

# Chapter 1

## Introduction to visual programming: -

Console application: Each line in Main () executed sequentially – then the program halts.

((أي انها الأوامر التي توجد داخل main method فقط ثم يتم توقف البرنامج و يتم عرض النتائج من الشاشة السوداء console panel))

Windows application: Once launched, sits, and waits for an event,

Sits in a process loop

((أي انه يتم تنفيذه فور استدعاء الحدث و ينتظر انتهاء عملية التنفيذ ويتم عرض النتائج في واجهه التشغيل التفاعلية GUI))

Event: notification from operating system that an Action.

((هو اشعار من البرنامج يفيد بان البرمجية تقوم بالعمل))

Graphical user interface GUI: is a front-end program use image and control for design it

((هي الواجهة الامامية للبرنامج يستعمل بها بعض الصور والأدوات لتصميمها))

Elements of Good Design:-

Appearance matters

.. Human-computer interaction (HCI) research

((تفاعل الانسان والحاسوب))

Design considerations

– Consistency ((التنسيق))

– Alignment ((التناسق))

– Avoid clutter ((تجنب الفوضى))

– Color ((الألوان))

– Target audience ((الفئة المستهدفة))

InitializeComponent( ) Method:- Some of the auto generated code in the

Method ((أي انها تساعد على عمل الاحداث))

this.Closing += new System.ComponentModel.CancelEventHandler (add event handler)

this.Closing -= new System.ComponentModel.CancelEventHandler ( remove event handler)

this. Control. add (object control); --→ to add control in code.

Label: Provide descriptive text or labels for other controls

((أي انه وصف للعناصر التي بالبرنامج))

Textbox: Used to enter data or display text during run time.

((يستخدم لإدخال البيانات داخل مربع وقت تنفيذ البرنامج))

Button: Enables user to click button to perform task.

((أي انها ازرار لتنفيذ المهام))

## Chapter 2

Listbox : Displays list of items for single or multiple Selections.

(( يأتي بقيم للاختيار الفردي او المتعدد))

Combobox : Displays list of items for single selection only.

Dialog:-

lblOutput.Font = fontDialog1.Font -----for font dialog

if for color dialog become ----- lblOutput.color =

colordialog1.color

Checkbox : Appear as small boxes Allow users to make a yes/no or true/false selection

(( تظهر كمربع صغير و بنتيجة نعم او لا ))

Radiobutton: Appear as small circles Allow users to make a yes/no or true/false selection.

## Chapter 3

Database management system (DBMS): computer programs used to manage and query databases

Ex: oracle , SQL server ,ms Access

### **Data Providers**

Microsoft SQL Server

- Applications using SQL Server 7.0 or later

Oracle

- Applications using Oracle data sources

Object Linking and Embedding Database

(OLE DB)

- Applications that use Microsoft Access databases

Open Database Connectivity (ODBC)

- Applications supported by earlier versions of Visual

Studio

Four core classes make up each data provider

namespace

- Connection

- Command

– DataReader

–DataAdapter

### **connecting to the Database:**

```
string sConnection;
```

```
sConnection = "Provider=Microsoft.ACE.OLEDB.12.0;" +
```

```
"Data Source=member.accdb";
```

```
OleDbConnection dbConn;
```

```
dbConn = new OleDbConnection(sConnection);
```

```
dbConn.Open();
```

SQL Queries:

Queries can be written to SELECT, INSERT,

UPDATE, and DELETE data in database tables

n	Control	Property	Event	Note
1	form	Font , fontcolor location, size	Load	Default location form (0,0)
2	Label	Font , size , text , name , font	Select	
3	Textbox	Modified , multyline , passwordchar , readonly ,textalign , name , text	Change text.	
4	button	Name , backcolor , font , fontcolor, tabindex , text	Click	You can inheritance the property

				from a form control
5	Listbox	Item , selecteditem , sorted , text , multycolumn	Selectedindexchange	Item is can add collection this
6	Combobox	Item , text	Selectedindexchange	
7	Menustrip	Text , tooltip	Click	
8	Format font		Apply	
9	Format color		Apply	
10	Chechbox		Checkedchange	
11	radiobutton		Checkedchange	
12	Groupbox	Name , text	enter	Use this control to put radiobutton
13	numaricupdown	Value, minimum , maximum	valuechange	
14	Datagradeview		Cellcontentclick	
15	dateTimePicker		valuechange	
16	panel		paint	
17	pictureBox		Click	
18	richTextBox		Change text	