Dinesh Kumar Selvam

DATABASE COURSEWORK - 2

COMP 23111

7th December 2021

PART A: Normalisation

UNF:

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

Student	Student	Date of
ID	Name	Attempt
	Duncan	
44	Hull	22/11/2020

Quiz ID	Questions
34	1. Which SQL Statement is used to extract data from a database? SELECT OPEN EXTRACT GET
34	2. Which SQL Statement is used to insert new data in a database? INSERT NEW INSERT INTO ADD RECORD ADD NEW
34	3. With SQL, how do you select all the records from a table named "Persons" where the value of the column "FirstName" is "Peter"? 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:

		Quiz	Quiz	Quiz
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z ID	Name	or	ble	ion
		Peter		60
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34	1	Which SQL Statement is used to extract data from		SELECT	
34	1	a database?	1	SELECT	
34	1	Which SQL Statement is used to extract data from		OPEN	
J4	1	a database?	2	Of LIV	
34	1	Which SQL Statement is used to extract data from		EXTRACT	
J 4	1	a database?	3	LATINACT	
34	1	Which SQL Statement is used to extract data from		GET	
34	1	a database?	4	OLI	
34	2	Which SQL Statement is used to insert new data		INSERT NEW	
34		in a database?	1	INSLITE INLV	
34	2	Which SQL Statement is used to insert new data		INSERT INTO	
34	2	in a database?	2	INSLIT INTO	
34	2	Which SQL Statement is used to insert new data		ADD RECORD	
34	2	in a database?	3	ADD ILCOID	
34	2	Which SQL Statement is used to insert new data		ADD NEW	
34	2	in a database?	4	ADDINEW	
		With SQL, how do you select all the records from		SELECT* FROM	
34	3	a table named "Persons" where the value of the		Persons WHERE	
		column "FirstName" is "Peter"?	1	FIRSTNAME <> 'Peter'	
		With SQL, how do you select all the records from		SELECT [all] FROM	
34	3	a table named "Persons" where the value of the		Person WHERE	
		column "FirstName" is "Peter"?	2	FirstName = 'Peter'	
		With SQL, how do you select all the records from		SELECT* FROM	
34	3	a table named "Persons" where the value of the		Persons WHERE	
		column "FirstName" is "Peter"?	3	FirstName = 'Peter'	
		With SQL, how do you select all the records from		SELECT [all] FROM	
34	3	a table named "Persons" where the value of the		Person WHERE	
		column "FirstName" is "Peter"?	4	FirstName LIKE 'Peter'	

2NF:

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Q uiz ID	Qu esti on Nu mb er	Questions	Option 1	Option 2	Option 3	Option 4
34	1	Which SQL Statement is used to extract data from a database?	SELECT	OPEN	EXTRACT	GET
34	2	Which SQL Statement is used to insert new data in a database?	INSERT NEW	INSERT INTO	ADD RECORD	ADD NEW
34	3	With SQL, how do you select all the records from a table named "Persons" where the value of the column "FirstName" is "Peter"?	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'

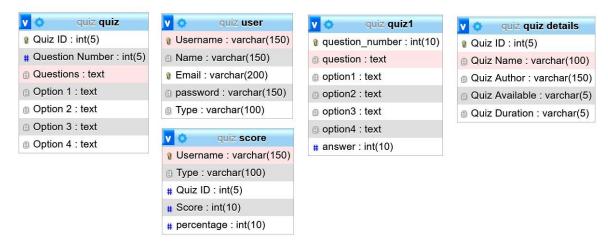
3NF:

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Q uiz ID	Qu esti on Nu mb er	Questions	Option 1	Option 2	Option 3	Option 4
34	1	Which SQL Statement is used to extract data from a database?	SELECT	OPEN	EXTRACT	GET
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PART B: Relational Schema



PART C: Implementation

```
CREATE TABLE IF NOT EXISTS `quiz`.`quiz details` ( `Quiz ID` INT(5) NOT NULL , `Quiz Name` VARCHAR(100) NOT NULL , `Quiz Author` VARCHAR(150) NOT NULL , `Quiz Available` VARCHAR(5) NOT NULL , `Quiz Duration` VARCHAR(5) NOT NULL , PRIMARY KEY (`Quiz ID`)) ENGINE = InnoDB;
```

CREATE TABLE IF NOT EXISTS `quiz`.`quiz` (`Quiz ID` INT(5) NOT NULL , `Question Number` INT(5) NOT NULL , `Questions` TEXT NOT NULL , `Option 1` TEXT NOT NULL , `Option 2` TEXT NOT NULL , `Option 3` TEXT NOT NULL , `Option 4` TEXT NOT NULL , PRIMARY KEY (`Quiz ID`)) ENGINE = InnoDB;

CREATE TABLE IF NOT EXISTS `quiz`.`score` (`Username` VARCHAR(150) NOT NULL , `Type` VARCHAR(100) NOT NULL , `Quiz ID` INT(5) NOT NULL , `Score` INT(10) NOT NULL, `percentage` INT(10) NOT NULL , PRIMARY KEY (`Username`)) ENGINE = InnoDB;

```
CREATE TABLE IF NOT EXISTS `quiz`.`user` ( `Username` VARCHAR(150) NOT NULL , `Name` VARCHAR(150) NOT NULL , `Email` VARCHAR(200) NOT NULL , `password` VARCHAR(150) NOT NULL , `Type` VARCHAR(100) NOT NULL , PRIMARY KEY (`Username`), UNIQUE (`Email`)) ENGINE = InnoDB;
```

PART D: Application

- 1. First Register as a staff.
- 2. Second Login using the staff credentials.
- 3. Third create a quiz.
- 4. Fourth Register as a student.
- 5. Fifth Login using student credentials.
- 6. Next attempt the quiz as the student and view scores.
- 7. Next Login as staff and try other options to modify the quiz.

NOTE: THIS APPLICATION WAS TESTED USING XAMMP APACHE SERVER AND XAMMP MYSQL SERVER USING PHPMYADMIN ON WINDOWS OS. THERE MIGHT BE SOME CHANGES/ERRORS WHEN EXECUTING IN A DIFFERENT ENVIRONMENT.