Coursework2-Presentation

Name: Tianpeng Huang

Title of assessment: 23111-Cwk2-S-Advanced Databases

Module code: COMP23111

Date: 25/11/2021

Part A: Normalisation

UNF-Identify all fields and sample data. Identify key and underline it

Quiz <u>ID</u>	34		
Quiz Name	SQL		
Quiz Author	Peter Parker		
Quiz Available	Yes		
Quiz Duration	60 minutes		
<u>Student</u> <u>ID</u>	44		
Student Name	Duncan Hull		
Date of Attempt	22/11/2020		
<u>Question_id</u>	1	2	3
Question_title	Which SQL statement is used to extract data from a database?	Which SQL statement is used to insert new data in a database?	With SQL,how do you select all the records from a table named "Persons" where the value of the column "FirstName" is "Peter"?
Question_option	SELECT OPEN EXTRA CTGET	INSERT NEW INSERT INTO ADD RECORD ADD NEW	SELECT*FROM Persons WHERE FIRSTNAME<'Peter' SELECT [all] FROM Person WHERE FirstName ='Peter' SELECT*FROM Persons WHERE FirstName = 'Peter' SELECT [all] FROM Person WHERE FirstName LIKE 'Peter'

1NF – Remove Repeating Attributes, identify new compound key

Quiz ID	34
Quiz Name	SQL
Quiz Author	Peter Parker
Quiz Available	Yes
Quiz Duration	60 minutes
Student ID	44
Student Name	Duncan Hull
Date of Attempt	22/11/2020

Quiz ID	34
Question_id	1
Question_title	Which SQL statement is used to extract data from a database?
Question_option	SELECT OPEN EXTRA CTGET

2NF – Check Partial Dependencies, Remove any to new table with copy of determinant

Quiz ID	34
Quiz Name	SQL
Quiz Author	Peter Parker
Quiz Available	Yes
Quiz Duration	60 minutes

Student ID	44
Student Name	Duncan Hull

Quiz ID	34
Student ID	44
Date of Attempt	22/11/2020

Quiz ID	34
Question_id	1
Question_title	Which SQL statement is used to extract data from a database?
Question_option	SELECT OPEN EXTRA CTGET

3NF – Check Transitive Dependencies, Remove any to new table with copy of determinant

Quiz ID	34
Quiz Name	SQL
Quiz Author	Peter Parker
Quiz Available	Yes
Quiz Duration	60 minutes

Student ID	44
Student Name	Duncan Hull

Quiz ID	34
Student ID	44
Date of Attempt	22/11/2020

Quiz ID	34
Question_id	1
Question_title	Which SQL statement is used to extract data from a database?

Question_title	Which SQL statement is used to extract data from a database?
Question_option	SELECT OPEN EXTRA CTGET

Part B: Relational Schema

Quiz (<u>Quiz_id</u>, Quiz_name, Quiz_author, Quiz_available, Quiz_duration)
PK: Quiz_id
NOT NOLL: Quiz_id, Quiz_name, Quiz_author, Quiz_available, Quiz_duration

Student (<u>Student_id</u>, Student_name Student_password)
PK: Student_id
NOT NOLL:Student_id, Student_name Student_password

Staff (<u>Staff_id</u>, Student_name Student_password)
PK: Staff_id
NOT NOLL:Staff_id, Student_name Student_password

Student_Time (<u>Quiz_id,</u> <u>Student_id,</u> <u>Date</u>, Score)
PK: Quiz_id, Student_id, Date
FK: Quiz_id --> Quiz(Quiz_id)
     Student_id --> Student(Student_id)
NOT NOLL: Student_id, Student_id, Date, Score

Staff_Time (<u>Quiz_id,</u> <u>Staff_id,</u> <u>Date</u>, Score)
PK: Quiz_id, Staff_id, Date
FK: Quiz_id --> Quiz(Quiz_id)
     Staff_id --> Staff(Staff_id)
NOT NOLL: Staff_id, Staff_id, Date
DEFAULT Score = NULL

Question (<u>Quiz_id,</u> <u>Question_id</u>, Questions)
PK: Quiz_id, Question_id
FK: Quiz_id --> Quiz(Quiz_id)
NOT NOLL: Quiz_id, Question_id, Questions

Answer (<u>Quiz_id,</u> <u>Question_id,</u> <u>Options</u>, Answer, Score)
PK: Quiz_id, Question_id, Options
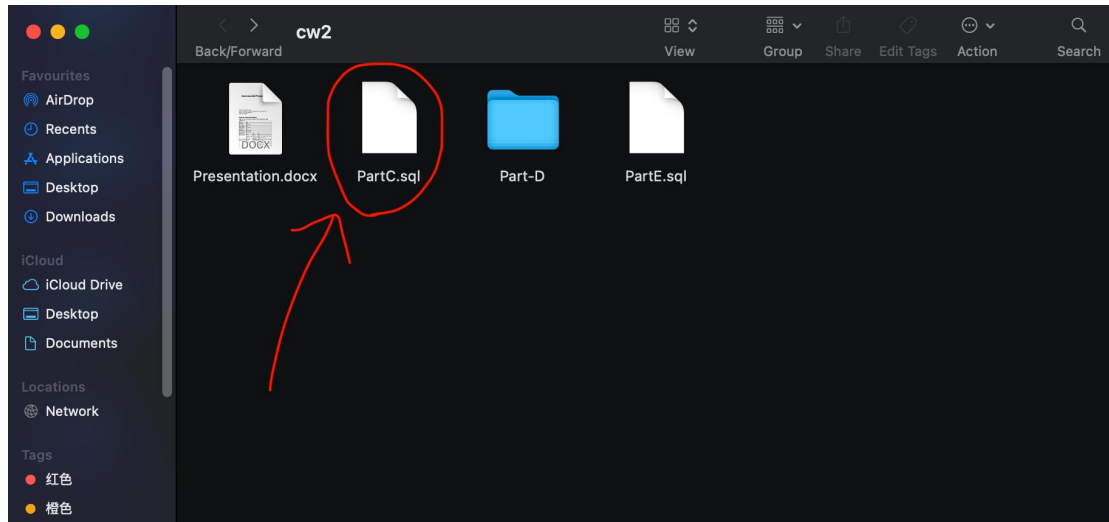FK: Quiz_id --> Quiz(Quiz_id)
     (Quiz_id,Question_id) --> Question(Quiz_id, Question_id)
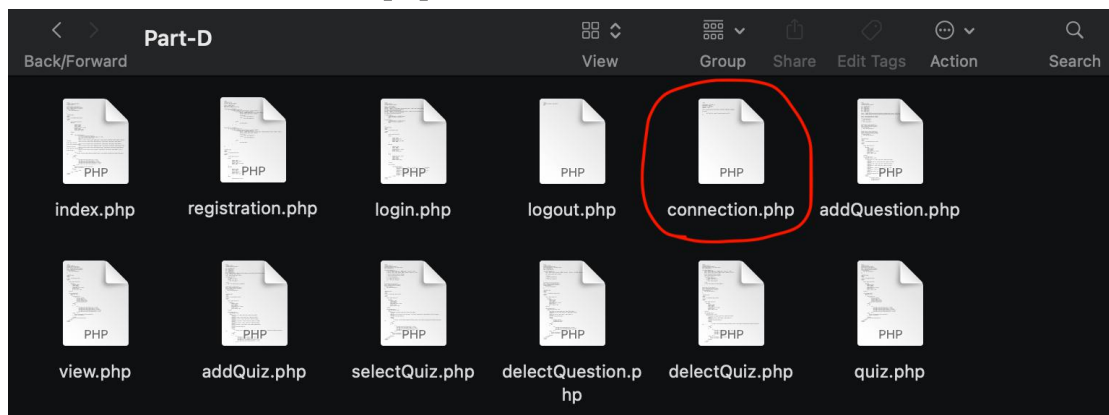NOT NOLL: Quiz_id, Question_id, Options, Answer
DEFAULT Score = NULL

Part C: Implementation

MySQL Statements used to implement my Part B schema. The Part C.sql file containing this code has been submitted, please see the folder I submitted.

Part D: The Application

Connect phpmyadmin and Mysql

Part E: Stored Procedures and Triggers