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VISUAL FOXPRO - AN INTRODUCTION

4.1 INTRODUCTION

Visual FoxPro is a Relational Database Management System (RDBMS), which allows you to work with several logically related tables of data simultaneously. A Table in a database contains a number of Rows and Columns. One row in the table is equivalent to one record and one column is equivalent to one field.

4.2 OBJECTIVES

After going through this lesson, you would be able to

- start Visual Foxpro menus
- use shortcut keys
- use Visual Foxpro menus.
- explain the concept of DBMS

4.3 CONCEPT OF DATABASE MANAGEMENT SYSTEM (DBMS)

Before you understand the concept of Database Management System. (DBMS), it is necessary that you understand few basic terms related to DBMS. Let us begin with *data*. Anything can be data, e.g., a number, name of a person or place, address, etc. When a data is meaningful, it is called **Information** and a **Database** is an organized collection of related information. You can use database for

- retrieving desired information
- taking meaningful decision
- reorganizing information
- processing information

Database Management System (DBMS) is a generalized software package used to build and manage the database, i.e., add, modify (edit), update, delete and sort (arrange in a particular order) information in the database. DBMS also helps to retrieve the desired information in the required format from the database. Visual FoxPro is a leading database Management System. It is a member of Microsoft Visual Studio. Visual FoxPro is one of the Relational Database Management System (RDBMS). It is windows based Graphical User Interface (GUI) RDBMS. The database is a broader concept in Visual FoxPro in which the information is stored in related tables. The table is equivalent to database of the earlier version of FoxPro. A database is a collection of various records comprising rows and columns. One row is one record and one column is one field. A *record* is collection of logically related fields and a *field* is one column information. In Visual FoxPro, there can be more than one table storing different stream of information. A table in a database contains a number of Rows and Columns. One row in the table is equivalent to one record and one column is equivalent to one field.

4.4 STARTING VISUAL FOXPRO

The minimum hardware/software configuration of the machine required for installing Visual FoxPro is that you should have a Pentium Series of Computer with 32 MB RAM and 10GB of Hard Disk Drive with Windows 95 or higher operating system. Here we have discussed 6.0 version of Visual Foxpro

In order to start with Visual FoxPro, you must ensure that Visual FoxPro system is already installed on your computer. To invoke Visual FoxPro, Double click the *My Computer* Icon on the Desktop Window. Then double click C: drive. Now, click on *Program Folder* and then *Microsoft Visual Studio*. Now double click the *Microsoft Visual FoxPro* icon as shown in Fig. 4.1

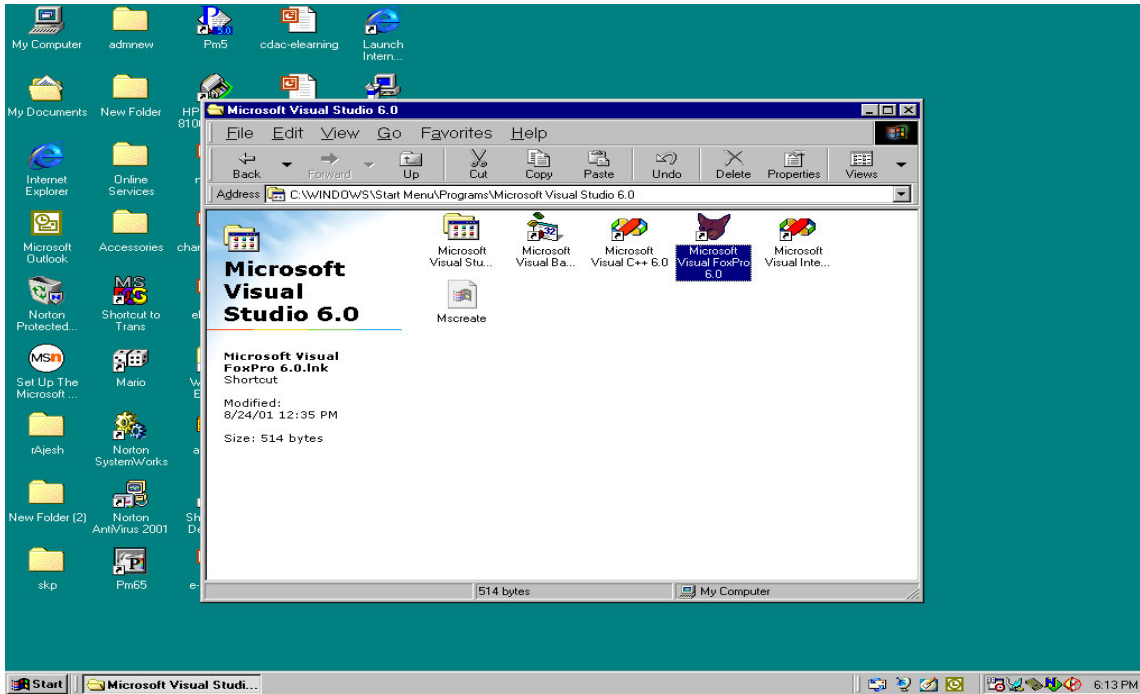


Fig. 4.1: Visual FoxPro icon within Program Folder of Windows

You can also make a shortcut of Visual FoxPro icon on your desktop for directly loading the system as shown in Fig. 4.2.

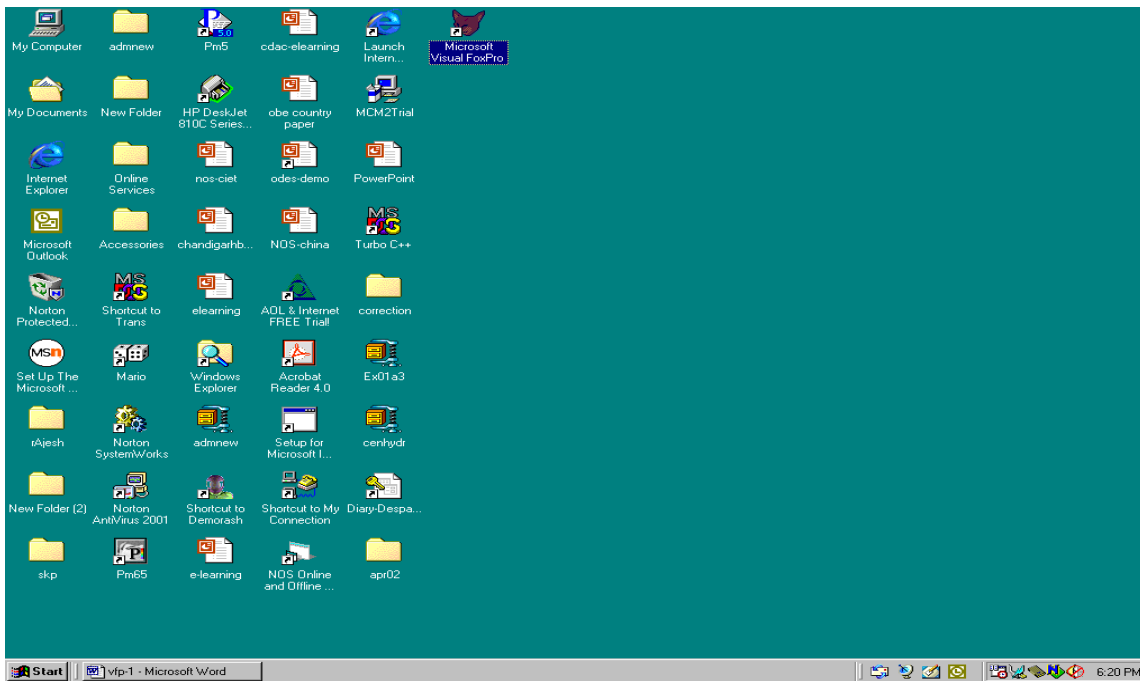


Fig. 4.2: Highlighted Visual FoxPro icon on the Desktop

In this case double click the Visual FoxPro icon from the desktop itself and then Visual FoxPro window will appear on your screen as shown in Fig. 4.3

Fig. 4.3: Visual FoxPro with Command Window

Alternatively, you can click the **Start** menu then click on **Visual Studio 6.0** and then click on **Microsoft Visual FoxPro** and then click the left mouse

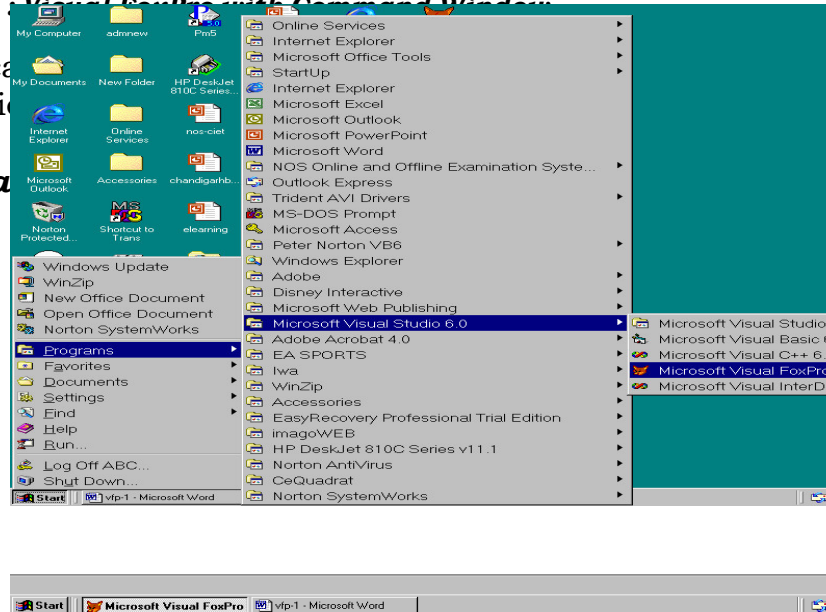


Fig. 4.4: Visual FoxPro through Start Menu

The Visual FoxPro window will appear on your screen as shown in the above fig. 4.3.

4.5 USING THE VISUAL FOXPRO MENUS

The Visual FoxPro Menu system can be classified into the following components as:

- Menu Bar
- Menu Pad (Item)
- Menus (Pull Down Menu)
- Menu Options
- Toolbar

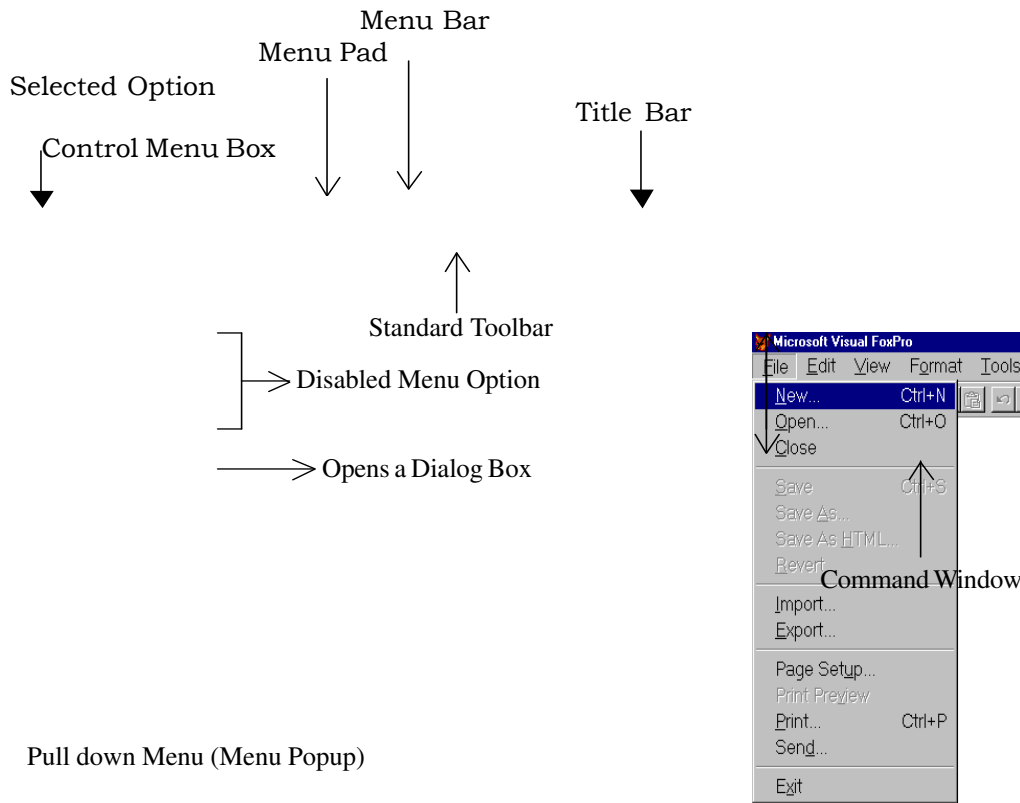


Fig. 4.5: Visual FoxPro Menu Systems

4.5.1 Menu Bar

A **Menu Bar** is located at the top of the screen and displays all the available titles for menu as shown in the figure 1.5. The content of the menu bar changes when you move from one title to another title of the menu bar.

4.5.2 Menu Pads (Items)

The titles displayed on the menu bar are called **Menu Pads (Items)**. You can use either the mouse or the keyboard to display the menu associated with each menu pad. Using the mouse, click on the title of the menu you wish to use. To access the menu bar from keyboard, press <ALT> or <F10> key and then type the underlined letter for the menu you wish to use. For example <ALT>+F for invoking File Menu. You can also use the Left and Right arrow keys to move from one menu pad to another menu pad, and press <RETURN> key.

You will also find that some of the menu pads appear dimmed and cannot be highlighted or selected. These menu pads are disabled. You cannot display the menu if the menu pad is disabled.

4.5.3 Menus

When you choose a menu pad from the menu bar by clicking the menu pad, Visual FoxPro displays a **pull-down menu**. A **Menu** is a list of related options displayed in the pull-down menu. When you choose an option from a menu, Visual FoxPro executes it. Choosing an option means activating a highlighted option by clicking with mouse or pressing the <Spacebar> key or <Return> key.

4.5.4 Menu Options

When you choose a menu pad from the menu bar, Visual FoxPro displays a pull-down menu. A pull-down menu contains options as shown in the fig. 4.3. The options on each menu are logically related to menu pad.

To choose a desired menu option you want, use one of the following methods:

- Move to the menu pad and click. The pull-down menu appears. Click on the desired option you want.
 - Press <Alt> key or <F10> key and then press the underlined letter (hot key) in the menu pad name. Type the underlined key for the menu option you want.
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- Use the Left and Right Arrow keys to the menu pad you want to use and then press <Return> key. Use the Up and Down arrow keys to select the desired option and then press the <Return> key or <Spacebar> key.

You will find that some of the menu options have an ellipsis (...) after the option. This indicates that the option will further open a dialog box. A dialog box appears to request the additional information.

4.5.5 Toolbar

The **Toolbar** appears below the menu bar and displays the icons as shown in Fig. 4.5. To access the toolbar using the mouse, click on the icon you want to use.

INTEXT QUESTIONS

1. What is the difference between data and information?
2. Give the full form of RDBMS.
3. Choose the Correct Answer:
 - (a) A database is a collection of
 - (i) Fields (ii) Table (iii) Records (iv) Column
 - (b) In Visual FoxPro, a Table is equivalent to
 - (i) Row (ii) Column (iii) Field (iv) Database

4.6 VISUAL FOXPRO TEXT EDITOR

Modify Command is the standard **Text Editor** of the Visual FoxPro. In short it is also called **modi comm**. It allows you to create and modify text. Using this text editor you can code or modify a Visual FoxPro program. The following keys can be used for selecting and editing text.

Key(s)	Action
Cursor Movement	
Right Arrow	To move the cursor one character to the right.
Left Arrow	To move the cursor one character to the left.

Up Arrow	To move the cursor up one line.
Down Arrow	To move the cursor down one line.
Home	To move the cursor to the beginning of the current line.
End	To move the cursor to the end of the current line.
Page up	To move the cursor up the height of the current line.
Page down	To move the cursor down the height of the current line.
Ctrl+Home	To move the cursor to the beginning of the current text.
Ctrl+End	To move the cursor to the end of the current text.
Ctrl+Right Arrow	To move the cursor one word to the right.
Ctrl+Left Arrow	To move the cursor one word to the left.
Selecting Text	
Shift+Right Arrow	To select one character to the right of the cursor.
Shift+Left Arrow	To select one character to the left of the cursor.
Shift+Up Arrow	To select one line up to the cursor.
Shift+Down Arrow	To select one line down to the cursor.
Ctrl+A	To select all text.
Deleting Text	
Backspace	To delete the selected text or the character to the left of the cursor if no text is selected.
Del	To delete the selected text or the character to the right of the cursor if no text is selected.

Inserting Text

Ins To switch between insert and overwrite mode.

4.7 SHORTCUT KEYS FOR MENU OPTIONS

Visual FoxPro provides various shortcut Keys to choose the menu options. Some of them are listed below.

Key(s)	Action
Ctrl+A	To select all the current objects.
Ctrl+C	To copy the current selection to the clipboard.
Ctrl+D	To start a Visual FoxPro Program
Ctrl+G	To move the cursor to the designated line in a text or in the command window.
Ctrl+M	To resume a program.
Ctrl+P	To Print.
Ctrl+R	To redo.
Ctrl+S	To save the file.
Ctrl+V	To paste the content of the clipboard at the current cursor position.
Ctrl+W	To leave the current operation and to save any modification.
Ctrl+X	To cut the selected object from its current location and to place it on the clipboard.
Ctrl+Y	To append new record.
Ctrl+Z	To undo.
Ctrl+F1	To activate the next window open within Visual FoxPro.
Ctrl+F2	To display the command window.
Ctrl+F4	To close the current window.
Ctrl+F5	To restore the current window to its original size.
Ctrl+F7	To move the current window with the arrow key.

Ctrl+F8	To increase/decrease the size of the current window.
Ctrl+F9	To minimize the current window to an icon.
Ctrl+F10	To maximize the current window.
Esc	To exit current editing without saving the modification.
F1	To activate on-line help.
F2	To open the view window.
F3	To list the content of the current table.
F4	To list the files in the current directory.
F5	To display the structure of the current table.
F6	To display the status.
F7	To display the current memory variables.
F8	To display the field names and the current record of the current table.
F9	To open the Browse window in append mode.

4.8 EXITING VISUAL FOXPRO

You can exit Visual FoxPro by using any one of the following methods:

- Type **quit** in the command window and press <Return> key.
- Open the **File** menu and choose the **Exit** option.
- Click mouse on the Control Menu Box from the Title bar of the main Visual FoxPro window as shown in the figure 4.3.
- Press <Alt+F4> key.

4.9 WHAT YOU HAVE LEARNT

In this lesson you have learned about the concept of database and how to invoke Visual FoxPro, Visual FoxPro menus, shortcut keys for menu options and how to exit Visual FoxPro. In the next lesson you will learn about the complete Visual FoxPro Menu System and Toolbars.

4.10 TERMINAL QUESTIONS

1. Discuss the concept of DBMS.
2. What are the various ways of starting Visual FoxPro?
3. Define the various Menu Pads available on the Menu Bar of Visual FoxPro.
4. Name the Text Editor of Visual FoxPro.
5. What is the shortcut for displaying the structure of the current table?

4.11 KEY TO INTEXT QUESTIONS

- 1 Data: Anything can be data, e.g. a number, name of a person or place, address, Information: When a data is meaningful, it is called *information*.
 - 2 Relational Database Management Systems
 - 3 (a) (iii) (b) (iv)
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