**NATIONAL UNIVERSITY OF COMPUTER AND EMERGING SCIENCES**



**Lab Exercise 02**

For

***CL2005- Database Systems Lab***

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**Lab Task 1 – Bookstore Database**

**A. Create** a table called **Publisher** having the following structure:

|  |  |
| --- | --- |
| **Field**  **Name** | **Data**  **Type** |
| PubID | Short  Text |
| PubName | Short  Text |
| URL | Hyperlink |

• Set the field **PubID** as the primary key.

• Set the **Field Size** field property of the field **PubID** to **5**.

• Set the **Field Size** field property of the field **PubName** to **50**. Set the caption property of the **PubID** field to **Publisher ID**.

• Set the caption property of the **PubName** field to **Publisher’s Name**.

**B. Enter** the following data for the **Publisher** table:

|  |  |  |
| --- | --- | --- |
| **PubID** | **PubName** | **URL** |
| MH | McGraw-Hill | http://www.mhhe.com |
| PH | Prentice Hall | http://www.prenhall.com |
| WI | Wiley | http://www.wiley.com |
| EL | Elsevier | http://www.elsevierdirect. com |
| AW |  | Addison Wesley http://www.aw.com |
| MP | MIT Press | http://mitpress.mit.edu |
| CL | Cengage  Learning | http://cengage.com |

**C.** Import external data from the Excel spreadsheet file **Bookstore (Provided by instructor)**.

* Make sure **Import the source data into a new table in the current database** is selected.
* Select the **Author** worksheet.
* Make sure that **First Row Contains Column Headings** is selected.
* For the **AuthorID** field, set the **Data Type** option to **Long Integer** and set the **Indexed** option to **Yes (No Duplicates)**.
* Select **choose my own primary key** and make sure the **AuthorID** field isselected.
* Save the table with the name **Author**.

**D.** Create a new query based on the "Author" table. Include the following fields in the query:

AuthorID

LastName

FirstName

Find out how many **John** are in this **Author’s** table and display their data in the query.

**E.** Export the table **“Publisher”** in EXCEL spreadsheet.

**Lab Task 2 - Music Album Database**

You are tasked with teaching a course on classical music albums. Your course will cover ten iconic albums released between 1970 and 1990. To prepare for the class, you decided to create a database to organize the album information using Microsoft Access.

* Start **Access** and create a new blank database. Name it "**MusicAlbums**."
* Populate the "**MusicAlbums**" database with a random selection of five classic music albums from the 1970s and 1980s.
* Create a table named "**Album**." Include fields such as "**Album ID" (Auto Number),** "**Title**," "**Artist**," "**Release** **Year**," "**Genre**," and "**Number of Tracks**." Define appropriate data types and field names.
* Create a table named "**Artist**." This table should have fields like "**Artist** **ID**," "**First** **Name**," "**Last** **Name**," and "**Country**." Avoid redundant data between the "**Album**" and "**Artist**" tables.
* Enter records for five albums and their corresponding artists into the "**Album**" and "**Artist**" tables.
* Create an Excel worksheet and add information for three additional artists. The columns in the worksheet should match the fields in the "Artist" table and be in the same order. Save and close the Excel workbook.
* Import the artist data from the Excel worksheet into the "**Artist**" table in the "**MusicAlbums**" database.
* Create queries to:
  + List albums released in the 1980s.
  + Display albums with more than 10 tracks.
  + Find artists with albums in the "Rock" genre.
  + Generate a report showing a list of albums with their details and artist information.
  + Export the complete data from the "**MusicAlbums**" database to an **Excel file**.

-------------------------------------------------------------------------------------------------------------------- **Submission Guidelines**

**1.** File names = = **MS Access & Excel files** and name as **“FXX\_XXXX”** (Replace the ‘X’ with your roll no.). **2.** Submit the files on **Google Classroom** before the deadline.

**3. No** submissions will be **accepted after the deadline**.

**GOOD LUCK**