Review Test Submission: Quiz 2

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Course	CS5200 41321 Database Management Sys SEC 01 - Summer 1 2017
Test	Quiz 2
Started	5/30/17 12:20 PM
Submitted	5/30/17 1:26 PM
Status	Needs Grading
Attempt Score	Grade not available.
Time Elapsed	1 hour, 5 minutes
Results Displayed	Submitted Answers, Correct Answers, Feedback, Incorrectly Answered Questions

Question 1

Needs Grading

Construct a UML diagram for the following scenario: suppose you are constructing a database to track blog posts, blog post comments and topics (represented via key word phrases) referenced in each blog post and referenced in each blog post comment for a specific political blog. A blog post is created by 1 or more authors of the blog. A blog post comment is created by 1 reader of the blog and is in response to a specific blog post.

- Each blog post has the text that compose the post, a collection of authors, a title, a publication date, and a unique blog post identifier. The blog post text is used to identify the key word phrases within the blog post. The key word phrases are then mapped to a collection of corresponding political topics.
- Each author has a name, an affiliation, and an email address
- Each reader (readers create blog post comments) has a name, and an email address
- A blog post comment has the text that compose the blog post comment, one creator (a reader of the blog), and a publication date. The blog post comment text is used to identify the key word phrases within the blog post comment. The key word phrases are then mapped to a collection of corresponding political topics.
- To identify the collection of political topics you are interested in tracking, you have created a list of specific key word phrases that represent the targeted political topics. You track the occurrences of specific key word phrases that appear in the posts and in the blog post comments. A key word phrase represents 1 to many political topics and a political topic may be represented by one of many different key word phrases. For example, the political topic *2016 primary* is represented via any one of the following comma separated key word phrases: (primary, trump, Hillary, clinton, sanders, feel the bern, rubio, cruz, bush) while the political topic *Benghazi* could be represented via any one of the following comma separated key word phrases (clinton, Chris Stevens, Susan Rice, Benghazi, Libya).
- Key word phrases are alphanumeric strings that are proxies for the targeted political topics. You identify the occurrences of a key word phrase within a particular post (or blog post comment); this is called a key word phrase instance. Each key word phrase instance has a position within the particular blog post (or blog post comment). Key word phrase positions are integers that increment for each word position within the specific post or comment. A key word phrase position is unique for each word within a specific post or post comment. Key word phrase positions are not unique across the blog. A particular key word phrase may appear multiple times within a post or within a post comment. You track all occurrences of each key word phrase.

1- Identify the entities, attributes, relationships, and multiplicity constraints i.e. (0..1, 1..1, 1..*, *..*) from the description above. Please add any additional identifying attributes that might be necessary to uniquely represent the entities within the schema as well as within the relations. Clearly list any assumptions you make. (40pts)
2- Clearly indicate primary keys, the foreign keys, and the constraints (participation, cardinality) in the UML diagram. (20pts)
3- All your relations should be in third normal form. (20 pts)

Selected Answer: Quiz2_Wan.zip
Response Feedback: [None Given]

Question 2

5 out of 5 points

Classify the following relation as either unnormalized, 1NF, 2NF, or 3NF

Employee (**employeeNo**, employeeName, jobCode)

employeeNo determines *employeeName*

employeeNo determines *jobCode*

Selected Answer: 3NF

Correct Answer: 3NF

Question 3

0 out of 5 points

Classify the following relation as either unnormalized, 1NF, 2NF, or 3NF

Employee (**employeeNo**, employeeName, **project**, hoursWorked)

employeeNo determines *employeeName*

employeeNo and *project* determine *hoursWorked*

Selected Answer: 2NF

Correct Answer: 1NF

Question 4

5 out of 5 points

For the table shown below, how many records does the following SQL statement generate?

SELECT * FROM EXAM_RESULTS WHERE LAST_NAME LIKE '%N%' AND EXAM_SCORE > 89;

Table EXAM_RESULTS

STUDENT_ID	FIRST_NAME	LAST_NAME	EXAM_ID	EXAM_SCORE
10	LAURA	LYNCH	1	90
10	LAURA	LYNCH	2	85
11	GRACE	BROWN	1	78
11	GRACE	BROWN	2	72
12	JAY	JACKSON	1	95
12	JAY	JACKSON	2	92
13	WILLIAM	BISHOP	1	70
13	WILLIAM	BISHOP	2	100
14	CHARLES	PRADA	2	85

Selected Answer: 3

Correct Answer: 3

Question 5

5 out of 5 points

Which of the following is false about the ALTER TABLE statement when used on the following table ?

Table EXAM_RESULTS

STUDENT_ID	FIRST_NAME	LAST_NAME	EXAM_ID	EXAM_SCORE
10	LAURA	LYNCH	1	90
10	LAURA	LYNCH	2	85
11	GRACE	BROWN	1	78
11	GRACE	BROWN	2	72
12	JAY	JACKSON	1	95
12	JAY	JACKSON	2	92
13	WILLIAM	BISHOP	1	70
13	WILLIAM	BISHOP	2	100
14	CHARLES	PRADA	2	85

Selected Answer: It can add the following row to the table.

15	James	Gorden	2	89

Correct Answer: It can add the following row to the table.

15	James	Gorden	2	89

Tuesday, May 30, 2017 1:26:40 PM EDT

← OK