CS 561 Software Engineering

Fall 2017

Database Design Specification

Group Members：

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Table 0. Versions

NO.	Version	Date	Owner	Description
1	0.1	09/30/2017	Teng Li,Kang Li	First draft
2	0.2	10/02/2017	Teng Li, Kang Li	Add ta_name, ta_osu_id in t_question table, and the data of course_keywords in t_dictionary table
3	1.0	10/03/2017	Teng Li, Kang Li	1. Create t_keywords table 2. Add last_name and first_name in t_user table 3. Add preferred_time, num_liked, stdnt_last_name stdnt_first_name, ta_last_name and ta_first_name in t_question table
4	1.1	10/05/2017	Teng Li, Kang Li	Add connection example code
5	2.0	10/10/2017	Teng Li	1. Change osu_id to user_id in t_question and t_question_concern 2. osu_id could be NULL in the t_user
6	2.1	10/13/2017	Teng Li	1. Change Data Type of osu_id to varchar in t_user

1. E-R Diagram

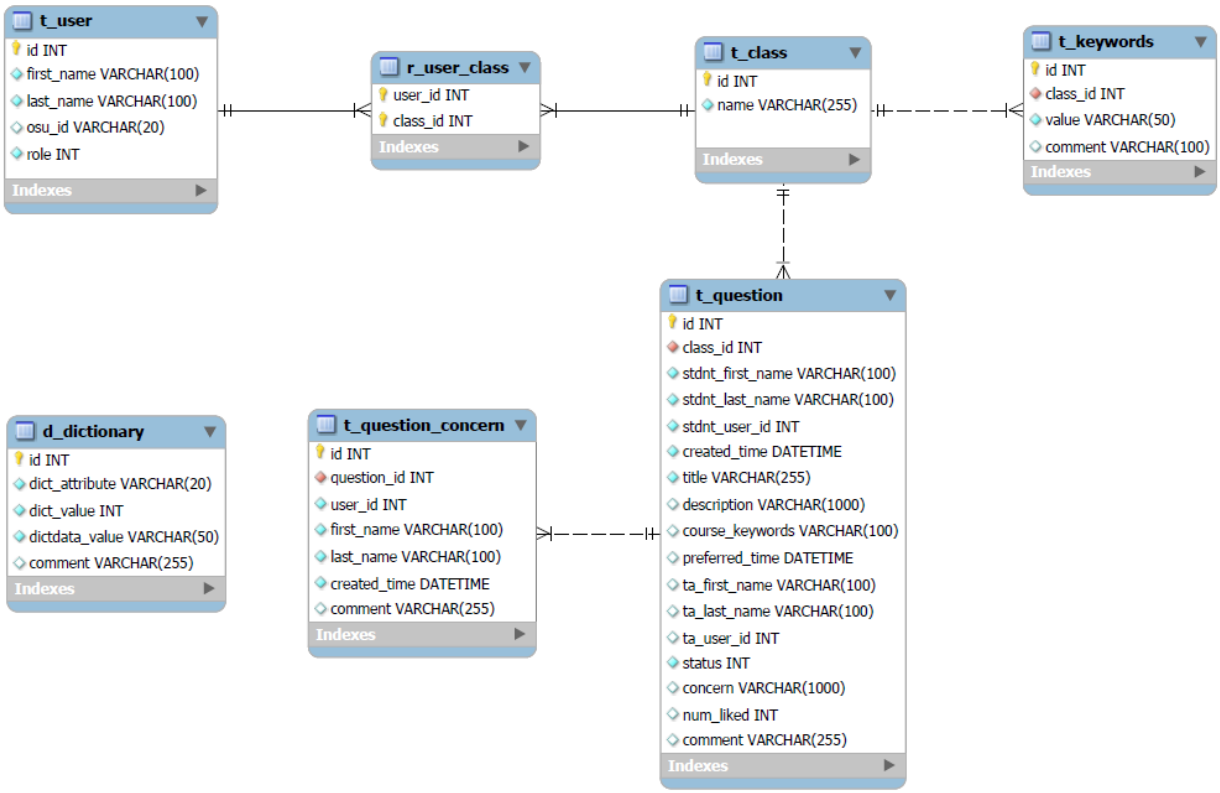

Figure 1.1 E-R diagram

2. Tables

Table 2.1. t_user

Column Name	Data Type	Not Null	Unique	Comments
id	INT(5)	Y	Y	PK
first_name	VARCHAR(100)	Y	N	
last_name	VARCHAR(100)	Y	N	
osu_id	VARCHAR(20)	N	Y	
role	INT(2)	Y	N	0 Student (default) 1 TA

Table 2.2. t_class

Column Name	Data Type	Not Null	Comments
id	INT(5)	Y	PK
name	VARCHAR(255)	Y	

Table 2.3. r_user_class

Column Name	Data Type	Not Null	Comments
user_id	INT(5)	Y	fk_r_user_class_to_t_user
class_id	INT(5)	Y	fk_r_user_class_to_t_class

Hints: primary key (user_id, class_id)

Table 2.4. t_question

Column Name	Data Type	Not Null	Comments
id	INT(5)	Y	PK
class_id	INT(5)	Y	fk_t_question_to_t_class
stdnt_first_name	VARCHAR(100)	Y	
stdnt_last_name	VARCHAR(100)	Y	
stdnt_user_id	INT(10)	Y	
created_time	Datetime	Y	
title	VARCHAR(100)	Y	
description	VARCHAR(100)	N	
course_keywords	VARCHAR(100)	N	use “,”
preferred_time	Datetime	N	
ta_first_name	VARCHAR(100)	N	
ta_last_name	VARCHAR(100)	N	
ta_user_id	INT(10)	N	
status	INT(2)	Y	0 proposed (default) 1 answered 2 deleted 3 signed

concern	VARCHAR(100)	N	
num_liked	INT(3)	Y	
comment	VARCHAR(100)	N	

Table 2.5. t_question_concern

Column Name	Data Type	Not Null	Comments
id	INT(5)	Y	PK
question_id	INT(5)	Y	fk_t_question_concern_to_t_question
first_name	VARCHAR(100)	Y	
last_name	VARCHAR(100)	Y	
user_id	INT(10)	Y	
created_time	Datetime	Y	
comment	VARCHAR(100)	N	

Table 2.6. t_dictionary

Column Name	Data Type	Not Null	Comments
id	INT(5)	Y	PK
dict_attribute	ARCHAR(20)	Y	
dict_value	INT(2)	Y	
dict_data	VARCHAR(50)	Y	
comment	VARCHAR(100)	N	

Table 2.7. t_keywords

Column Name	Data Type	Not Null	Comments
id	INT(5)	Y	PK
class_id	INT(5)	Y	fk_t_keywords_to_t_class
value	VARCHAR(50)	Y	
comment	VARCHAR(100)	N	

3. Dictionary

Table 3.1. Initialized data

dict_attribute	dict_value	dict_data	comment
user_type	0	Student	
user_type	1	TA	
question_status	0	proposed	
question_status	1	answered	
question_status	2	deleted	
question_status	3	signed	

4. Connection Example

Table 4.1. Connection information

Hostname	oniddb.cws.oregonstate.edu
Database Name	~~%dbname%~~
Username	~~%username%~~
Password	~~%Password%~~

```
<?php

$dbhost = 'oniddb.cws.oregonstate.edu';
$dbname = '%dbname%';
$dbuser = '%username%';
$dbpass = '%Password%';

$mysql_handle = mysql_connect($dbhost, $dbuser, $dbpass)
   or die("Error connecting to database server");

mysql_select_db($dbname, $mysql_handle)
   or die("Error selecting database: $dbname");

echo 'Successfully connected to database!';

mysql_close($mysql_handle);

?>
```