Hard | Medium |
| UC02.09.02 | Drop-dict more | High | Hard | Medium |
| UC02.10 | Create index | High | Hard | Medium |
| UC02.11 | Create question | Medium | Challenging | Medium |
| UC02.12 | User config | High | Hard | Medium |
| UC02.13 | Mail config | High | Hard | Medium |
| UC02.14 | System config | High | Hard | Medium |
| UC02.15 | Help | Medium | Challenging | Medium |
| UC02.16 | Thay đổi phân trang | Medium | Challenging | Medium |
| Dictionary display system | | | | |
| UC03.01 | Search question | Medium | Hard | Medium |
| UC03.02 | Xem chi tiết câu hỏi | High | Challenging | Medium |
| UC03.03 | Create question | High | Challenging | Medium |
| UC03.04 | Thay đổi phân trang | Medium | Challenging | Medium |
| **Dictionary management system (andrioid app)** | | | | |
| UC04.01 | Tìm kiếm trên android app | Medium | Hard | Medium |
| UC04.02 | View question detail trên android app | High | Hard | High |
| UC04.03 | Send mail trên android app | High | Hard | High |
| UC04.04 | Delete question trên android app | High | Hard | High |
| UC04.05 | Khôi phục câu hỏi trên android app | Medium | Hard | Medium |
| UC04.06 | Insert question into dict trên android app | High | Hard | High |
| UC04.07 | Update question trên android app | Medium | Hard | Medium |
| UC04.08 | Upload-dict trên android app | High | Hard | High |
| UC04.09 | Drop-dict trên android app | High | Challenging | High |
| UC04.10 | Create question trên android app | Medium | Challenging | Medium |
| **Dictionary display system (andrioid app)** | | | | |
| UC05.01 | Search question trên android app | Medium | Hard | Medium |
| UC05.02 | Xem chi tiết câu hỏi trên android app | High | Hard | High |
| UC05.03 | Create question trên android app | High | Hard | High |
| **User management module** | | | | |
| UC06.01 | Tạo tài khoản | Medium | Easy | Low |
| UC06.02 | Xem thông tin tài khoản | Medium | Easy | Low |
| UC06.03 | Đổi mật khẩu | Medium | Easy | Low |
| **Hệ thống** | | | | |
| UC07.01 | Đăng nhập Article system | Medium | Easy | Low |
| UC07.02 | Đăng xuất Article system | Medium | Easy | Low |
| UC07.03 | Đăng nhập Dictionary management system | Medium | Easy | Low |
| UC07.04 | Đăng xuất Dictionary management system | Medium | Easy | Low |
| UC07.05 | Đăng nhập android app | Medium | Easy | Low |
| UC07.06 | Đăng xuất android app | Medium | Easy | Low |

Table 111: Đánh giá độ ưu tiên usecase

### Đánh độ ưu tiên thuộc tính chất lượng

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **ID** | **Title** | **Stakeholder priority** | **Difficulty ranking** | **Final Priority** |
| QAP01 | Search articles on intranet | Medium | Hard | Medium |
| QAP02 | Search question on the intranet | Medium | Hard | Medium |
| QAP03 | Search question on the internet | Medium | Hard | Medium |
| QAP04 | Lưu bản tin trên intranet | High | Hard | High |
| QAP05 | Đăng tin lên internet | High | Hard | High |
| QAP06 | Đáp ứng 1000 người truy cập với ít nhất là 2 giây | High | Hard | High |
| QAS01 | Mã hóa mật khẩu | Medium | Challenging | Medium |
| QAS03 | Không hiển thị lỗi hệ thống | Medium | Challenging | Medium |
| QAI01 | Tự động lưu khi bị mất kết nối | High | Hard | High |
| QAU01 | Cấu hình tập trung/phân tán | Medium | Hard | Medium |
| QAU02 | Giao diện trực quan | High | Challenging | Medium |
| QAM01 | Thực hiện sang iOS | Medium | Hard | Medium |
| QASc01 | Mở rộng tập trung/phân tán | High | Hard | High |
| QAR01 | Trả về nội dung tương ứng với từ khóa tìm kiếm | Medium | Challenging | Medium |

Table 112: Đánh độ ưu tiên thuộc tính chất lượng

### Đánh độ ưu tiên ràng buộc nghiệp vụ

|  |  |  |
| --- | --- | --- |
| **Description** | **Độ khó khăn** | **Chú thích** |
| Thời gian phát triển: 30 tuần | Medium |  |
| Nhân lực: 6 người | Medium |  |

Table 113: Đánh độ ưu tiên ràng buộc nghiệp vụ

### Đánh độ ưu tiên ràng buộc kĩ thuật

|  |  |  |
| --- | --- | --- |
| **Description** | **Độ khó khăn** | **Chú thích** |
| Hệ thống vận hành: Window 7, Android, Browser web Google chrome 23-25, Firefox 14-16, IE 9-11, android 2.0. | Medium |  |
| Nền tảng: Java platform | Medium |  |
| Ngôn ngữ: Java, Java Script, CSS, HTML | Medium |  |
| Công cụ and phương pháp: Eclipse, My SQL, Maven 2 | Medium |  |
| Giao thức, tiêu chuẩn, interfaces: J2EE, Spring 3 + hibernate, Lucene search | Medium |  |

Table 114: Đánh độ ưu tiên ràng buộc kĩ thuật