

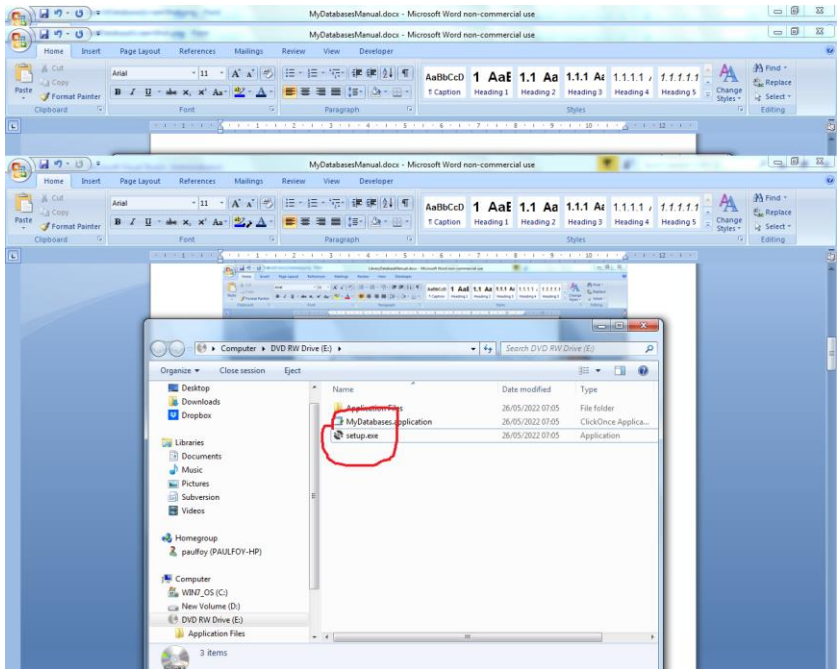
# 1 Introduction

This is a manual for the installation and use of the database application 'MyDatabases2'. This program is a Windows application, for creating, loading and manipulating a collection of databases. Any number of databases may be manipulated. You are licensed to install this application on one device and to do this you must register the application on the device. The program is so named because it is the second version of this program – the first version using the Microsoft SQL Server as its database engine. However this program has no external dependencies whatsoever, other than a Windows platform.

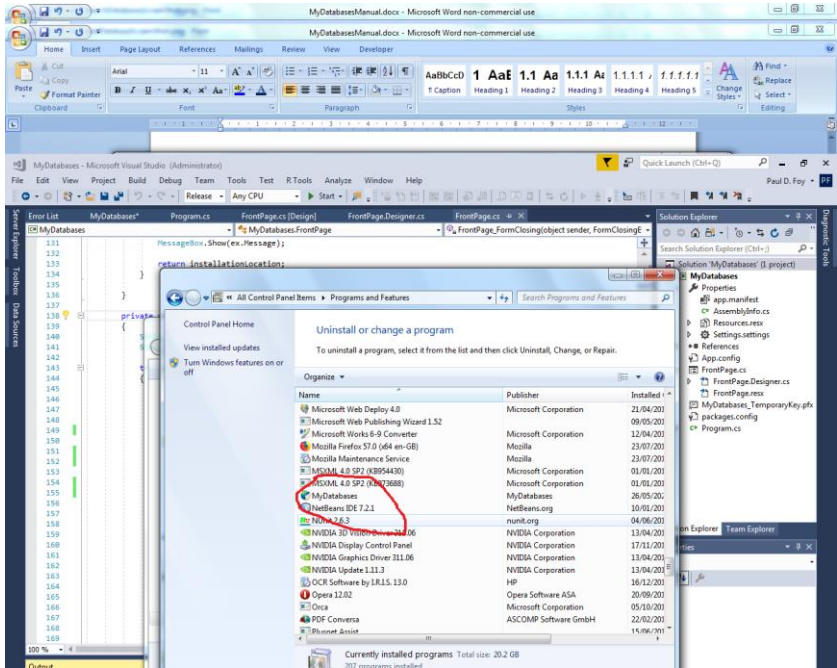
## 2 Pre-requisites.

1. A PC running Windows 7 or above.
2. A USB stick or optical drive containing the program setup files or online download, together with this manual (available online).

The application is installed by inserting the supplied stick or disc into the PC or unzipping the .zip file and running the 'setup.exe' program on it. The application was developed on a Windows 11 platform.



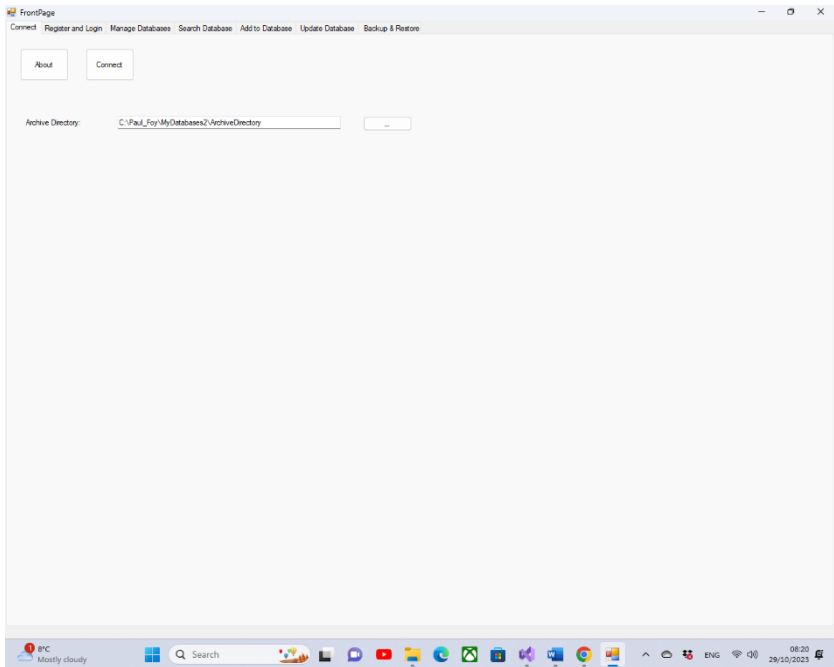
The program can be removed from the PC, by using the 'Program & Features' menu from within Control Panel.



### **3 Use**

The application has 8 tabs. The order of operation (in this order only) is: Connect, Register, Log in, perform the operations of the application. Register is a one-time operation and can be omitted on subsequent uses of the application – the others must be performed.

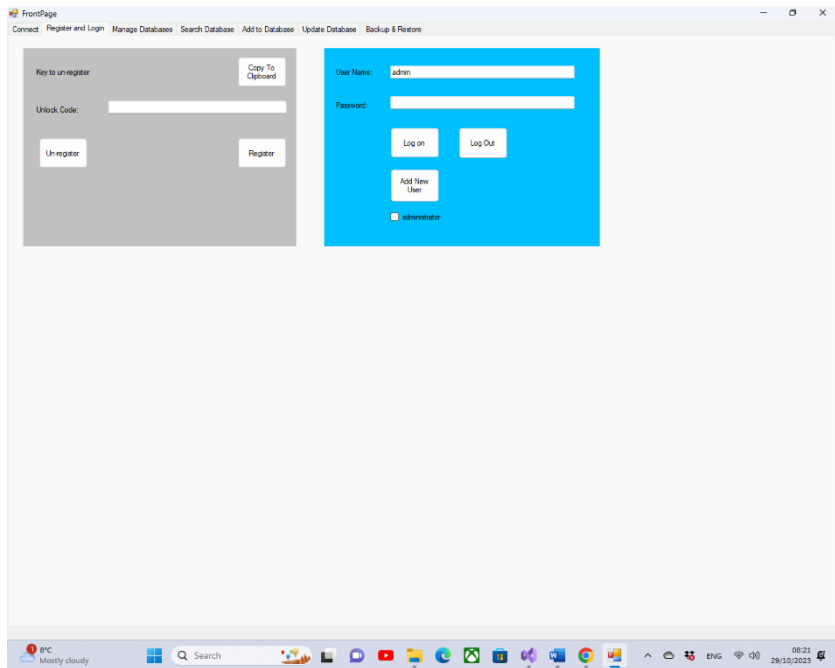
## 3.1 Connect



The application is initialised by using the **Connect** button. To use this application it is necessary to select an archive directory, and if this has not been done prior to connecting you are reminded to do so.

It is also possible to see information about the software using the 'About' button.

## 3.2 Register and Login



Before this application can be used on a device it must be registered on the device. This is the role of the controls on the left-hand panel.

The presented key to register must be sent to 'paulfoy@mathematicalservices.co.uk'. It can be copied using the 'Copy To Clipboard' button. In return you will be sent an unlock code, which is unique to that device. On inserting that into the textbox the application is registered using the 'Register' button.

The 'Unregister' button is used to cancel this registration, at which point, this product or an upgraded version of this product, will have to be registered again before use. The same registration code as initially used can be employed.

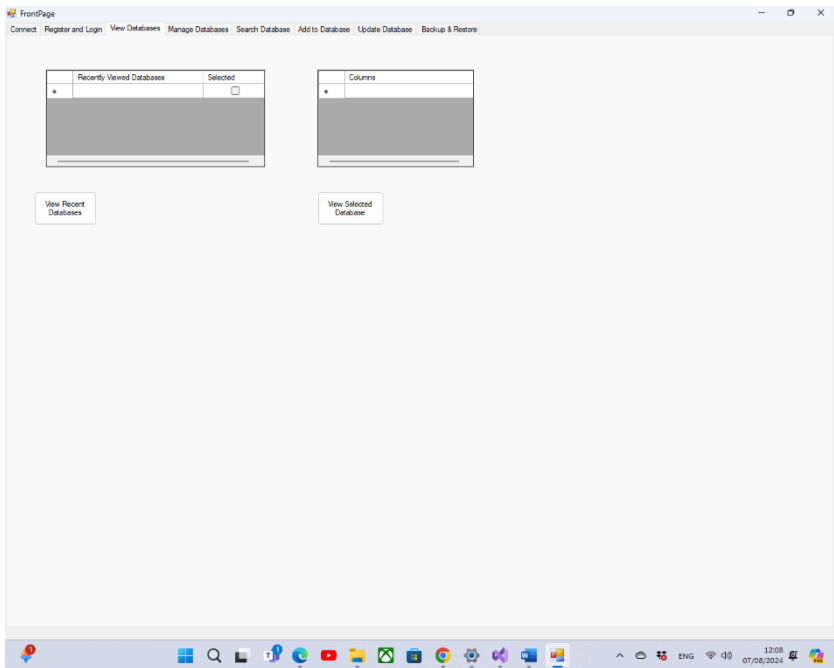
Only users that have logged in can use this application. This is the role of the right-hand panel. To log in it is necessary to supply a valid username and password.

The database of valid usernames and passwords is called 'MyDatabases2Users'. Its fields are:

1. username
2. password
3. administrator
4. date
5. guid

The names of these fields are self-explanatory. Field 3 determines whether the current user is an administrator or not. It is a string which can have only the values 'yes' or 'no', depending upon whether the user is an administrator or not respectively. An administrator is a privileged user who will have special privileges in future versions of the application. Until another user is added only a user with username 'admin' and password 'admin', can log in. Thus this user and this user only can begin to use the application and to set things up, including establishing other users, via the button **Add New User**. The check box determines whether the user added is an administrator or not.

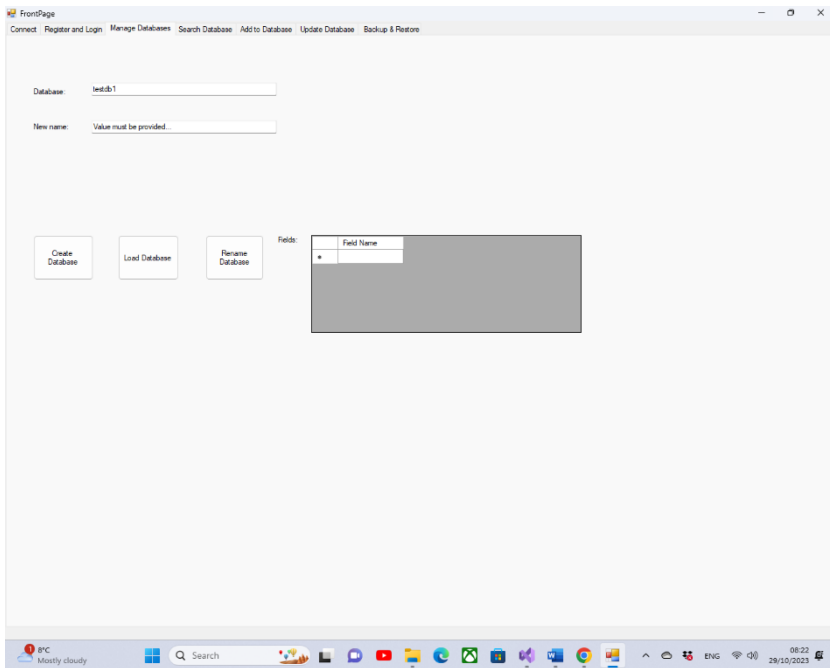
### 3.3 View Databases



This tab is useful if you have forgotten the names of the databases (or what constituted them) of which you have been recently working. It allows you to view the databases and to list the columns of a selected database. The databases listed are those in the current archive directory of the 'Connect' tab.



### 3.4 Manage Databases



This tab allows you to create, load, and rename a database. The various buttons behave as follows:

**Create Database:** Allows the creation of a new database. The fields of the database are as provided in the 'Fields' flex grid.

One of the distinguishing features of this application is that each record of a table is unique and distinguished by its GUID. This GUID is supplied by the application, upon creation of the database, and cannot be selected by the user. Its sole purpose is to maintain the unique identity of each record of the table. This permits, for example, the inclusion of two or more copies of the same book, which are identical in all respects (i.e. other fields) apart from the GUID. Each record is also labelled with

the date on which it was created. This date is supplied by the application and cannot be selected or altered by the user.

**Load Database:** A database previously created by this application may be loaded. The fields of the database appear in the 'Fields' flex grid. Only databases created by or compatible with this application can be loaded.

**Rename Database:** A loaded database, with a name of the upper text box is renamed with a name of the middle text box. All data and names within the database remain unaltered.

The philosophy, and mode of use of the application is that only those databases created, or loaded from text file, can be manipulated by the application. The most recently created or loaded application becomes the active database for the application. However any previously loaded database of the application's session can be accessed by the application by providing its name in the 'Database' text boxes of the various tabs.

The storage on disc of a database is via the database's provided name with the filetype '.txt'. Thus the contents of a database may be freely viewed outside of the application, using simple Window's tools, as well as via the search flex grid of this application.

There is a correspondence maintained by the application between the storage on disc (via the .txt file) and the storage in memory of the application. This applies to any database accessed by the application.

Note, that for all these operations names must begin with a letter.

## 3.5 Search

Database: ElectricityFlat58      Field To Search:

Keyword: \*

Search Database    Search Selection    Detailed Selected Item    Order by Date    Date format: dd-mm-yyyy    Sort order: Most Recent    Sum A Column

Results:

Electricity payment received	Date received	Electricity payment paid	Date paid	Date of Entry	GUID	Checked
40.0	02-08-2024			03-08-2024	3ab67ad0c024c4...	<input type="checkbox"/>
80.0	02-07-2024			03-08-2024	2040218f90e342...	<input type="checkbox"/>
40.0	02-05-2024			03-08-2024	b230a7bc94614...	<input type="checkbox"/>
40.0	02-04-2024			03-08-2024	4e278c6938ba44...	<input type="checkbox"/>
0.0		341.61	02-03-2024	04-08-2024	4e0f856a13c4d5...	<input type="checkbox"/>

This tab allows you to search via a key word from a field within a database. The results of the search are displayed. The button's features are:

**Search Database:** Search the field of the database specified by the keyword specified. If the wildcard character '\*' is specified all records are displayed.

**Search Selection:** In the same way it is possible to search from within the 'Results' flex grid.

**Delete Selected Items:** Deletes the record selected.

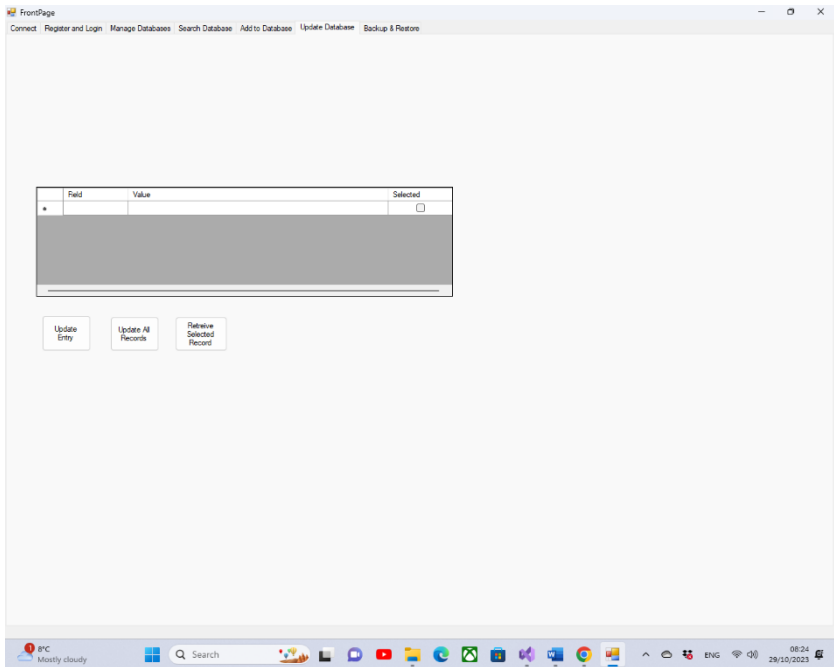
**Order By Date:** Orders the records of the 'Results' flex grid, according to date (of which currently the format is decided by

the application and there is no choice). The order may be least or most recent.

**Sum A Column:** By giving the column name in the adjacent text box the sum of the values in a column which contains numeric only values is returned. Empty cells are simply ignored.

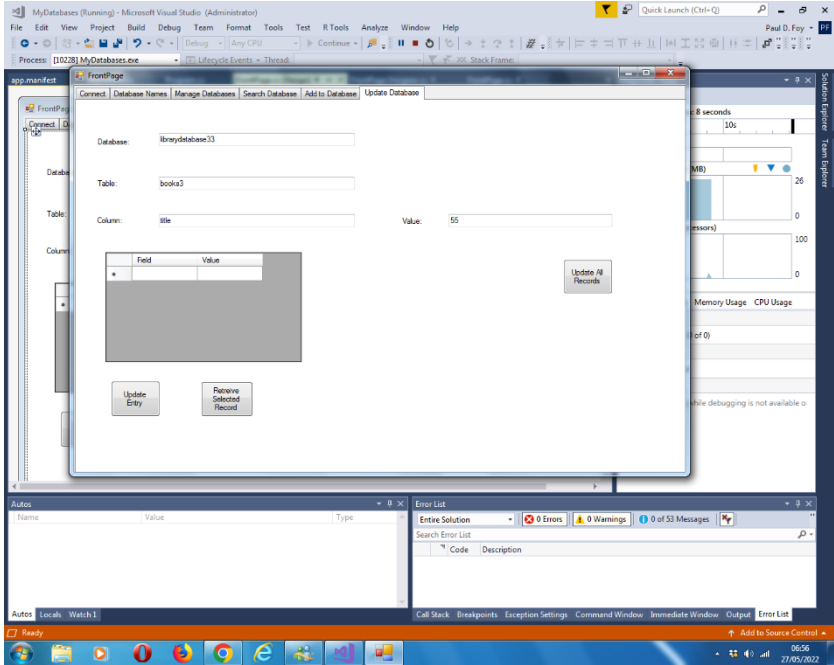
Each record is distinguished by (i) a unique Global Identification Number (Guid) and (ii) The date and time of creation, both provided on creation of the record. It is not possible to alter these two fields, or their format. They are automatically displayed in the 'Results' flex grid. A selected record may be updated on a subsequent tab.

## 3.6 Add



This tab allows an entry to be added to a selected database. A Guid will be assigned automatically. Once a Guid has been assigned it exists for the lifetime of that record irrespective to any other alterations to the other fields. The date and time of creation will also be assigned automatically. It is not possible to subsequently change this either.

### 3.7 Update

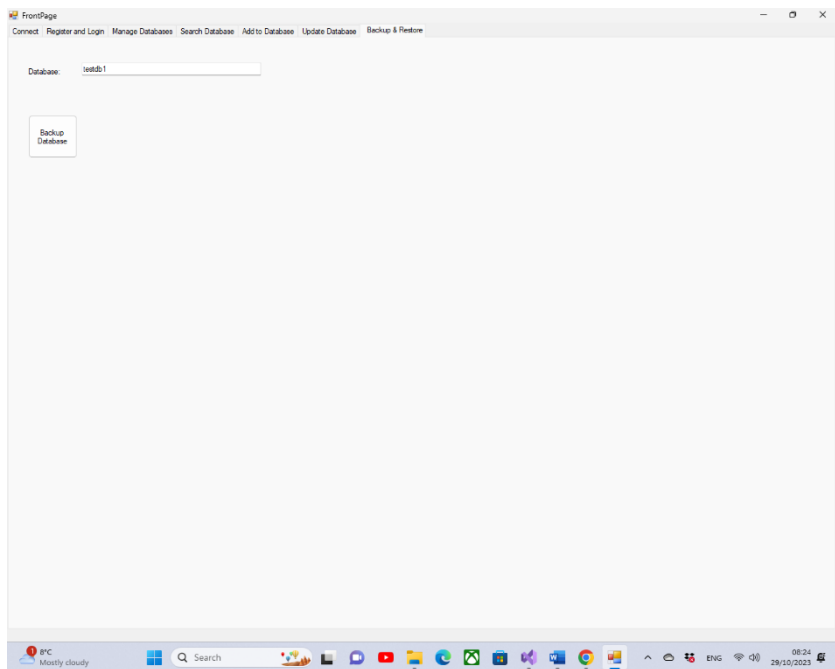


This tab allows 2 operations to be performed:

(1) an entry selected on the 'Search' tab can be retrieved and updated corresponding to the table searched for.

(2) A value can be assigned to the field selected, of all records in the database, except the two reserved ones - this is the function of the right-hand checkbox.

## 3.8 Backup and Restore



### Backup Database:

It is possible to back up the entire contents of a previously loaded database. The backup is stored in the supplied archive directory with a filename which is the database name supplied in the text box and an extension of '.txt'. If such a text file has not been previously created it is newly created, and if it does exist it is overwritten.

The application keeps an internal record of when a database is altered and if the application is closed prior to backing up such a database, the backup will be done automatically on closing.

Paul D. Foy  
Mathematical Services

August 2024