

Vietnamese Study System for Japanese

DETAIL DESIGN DOCUMENT

Data Design

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# Introduction

## Purpose

Vietnamese Study System for Japanese data design document describes structure of database and file structure of system including internal file structure as well as interface file structure.

## Definitions, Acronyms and Abbreviations

|  |  |  |
| --- | --- | --- |
| Abbreviations | Description | Comment |
| P/F | Primary/ Foreign key | Use to indicate that a field is a primary or foreign key in table |
| NOT | the attribute can’t be null | Set value “not null” for attribute in table |
| U | the attribute is unique | Set value “unique” for attribute in table |
| CRUD | Create, read, update, delete |  |

## References

List the entire reference document such as: other document of the system, or the technical article.

|  |  |
| --- | --- |
| Document Number | Title |
|  |  |
|  |  |

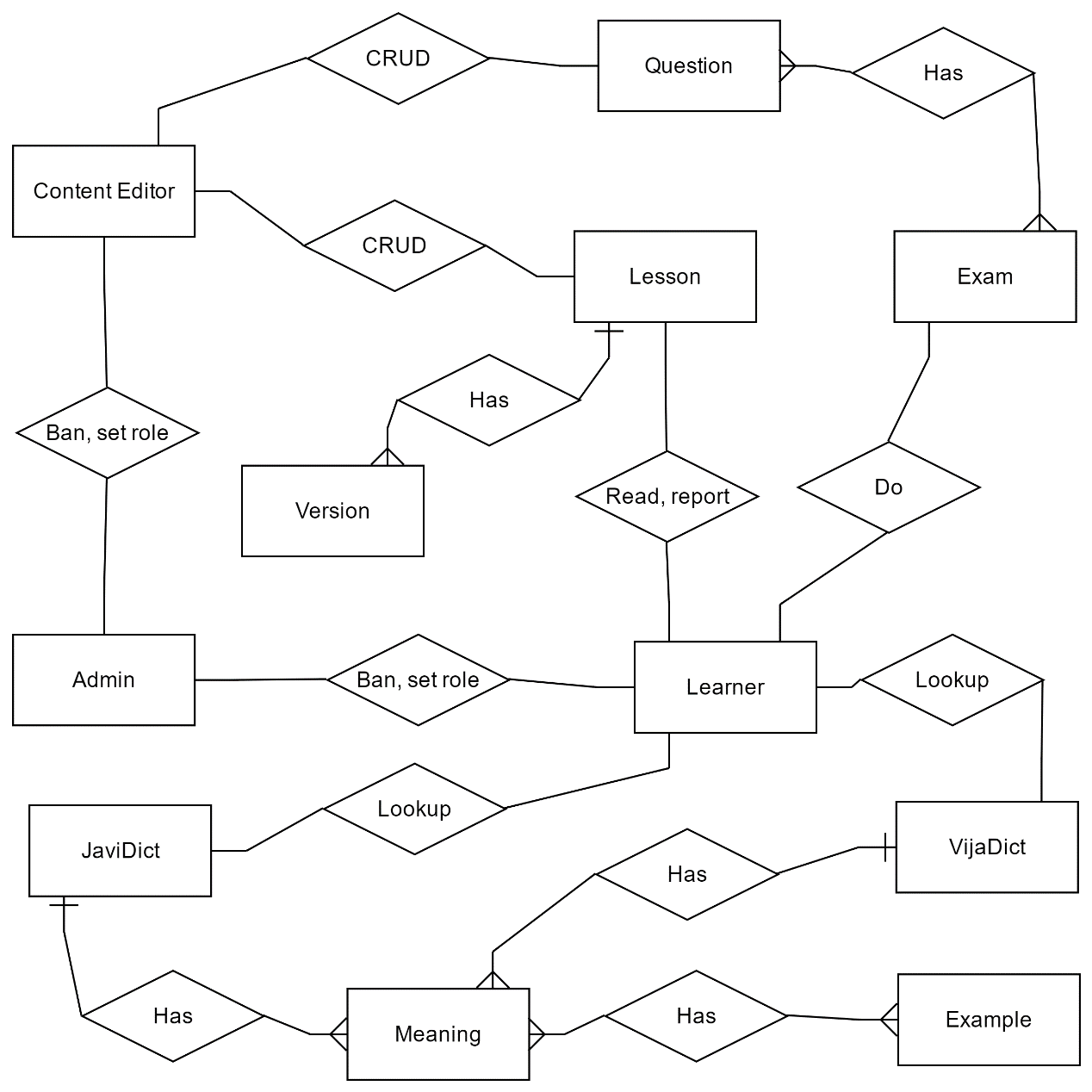
## Overview

General overview of the detail design such as what is the structure of the document: N/A

# Database

## ERDs

Entity relationship diagrams



**Figure 1: Entity relationship diagrams**

|  |  |  |
| --- | --- | --- |
| **No** | **Entity** | **Description** |
| 1 | Admin | System administrator |
| 2 | Learner | The end-user who learn on the website |
| 3 | Content Editor | The user who create, update lesson content and questions. |
| 4 | Question | Question for the exam |
| 5 | Lesson | The lesson |
| 6 | Version | The version of lesson |
| 7 | Exam | Examination for the user |
| 8 | VijaDict | Vietnamese-Japanese Dictionary |
| 9 | JaviDict | Japanese-Vietnamese Dictionary |
| 10 | Meaning | The meaning of word in dictionary |
| 11 | Example | Example for each meaning |

## Table Database

### Table diagram

Figure 2: Table diagram

n

List of tables and brief description

|  |  |  |
| --- | --- | --- |
| **No** | **Table Name** | **Description** |
|  | User | Store user information |
|  | course | Store course information |
|  | Question | Store question information |
|  | Answer | Store answer of question |
|  | QuestionModel\_content | Store child question of group question |
|  | Exam | Store all exam of user. |
|  | ExamAnswer | Store exam answer |
|  | lesson | Store lesson information |
|  | lessonversion | Store the version of lesson |
|  | report | Store user report |
|  | javi | Store Japanese Vietnamese dictionary |
|  | vija | Store Vietnamese Japanese dictionary |
|  | example | Store example for word meaning |

### User table

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| No | Field Name | Type | Max  Length | Null | Unique | P/F Key | Default | Description |
| 1 | id | integer |  | NOT |  | P |  | Auto increase |
| 2 | createdate | bigint |  |  |  |  |  |  |
| 3 | deletedate | bigint |  |  |  |  |  |  |
| 4 | deleteflag | boolean |  | NOT |  |  | FALSE |  |
| 5 | updatedate | bigint |  |  |  |  |  |  |
| 6 | address | character | 30 |  |  |  |  |  |
| 7 | bio | character |  |  |  |  |  | about me |
| 8 | dob | bigint |  |  |  |  |  | date of birth |
| 9 | email | character | 254 |  | U |  |  |  |
| 10 | password | character(32) |  | NOT |  |  |  | encrypted password |
| 11 | firstname | character |  |  |  |  |  |  |
| 12 | hobby | character |  |  |  |  |  |  |
| 13 | isbanned | boolean |  | NOT |  |  | FALSE |  |
| 14 | joindate | bigint |  | NOT |  |  |  |  |
| 15 | lastname | character | 30 |  |  |  |  |  |
| 16 | quote | character |  |  |  |  |  |  |
| 17 | role | integer |  | NOT |  |  | 3 |  |
| 18 | username | character | 30 | NOT | U |  |  |  |
| 19 | website | character |  | NOT |  |  |  |  |

### course table

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| No | Field Name | Type | Max  Length | Null | Unique | P/F Key | Default | Description |
| 1 | id | integer |  | NOT |  | P |  |  |
| 2 | des | character | 255 |  |  |  |  | description |
| 3 | name | character | 50 | NOT | U |  |  |  |

### Question table

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| No | Field Name | Type | Null | Unique | P/F Key | Default | Description |
| 1 | id | integer | NOT |  | P |  | Auto increase |
| 2 | createdate | bigint |  |  |  |  |  |
| 3 | deletedate | bigint |  |  |  |  |  |
| 4 | deleteflag | boolean | NOT |  |  | FALSE |  |
| 5 | updatedate | bigint |  |  |  |  |  |
| 6 | attachment | character |  |  |  |  |  |
| 7 | courseid | integer | NOT |  |  |  |  |
| 8 | creatorid | integer | NOT |  |  |  |  |
| 9 | numberofquestion | integer | NOT |  |  | 1 |  |
| 10 | question | character | NOT |  |  |  |  |
| 11 | questionanswertype | integer | NOT |  |  | 1 |  |
| 12 | questioncode | integer | NOT | U |  |  |  |
| 13 | questionskill | integer | NOT |  |  | 1 |  |
| 14 | questiontype | integer | NOT |  |  | 1 |  |
| 15 | state | integer | NOT |  |  | 1 |  |

### Answer table

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| No | Field Name | Type | Null | Unique | P/F Key | Default | Description |
|  | id | integer | NOT |  | P |  | Auto increase |
|  | createdate | bigint |  |  |  |  |  |
|  | deletedate | bigint |  |  |  |  |  |
|  | deleteflag | boolean | NOT |  |  |  |  |
|  | updatedate | bigint |  |  |  |  |  |
|  | answer | character | NOT |  |  |  |  |
|  | isright | boolean | NOT |  |  |  |  |
|  | questionmodel\_id | integer | NOT |  | F |  |  |

### QuestionModel\_content table

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| No | Field Name | Type | Null | Unique | P/F Key | Default | Description |
| 1 | QuestionModel\_id | integer | NOT |  | PF |  |  |
| 2 | content | integer |  |  |  |  |  |

### Exam table

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| No | Field Name | Type | Null | Unique | P/F Key | Default | Description |
| 1 | id | integer |  |  | P |  | Auto increase |
| 2 | createdate | bigint, |  |  |  |  |  |
| 3 | deletedate | bigint, |  |  |  |  |  |
| 4 | deleteflag | boolean | NOT |  |  | FALSE |  |
| 5 | updatedate | bigint, |  |  |  |  |  |
| 6 | courseid | integer | NOT |  |  |  |  |
| 7 | result | real | NOT |  |  | 0.0 |  |
| 8 | userid | integer | NOT |  |  |  |  |

### ExamAnswer table

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| No | Field Name | Type | Null | Unique | P/F Key | Default | Description |
| 1 | id | integer | NOT |  | P |  | Auto increase |
| 2 | createdate | bigint |  |  |  |  |  |
| 3 | deletedate | bigint |  |  |  |  |  |
| 4 | deleteflag | boolean | NOT |  |  | FALSE |  |
| 5 | updatedate | bigint |  |  |  |  |  |
| 6 | questionid | integer | NOT |  |  |  |  |
| 7 | useranswer | character | NOT |  |  |  |  |
| 8 | exammodel\_id | integer | NOT |  | F |  |  |

### lesson table

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| No | Field Name | Type | Null | Unique | P/F Key | Default | Description |
| 1 | id | integer | NOT |  | P |  | Auto increase |
| 2 | createdate | bigint |  |  |  |  |  |
| 3 | deletedate | bigint |  |  |  |  |  |
| 4 | deleteflag | boolean | NOT |  |  | FALSE |  |
| 5 | updatedate | bigint |  |  |  |  |  |
| 6 | courseid | integer | NOT |  |  |  |  |
| 7 | versionid | integer |  |  |  |  |  |

### lessonversion table

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| No | Field Name | Type | Null | Unique | P/F Key | Default | Description |
| 1 | id | integer | NOT |  | P |  | Auto increase |
| 2 | createdate | bigint |  |  |  |  |  |
| 3 | creatorid | integer | NOT |  |  |  |  |
| 4 | description | text | NOT |  |  |  |  |
| 5 | grammar | text |  |  |  |  |  |
| 6 | lessonid | integer | NOT |  |  |  |  |
| 7 | listening | text |  |  |  |  |  |
| 8 | practice | text |  |  |  |  |  |
| 9 | reading | text |  |  |  |  |  |
| 10 | state | integer | NOT |  |  | 1 |  |
| 11 | title | character | NOT |  |  |  |  |
| 12 | updatedate | bigint |  |  |  |  |  |
| 13 | version | integer | NOT |  |  | 1 |  |
| 14 | vocab | text |  |  |  |  |  |

### report table

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| No | Field Name | Type | Null | Unique | P/F Key | Default | Description |
| 1 | id | integer | NOT |  | P |  | Auto increase |
| 2 | content | character |  |  |  |  |  |
| 3 | createdate | bigint |  |  |  |  |  |
| 4 | deletedate | bigint |  |  |  |  |  |
| 5 | isdeleted | boolean | NOT |  |  | FALSE |  |
| 6 | lessonid | integer |  |  |  |  |  |
| 7 | questionid | integer |  |  |  |  |  |
| 8 | isread | boolean | NOT |  |  | FALSE |  |
| 9 | receiverid | integer |  |  |  |  |  |
| 10 | senderid | integer |  |  |  |  |  |

### javi table

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| No | Field Name | Type | Null | Unique | P/F Key | Default | Description |
| 1 | id | integer | NOT |  | P |  | Auto increase |
| 2 | kana | text |  |  |  |  |  |
| 3 | mean | text | NOT |  |  |  | json format |
| 4 | word | text | NOT |  |  |  |  |

### vija table

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| No | Field Name | Type | Null | Unique | P/F Key | Default | Description |
| 1 | id | integer | NOT |  | P |  | Auto increase |
| 3 | mean | text | NOT |  |  |  | json format |
| 4 | word | text | NOT |  |  |  |  |

### example table

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| No | Field Name | Type | Null | Unique | P/F Key | Default | Description |
| 1 | id | integer | NOT |  | P |  |  |
| 2 | ja | text | NOT |  |  |  | Japanese sentence |
| 3 | vi | text | NOT |  |  |  | Vietnamese sentence |

# Appendix

## Data format symbol

Following symbols are used to describe format of data field in files as well as in tables.

|  |  |
| --- | --- |
| Symbol | Description |
| # | Digit placeholder. |
| . | Decimal placeholder. |
| , | Thousands separator. |
| : | Time separator. |
| / | Date separator. |
| \ | Treat the next character in the mask string as a literal. This allows you to include the '#', '&', 'A', and '?' characters in the mask. This character is treated as a literal for masking purposes. |
| > | Convert all the characters that follow to uppercase. |
| < | Convert all the characters that follow to lowercase. |
| A | Alphanumeric character placeholder (entry required). |
| A | Alphanumeric character placeholder (entry optional). |
| 9 | Digit placeholder (entry optional). For example: 0 – 9. |
| 0 | Digit placeholder (entry required). For example: 0 – 9. |
| C | Character or space placeholder (entry optional). Valid values for this placeholder are ANSI characters in the following ranges: 32-126 and 128-255. |
| & | Character placeholder (entry required). Valid values for this placeholder are ANSI characters in the following ranges: 32-126 and 128-255. |
| ? | Letter placeholder. For example: a – z or A – Z. |
| Literal | All other symbols are displayed as literals; that is, as themselves. bound in “” like “ABC” |