



ISE 211 - Industrial Information Systems Databases and Analysis

Lecture 8 - Chapter 6

Design Of

User / Machine Interface



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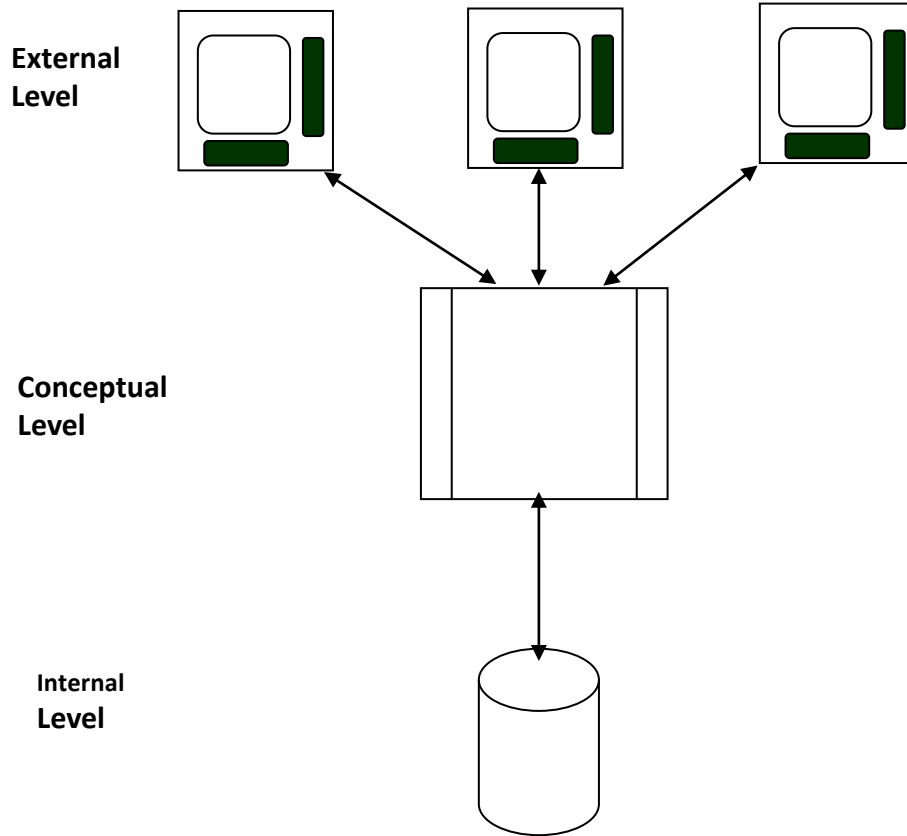
Agenda

- Levels Of Application
- Interaction Matrix
- Screen Design
 - Forms versus Reports
 - User Interaction
 - Machine Interaction
- Lab Work
 - Single Table Form
 - Create
 - Tailor
 - User Interaction (Command Buttons)
- Project Discussions

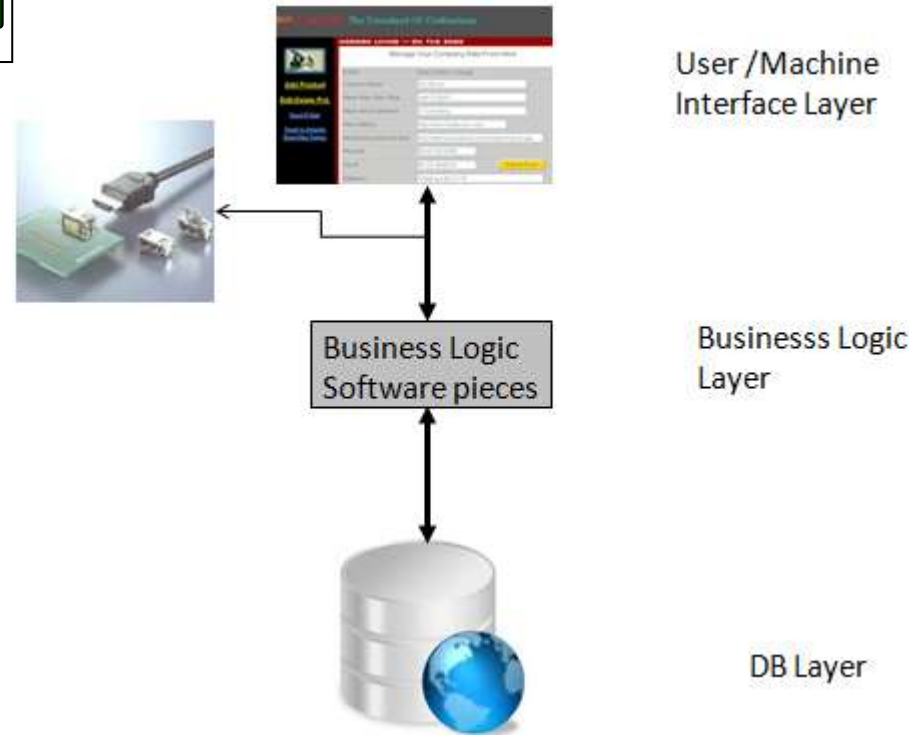


Levels Of Application

ANSI – SPARC Terminology



Professionals terminology





Functional / Entity Interaction Matrix

In reality Elemental Functions
 Can be combined into one or
 More forms or
 Interactive devices.
 (Think about Kent Kart validators,
 Filling terminals, POS, ATM
 other machinery that make life easy)

**Unfortunately we will work
 only with forms & reports**



ENTITY SET

ELEMENTAL FUNCTION	V	P		M	
	E	P	P	A	W
	N	U	O	T	A
	D	R	D	E	R
	O	C	E	T	H
	/	O	A	O	
	M	A	R	I	R
	A	T	D	L	E
	T	E	E	O	S
	E	R	I	T	E
	R	I	L	L	
	I	A	L	O	
	L	L	L	T	
Confirm Validity of Shipment		R	R		
Receive Materials	R			I	I

- I - Insert
- D - Delete
- U - Update
- R - Read Only



Screen Design

Form Specifications

1. Observe against available paper forms
2. Master Detail relations may exist
3. Can be more than one block of info (Bad Habit)
 - Think about ergonomic rules
 - Consider eye and brain abilities
 - Try to make life easier than ever
4. Check up against
 - Integrity
 - Possible User Errors
 - Possible Environmental Errors
5. Use navigation ergonomically

VENDOR

VENDOR_ID	V110
V_NAME	Jersey Vegetable Co.
V_STREET	2 Main St.
V_CITY	Patterson
V_STATE	NJ
V_ZIP	07055
V_PHONE	912-555-2300
V_FAX	912-555-2396
V_CONTACT	Paul Caudel

Record: 1 of 4

Do not deeply trust other layers of
Software for error checking.

Screen Design Report Specifications

1. Reports are READ ONLY
2. Observe against available paper reports
3. Try to prevent paper use
4. Try to prevent high CPU use
 - If necessary create summary tables at night time (Batch processing)
5. Use navigation ergonomically
 - Consider eye and brain abilities
 - Try to make life easier than ever





Uncompleted Lab work

- Try to write down your project draft analysis similar to as given in [Case 3.10](#) of the book *for your team of 2*.
- If there are forms, reports, documents or proposed ones; try to sketch them by hand within Lab hour.
- Try to draw a very draft E-R diagram for your project.
- **Create** Data Base within access.
Try to create Tables, DB diagram and show relations between table schemas.

Send by e-mail to hposaci@quiztechnology.com (Do not forget to write names)



Lab work

Step 1

- Creating a default form using form wizard (AE* 6.1)
 - labels default to attribute names
 - text boxes display each record of the attribute in the table
 - navigation buttons allows the user to move through the records of the table

Download database first

Attribute	Value
VENDOR_ID	V110
V_NAME	Jersey Vegetable Co.
V_STREET	2 Main St.
V_CITY	Patterson
V_STATE	NJ
V_ZIP	07055
V_PHONE	912-555-2300
V_FAX	912-555-2396
V_CONTACT	Paul Caudel

Kayıt: 1 / 5 Filtre Yok Ara



Lab work 1


Some different in access 2007

Access Exercise 6.1:

We want to establish a form named "VENDOR". This will be a form based on the **VENDOR** table.

1. Go to MS Access Main Window.
2. Open the database **Material_Manager_CH6_stu**.
3. From the database window, click on the "Form" tab and then double click "Create form by using wizard". This will bring you to the "Form Wizard" window (See Figure 6.3).

Forms can be based on either a table or a query. This form will be based on the table **VENDOR**.

4. In the "Tables/Queries" pull down menu, select the table name **VENDOR**.
5. In the "Available Fields" window, highlight the attributes you want on the form and click  . The chosen attribute will move to the "Selected Fields" selection box. Do this for all the attributes in the table. When this is done, click on the "Next" command button.
6. The Form Wizard will ask you to choose a form layout. Choose the "columnar" layout. Click the "Next" command button.
7. The Form Wizard will ask you to choose the style that will be used for the background display. Choose "Standard" and click the "Next" button.
8. The form wizard will ask for the form name. Use the name **VENDOR**. Click the "Finish" command button.
9. After execution, the form should appear as shown in Figure 6.4. You have now created a single table default form for the **VENDOR** table.

Field Name	Value
VENDOR_ID	V110
V_NAME	Jersey Vegetable Co.
V_STREET	2 Main St.
V_CITY	Patterson
V_STATE	NJ
V_ZIP	07055
V_PHONE	912-555-2300
V_FAX	912-555-2396
V_CONTACT	Paul Caudel



Lab work 1

Make Form Like This

VENDOR

 VENDOR

VENDOR_ID:	<input type="text" value="V110"/>	PHONE:	<input type="text" value="912-555-2300"/>
V_NAME:	<input type="text" value="Jersey Vegetable Co."/>	FAX:	<input type="text" value="912-555-2396"/>
ADDRESS:	<input type="text" value="2 Main St."/>	V_CONTACT:	<input type="text" value="Paul Caudel"/>
	<input type="text" value="Patterson"/>		
	<input type="text" value="NJ"/>		<input type="text" value="07055"/>

Kayıt: 1 / 5 Filtre Yok Ara



Lab work 1

Add Command Buttons

BtnInsert
BtnDelete
BtnSave
BtnLogin

Lock Text Boxes

Make invisible

VENDOR

VENDOR

VENDOR_ID: V110

V_NAME: Jersey Vegetable Co.

ADDRESS: 2 Main St.
Patterson
NJ 07055

PHONE: 912-555-2300

FAX: 912-555-2396

V_CONTACT: Paul Caudel

Insert Record Delete Record Save Record

▶* ✕ ✕

Login

Kayıt: 1/5 Filtre Yok Ara

Lab work 1

Addressing Form Objects From Code

- Addressing the specific property of an object
Forms![Form Name]![Form Object].Property=desired value
Forms![Vendor]![Insert_button].Visible=True
- Adding on_click event procedure

The image displays a software application window titled 'VENDOR'. The window has a blue header bar with the 'VENDOR' title and a logo. Below the header, there are several input fields for vendor information:

- VENDOR_ID: V110
- V_NAME: Jersey Vegetable Co.
- ADDRESS: 2 Main St. (with sub-fields for NJ and 07055)
- PHONE: 912-555-2300
- FAX: 912-555-2396
- V_CONTACT: Paul Caudel

A 'Login' button is located at the bottom right of the form. Below the form, there is a navigation bar with 'Kayıt: 1 / 5', 'Filtre Yok', and 'Ara'.

On the left side, a 'Özellik Sayfası' (Property Grid) is visible, showing the 'BtnLogin' control selected. The 'Olay' (Events) tab is active, displaying a list of events and their corresponding procedures:

Event	Procedure
Tıklatıldığında	[Olay Yordamı]
Odaklanıldığında	
Odaklanma Sonlandırıldığında	
Çift Tıklatıldığında	
Fare Tuşuna Basılırken	
Fare Tuşu Bırakılırken	
Fare Taşındığında	
Tuşa Basılırken	
Tuş Bırakılırken	
Tuşa Basıldığında	
Girildiğinde	
Çıkıldığında	



Lab work 1

BtnLogin On_Click Function

Private Sub Login button Click ()

‘Make labels and command buttons visible

Forms![Vendor]! [Insert_button].Visible = True

Forms![Vendor]! [Delete_button].Visible = True

Forms![Vendor]! [Save_button].Visible = True

Forms![Vendor]! [Insert Record].Visible = True

Forms![Vendor]! [Delete Record].Visible = True

Forms![Vendor]! [Save Record].Visible = True

‘Unlock attribute fields for editing

Forms![Vendor]![VENDOR_ID].Locked = False

Forms![Vendor]![V_NAME].Locked = False

Forms![Vendor]![V_STREET].Locked = False

Forms![Vendor]![V_CITY].Locked = False

Forms![Vendor]![V_STATE].Locked = False

Forms![Vendor]![V_ZIP].Locked = False

Forms![Vendor]![V_PHONE].Locked = False

Forms![Vendor]![V_FAX].Locked = False

Forms![Vendor]![V_CONTACT].Locked = False

EndSub



Lab + Home Work

Complete Up To Exercise 6.6 and Send by E-Mail

Complete your Uncompleted Project work

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Questions

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