

Portfolio Assignment 5

Property Listing (Database) Application

Objectives and Learning Areas:

For this exercise the following skills are being tested:

1. Connect to a database using OleDb
2. Add the OleDbDataAdapter component to create a database connection
3. Insert, Update and Delete a record to the database using sql statements
4. Use the OleDbDataAdapter to execute the query

Requirements

1. Given the specification of the Properties Application requested in the June 2013 as listed below, convert this application to include a connection to an access database.
2. The Application must read all records from the database table and display them in the listView
3. Add OleDbDataAdapter control to connect to the CarRental Database (the table layout is shown above)
4. Write the Insert, Update and Delete code where required to Alter the RentalList table.

Database Layout

Database Name	Table Name	FieldNames	Type	Sample Data
PropertiesDb (access database)	PropertyList	PropertyNumber	Number	1010
		Suburb	Text	Bellville
		Price	Currency	150000
		Bedrooms	Number	3
		Bathrooms	Number	2
		Garage	Text	Single
		ErfSize	Number	250
		ImageRef	Text	1010Blv

Specification & Screen Layouts

A Property Agency in the Cape region needs a computer application that would allow them to keep a record of all the properties that they are selling. The application must be able to:

- store properties with the necessary information;
- view information of properties;
- change the information for a specific property;
- delete information for a specific property.

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A property record contains the following information:

- **PropertyNumber:** A unique number for the property.
- **Suburb:** The Suburb in which the property is located.
- **Price:** The price of the property.
- **Bedrooms:** The number of bedrooms at the property.
- **Bathrooms:** The number of bathrooms at the property.
- **Garage:** Whether the property has a single garage, or double garage, or no garage (*none*).
- **ErfSize:** The size of the property in square meters (m²).
- **ImageRef:** The image reference refers to the name of the image for the property stored. It will be the **PropertyNumber** + ".jpg"

Using the screen designs below, you need to develop a Windows Forms Application that would meet the required functionalities stated further below:

Property Number	Suburb	Price	Bedrooms	Bathrooms	Garage	Erf Size (m2)
531	Blackheath	630000	3	1	Double	320
532	Eersterivier	550000	3	1	Single	280
533	Parow	899000	3	1	Double	420
534	Kuils River	735000	3	2	Single	389
535	Kuils River	899000	3	2	Single	412
536	Durbanville	1850000	5	2	Double	625
537	Durbanville	1590000	3	2	Single	612
538	Durbanville	1395000	4	2	Double	590
539	Bellville	995000	3	2	None	550
540	Bellville	999000	3	2	Double	575
541	Bellville	1095000	4	2	Double	614
542	Bellville	795000	2	2	Single	520
543	Parow	990000	3	2	Single	659
544	Kraaifontein	870000	3	1	Single	598
545	Kraaifontein	750000	3	2	Single	500

Figure 1.1 - Main Form (Viewing all Properties)

When the application starts, it loads this form shown in **Figure 1.1** first, where the user can see all the properties that are on sale. The user can Add a new property, Edit a property, or Delete a property.

Property Number:

Suburb:

Price:

Bedrooms: Bathrooms:

Erf Size: m2

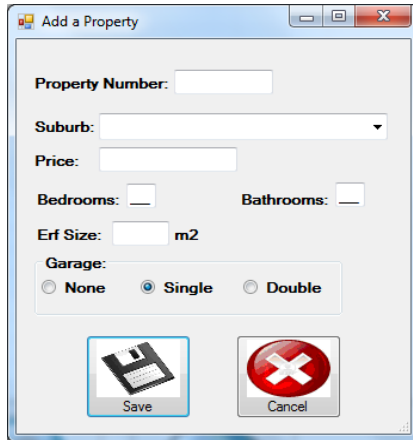
Garage: ☐ None ☒ Single ☐ Double

When the user presses the Add button, the form shown in **Figure 1.2** displays.

The user can enter the necessary values and press Save to return to the Main Form or Cancel to return without saving.

Figure 1.2 – Add Property Form

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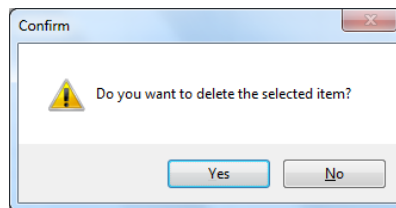
A screenshot of a Windows-style dialog box titled "Add a Property". It contains several input fields: "Property Number:" with a text box, "Suburb:" with a dropdown menu, "Price:" with a text box, "Bedrooms:" and "Bathrooms:" each with a text box, and "Erf Size:" with a text box followed by "m2". Below these is a "Garage:" section with three radio buttons: "None", "Single" (which is selected), and "Double". At the bottom are two buttons: "Save" with a floppy disk icon and "Cancel" with a red circle and a white 'X' icon.

When the user selects an item from the listview and clicks on the edit button, the Update form shown in Figure 1.3 displays.

The user can now make the necessary changes and press Save to update the record or press Cancel to leave the item unchanged.

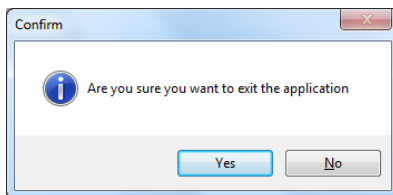
Figure 1.3 – Update Property Form

When the user clicks on the selected a item from the Figure 1.3 displays.



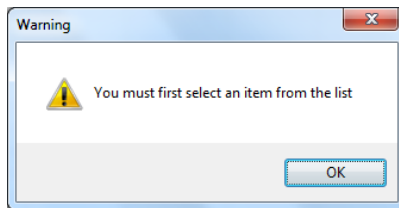
edit or delete button without having listview, the message as shown in

Figure 1.4 – Warning Message



When the user selects an item and clicks the Delete button, a confirmation message displays as shown in Figure 1.5

Figure 1.5 – Delete Confirmation Message



This message shown in Figure 1.6 will show on pressing the Exit button. This is a confirmation message and if the user selects **Yes**, the application will terminate, else it will remain open.

Figure 1.6 – Exit Confirmation Message