

CS2453: Visual Basic

VB 8: Karate

Objectives

1. Create VB applications that use databases.
2. Connect to a database
3. Use the DataGrid View control
4. Use data bound controls
5. Query using data from a database
6. Use SQL to query

Situation

Using the Karate database that came with the text book, create a complete query application. Provide a series of pre-defined queries with an appropriate name for each query displayed as menu options. You are to include the following predefined queries that will:

1. Display the first name, last name and phone numbers of all members of the Kyoshi Karate School.
2. Display details of all payments made to the Kyoshi Karate School.
3. Select a specific member(you could list the last names of all members in a combo box and allow the user to select a name from that list) and display payments made by that selected member. Also include validations to ensure that a name has been selected by the user.
4. Allow the user to enter a date and display all members that joined the school with respect to that date. Include on the form 2 radio buttons that will allow the user to select if he wishes to display dates before the given date or on or post the given date. The date should be selected using a DateTimePicker control. If no date has been selected by the user, the current date should be supplied to the query.

Each of the queries can display results on separate forms. Include on each separate form, a menu option to close the form.

Refer to the Karate School Management Application (page 643 onwards) as a guide while you create your application. You are to create your own interface and make sure that you create each form as neat and self explanatory as possible.

Specifications

1. Recurring Specifications that **are** required for the Karate program
 1. The form must be renamed and the title changed to reflect YourFirstName and YourLastName as Karate Queries by YourFirstName YourLastName. (If Pat Programmer was creating this program, it would be **Karate Queries by Pat Programmer**)
 2. Code must be grouped and commented in compliance with this course's programming standards.
 3. ALL files, forms, and controls MUST be renamed.
 4. Option Strict and Option Explicit must be ON
 5. ALL controls on the form must be in logical TabOrder using TabIndex in the Properties window for each control.
 6. The text property of Labels must be changed so that Label1 (or similar name) does not appear at runtime.
 7. Data types for variables and constants must be the most efficient.
 8. Use With..End With if and when appropriate.
 9. ToolTips
 10. Various erroneous inputs will be tested during the grading process. If any of them result in the program halting or crashing, the **maximum** credit will be 50%. If submitted by the initial deadline, it may be resubmitted until the final deadline. Work that is late or resubmitted is subject to a 10% penalty, but that might be better than 50% or a 0.
2. Connection Strings must not include absolute paths (paths to files on your computer ..

C:\VB2010\Chapter10\....) The programs MUST run without modifications when they are graded.

Assignment Submission

Zip the folder and submit it in the DropBox for the Assignment in Moodle

Program Grading Criteria

Grading Chart

Item	Possible Points	Points Off	Comments
Formatting/layout of forms	5		
All controls renamed	4		
Data connection	3		
Correct database used and included in project	3		
Queries: Display all members Display all payments Display payments for specific member Display payments according to date	 5 5 10 10		
Project correctly saved and submitted	3		
Documentation	2		
Efficient programming	3		
Programming Standards adhered to	2		
Total	55		
Late/Resubmit (10%)	-5		
Final Total			