

PROGRAM CODE; (LEA.3Q)  
Course Title: EVENTS PROGRAMMING  
Course Number: 420-P46-AS

PROJECT TITLE:  
**Mini Microsoft Access 2019**

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## I. Intro:

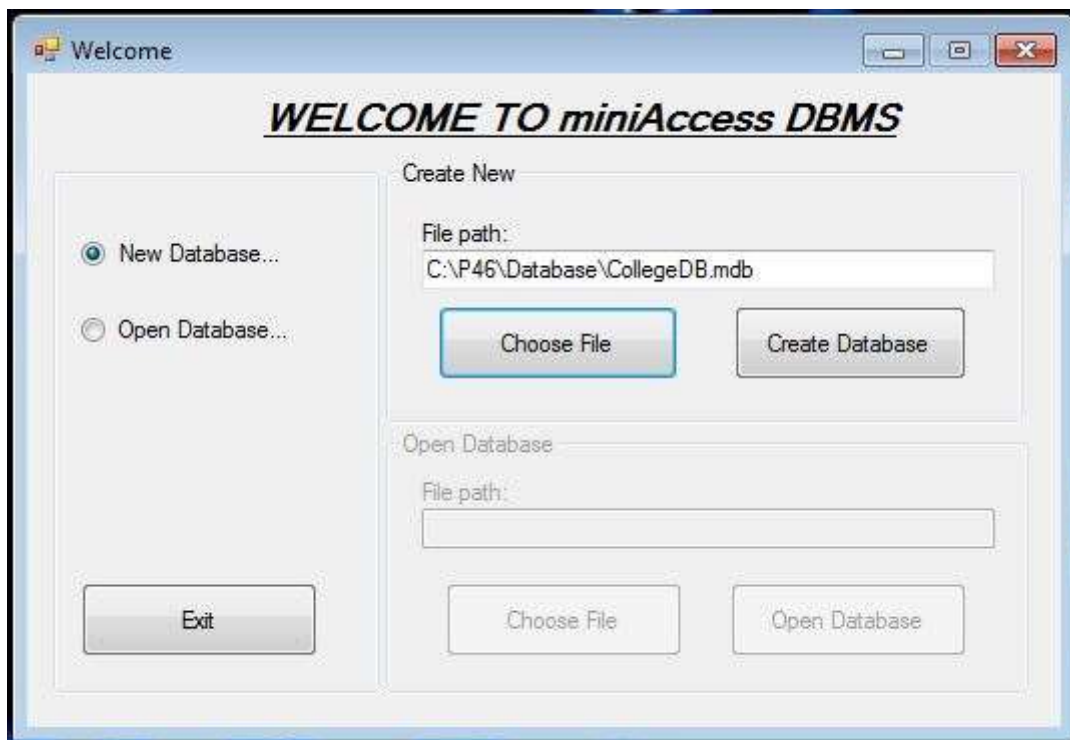
This is a very simple, MS Access like, application to create a database (we use MDB file format) with tables and relations.

You can also open existing MS Access database to view its structure, dabbles and some data (only text-compatible data could be viewed, e.g. no binaries, images etc)

Limitations: You cannot edit existing database structure, modify its data.

## II. Create Database:

Creating new Database is easy:



At start screen:

- Just click "New Database" radio button on the left
- Choose the right name for your new database. You can browse for the location by clicking <Choose File> button or type it right away into the "File Path:" field.
- Then click <Create Database> button to proceed with DB creation.

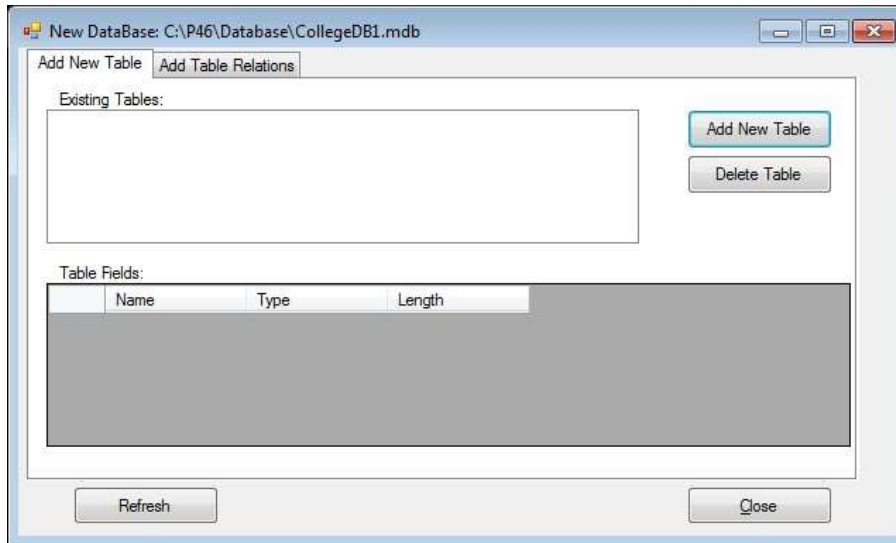
### **III. Create Tables and Relations:**

Next screen allows choosing between two options (tabs):

- Add/Remove a Table
- Add/Remove Table Relations

#### **a. Create Tables:**

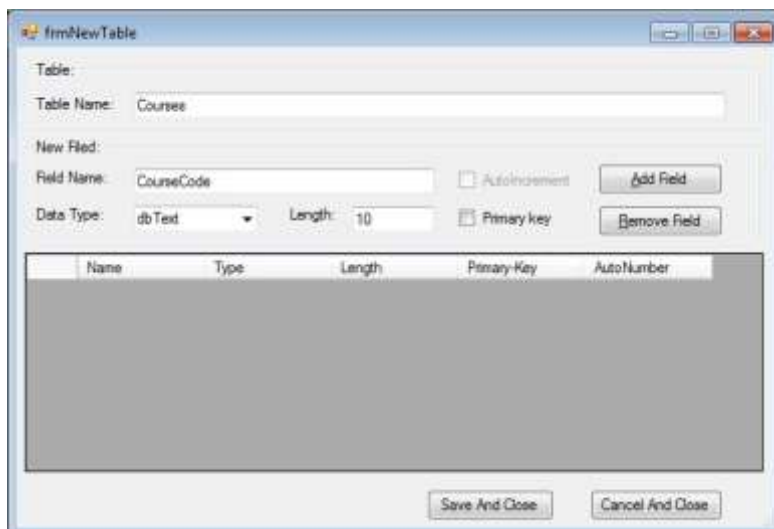
Creating your first table in the database (and all the rest tables too):



To create new table:

- Make sure you are on the “Add New Table” tab
- Click <Add New Table> button on the right side of the window

In the next window, you can name your new table and create a field of different data types:



Some guidelines in creating new tables:

- Table name should be unique for the current database;
- Table name should have only letters, numbers, dashes or underscore symbols;
- Data type could be only types listed in the drop-down list “data Type”;
- “Auto Increment” option should be enabled for only one field of “Long” type;
- Field name could not be empty and must be unique for the current table;

Name	Length	Primary-Key	AutoNumber
CourseCredit	10	True	
CourseTitle	100		

- To add a new field:
  - o Type the name of the field in “Field Name” text field
  - o Choose correct data type in “data Type” drop down list
    - dbText default length is 50 characters
    - dbLong should be used for Autoincrement
  - o Choose if this field is a primary key, or should be auto increment
  - o Click <Add Field> button
- To remove a field:
  - o Select the required field Row (you should select the whole row by clicking to the left side of the field grid at the bottom side of the window);
  - o Click <Remove Field> button;
- When you finish creating fields just click <Save And Close> button to save the changes.

*\*Actual table is added to the database only when you click <Save And Close> button*

If you want to cancel Table creation process press <Cancel and close> button. No changes to the database structure and no tables to add...

frmNewTable

Table:

Table Name: CourseRegistrations

New Field:

Field Name:  ☐ AutoIncrement

Data Type: dbDate Length:  ☐ Primary key

	Name	Type	Length	Primary-Key	AutoNumber
▶	CourseRegID	dbLong	1	True	True
	StudentID	dbLong	1		
	RegistrationDate	dbDate	1		
	StartingDate	dbDate	1		
	EndingDate	dbDate	1		

- You can also remove existing table from the database (those are listed in “Existing Tables”):
  - o Select the table name you want to remove from the database
  - o Click <Delete Table> button on the right
  - o Choose <Yes> to proceed or choose <No> to cancel deletion;

New DataBase: C:\P46\Database\CollegeDB.mdb

Add New Table

Existing Tables:

CourseRegistrations  
Courses  
SampleTable  
Students

Table Fields:

	Name	Type	Len
▶	FieldIndex	dbLong	4
	FieldName	dbText	50
	BirthDate	dbDate	8

Delete Tables

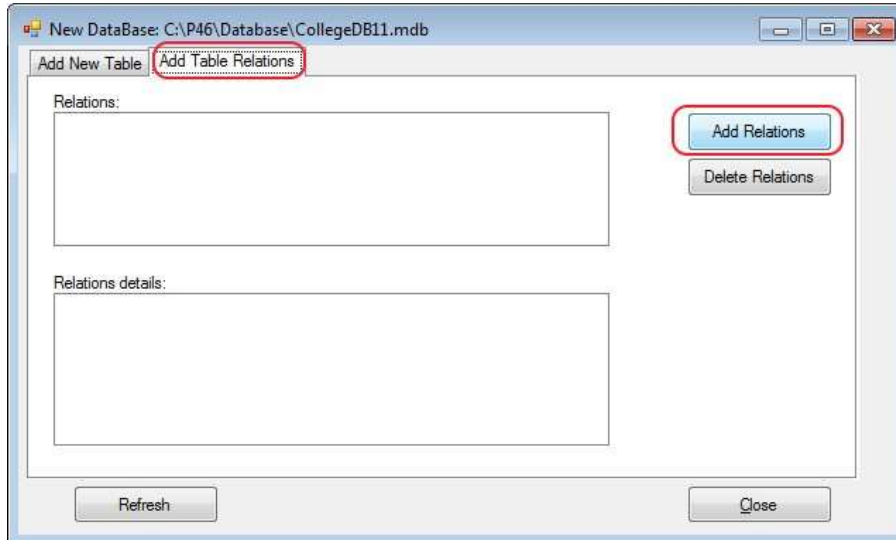
Are you sure you want to remove table: SampleTable?

You can also view Tables details like field names and data types when select a table name from listed in “Existing Tables”.

## **b. Create Relations:**

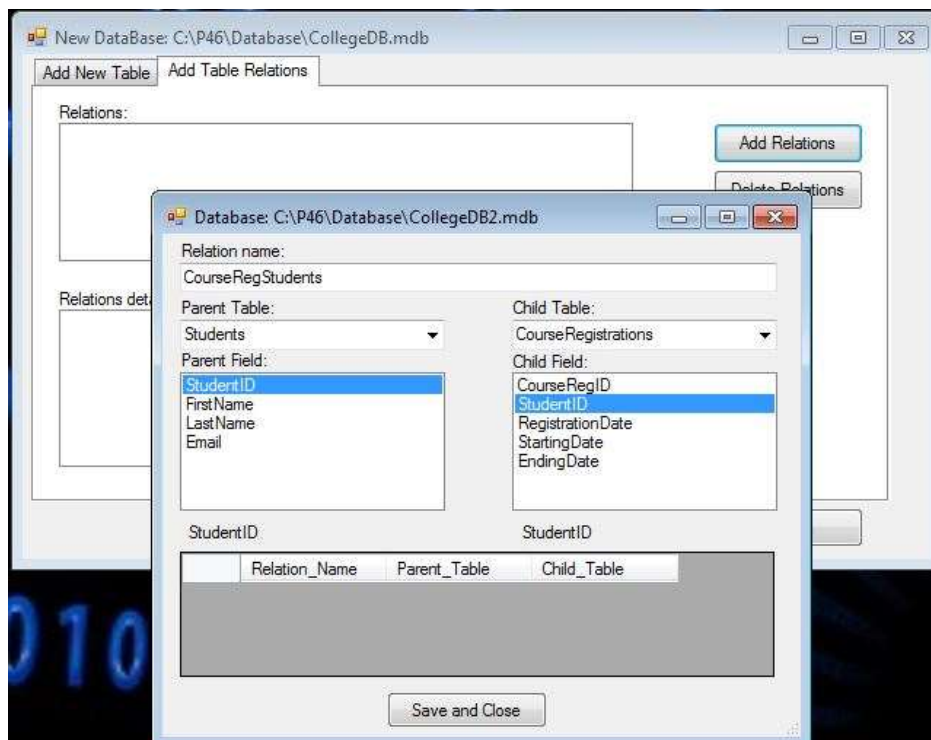
To create new table relation:

- **Two or more tables should already exist for any relations!**
- Make sure you are on the “Add Table Relation” tab
- Click <Add New Table> button on the right side of the window

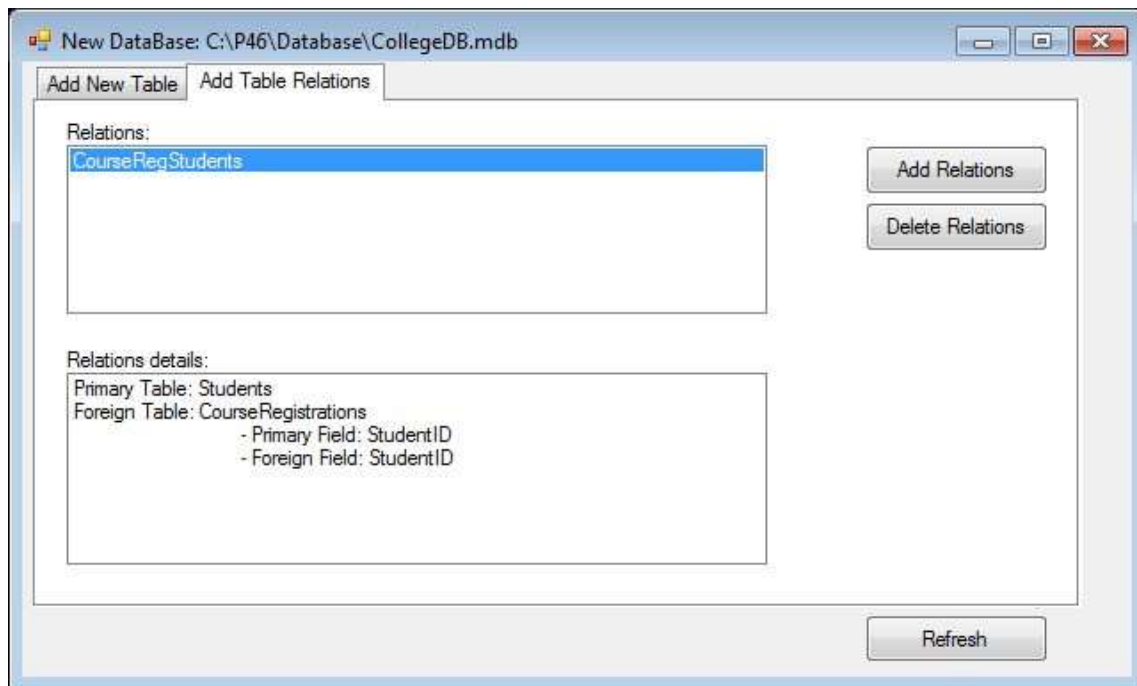


A new window comes with the following fields and options:

- “Relation name” – required to give the name for a new relation;
- “Parent table” – select the table from which you can choose the field to initiate parent relation
- “Child table” – select the table from which you can choose the field to initiate child relation
- Relation list grid at the bottom shows currently existing tables relations



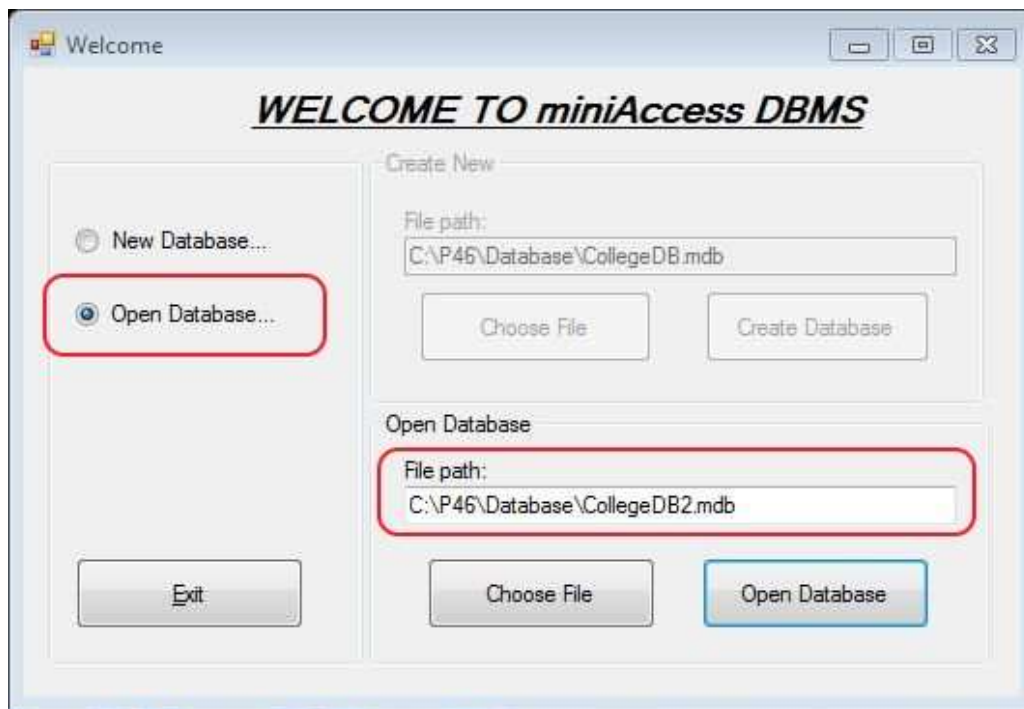
When the new relation created, current window will be closed and you will see the “Table and Relations” window similar to the one here:



Here you can add new relations again, or remove existing relation by using <Delete Relations> button to the right side of the window.

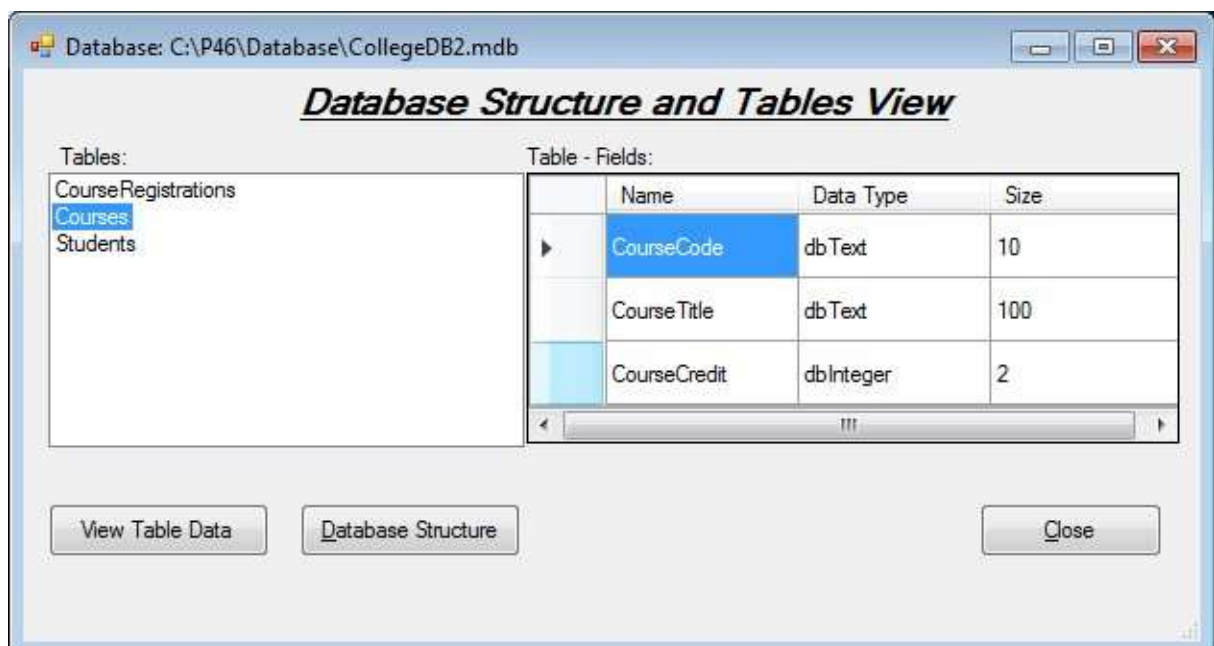
#### IV. Open Existing Database (MDB file)

At the “Welcome” screen, you choose: “Open Database...”



- Click radio button on the left side: “Open Database...”
- Type correct path into “File path:” field or use <Choose File> button to search and select required database file (ONLY MS ACCESS MDB files type)
- Click “Open Database” button on the right side

You should see similar window with database tables listed:

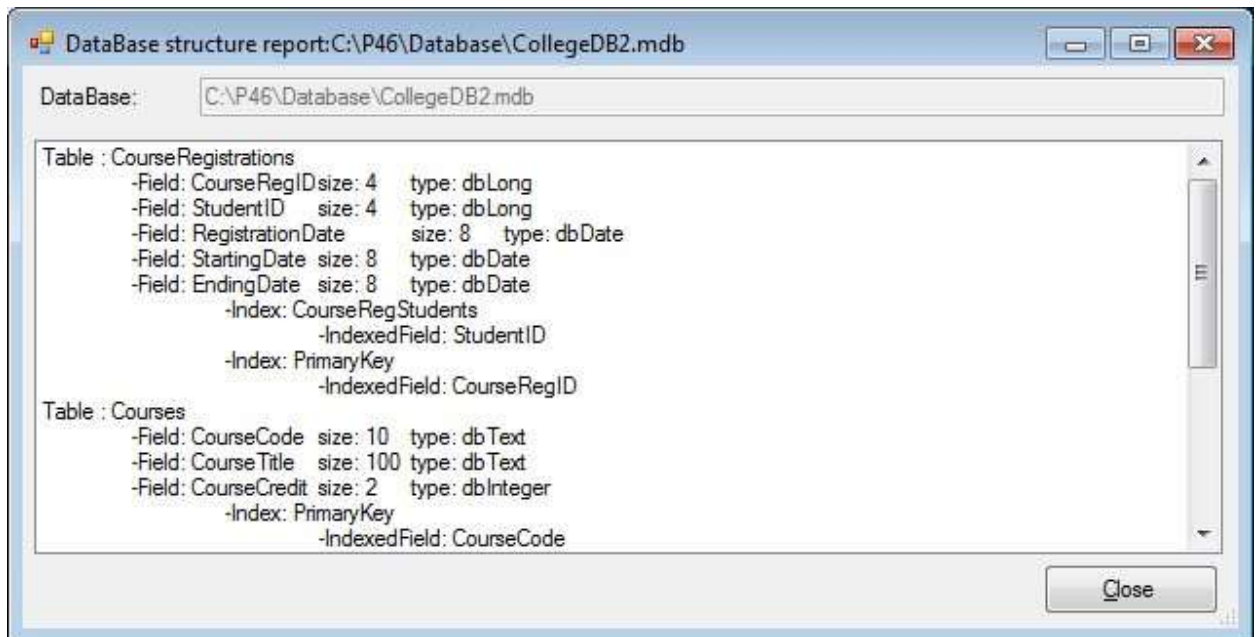




You can try open any table listed in the “Tables” list in a data view mode by:

- Double click the name of the table in the list
- Or select the name from the list and click <View Table Data>

You can also see the table structure (Tables list, Indexes, Relations etc) by clicking the button <Database structure>



Click <Close> to close the window.

***That is it that is all for this project. Have a nice day!***