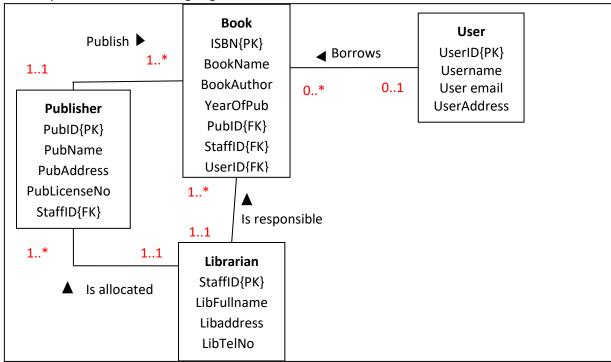


# 7BUIS030W Data System Concepts and Fundamentals Tutorial-06,2021

## **Tutorial 06 Question 01**

Carefully consider the following Logical ERD which was created in Tutorial 05.



#### Access the MySQL RDBMS through phpMyAdmin

On Blackboard, in the 'Tutorials' section, open the 'Guide to Access MySQL through phpMyAdmin' and follow all the instructions.

## **Tutorial 06 Question 02**

- a) In a notepad++ file, write the SQL Code to create the **User** table for the MySQL RDBMS. Carefully think of the data type for every column, whether a column can be left empty or not and whether additional constraints need to be defined. Also carefully define your primary keys and foreign keys.
- b) Save your file, then copy and paste your code in the SQL area of phpMyAdmin (second tab) and run it by clicking on "Go". You should see your successfully created table appearing in the list of tables on the left.

- a) In the notepad++ file, write the SQL Code to create the **Book** table for the MySQL RDBMS. Carefully think of the data type for every column, whether a column can be left empty or not and whether additional constraints need to be defined. Also carefully define your primary keys and foreign keys.
- b) Save your file, then copy and paste your code in Oracle SQL Developer and run it. You should get a "table created" message being displayed.

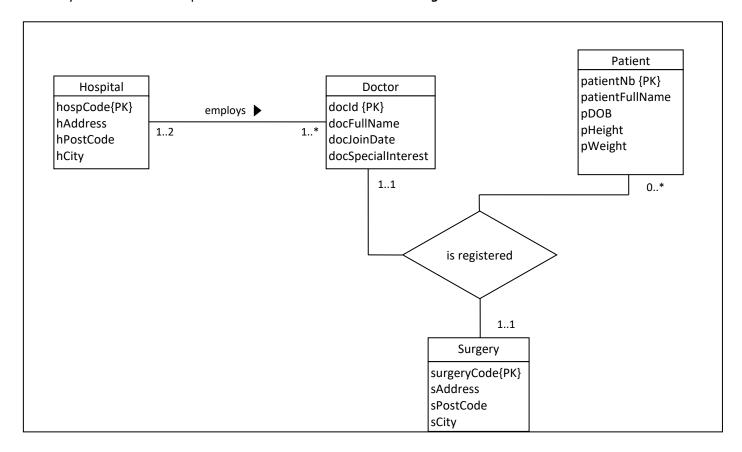
## **Tutorial 06 Question 04**

- a) In the same notepad++ file, write the SQL Code to create the **Publisher** table for the MySQL RDBMS. Carefully think of the data type for every column, whether a column can be left empty or not and whether additional constraints need to be defined. Also carefully define your primary keys and foreign keys.
- b) Save your file, then copy and paste your code in the SQL area of phpMyAdmin (second tab) and run it by clicking on "Go". You should see your successfully created table appearing in the list of tables on the left.

- a) In the same notepad++ file, write the SQL Code to create the **Librarian** table for the MySQL RDBMS. Carefully think of the data type for every column, whether a column can be left empty or not and whether additional constraints need to be defined. Also carefully define your primary keys and foreign keys.
- b) Save your file, then copy and paste your code in the SQL area of phpMyAdmin (second tab) and run it by clicking on "Go". You should see your successfully created table appearing in the list of tables on the left.

## **Tutorial 06 Case Study-2**

Carefully consider the conceptual ERD shown below for the *MedicOrg* firm.



## **Tutorial 06 Question 06**

Map this conceptual data model into a full logical data model. To do this, resolve all the relationships one by one and derive the associated relations (i.e. tables) with all the attributes, primary keys and foreign keys. Your solution should consist of a complete logical ERD.

#### Access the MySQL RDBMS through phpMyAdmin

On Blackboard, in the 'Tutorials' section, open the 'Guide to Access MySQL through phpMyAdmin' and follow all the instructions.

## **Tutorial 06 Question 07**

- c) In a notepad++ file, write the SQL Code to create the **Patient** table for the MySQL RDBMS. Carefully think of the data type for every column, whether a column can be left empty or not and whether additional constraints need to de defined. Also carefully define your primary keys and foreign keys.
- d) Save your file, then copy and paste your code in the SQL area of phpMyAdmin (second tab) and run it by clicking on "Go". You should see your successfully created table appearing in the list of tables on the left.

- c) In the notepad++ file, write the SQL Code to create the **Surgery** table for the MySQL RDBMS. Carefully think of the data type for every column, whether a column can be left empty or not and whether additional constraints need to de defined. Also carefully define your primary keys and foreign keys.
- d) Save your file, then copy and paste your code in Oracle SQL Developer and run it. You should get a "table created" message being displayed.

#### **Tutorial 06 Question 09**

- c) In the same notepad++ file, write the SQL Code to create the **Doctor** table for the MySQL RDBMS. Carefully think of the data type for every column, whether a column can be left empty or not and whether additional constraints need to de defined. Also carefully define your primary keys and foreign keys.
- d) Save your file, then copy and paste your code in the SQL area of phpMyAdmin (second tab) and run it by clicking on "Go". You should see your successfully created table appearing in the list of tables on the left.

- a) In the same Word document or notepad file, write the SQL Code to create any additional table for the MySQL RDBMS. Carefully think of the data type for every column, whether a column can be left empty or not and whether additional constraints need to de defined. Also carefully define your primary keys and foreign keys.
- b) Save your file, then copy and paste your code in the SQL area of phpMyAdmin (second tab) and run it by clicking on "Go". You should see your successfully created table appearing in the list of tables on the left.