

RUTGERS

Rutgers Business School
Newark and New Brunswick

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**Accounting Information
Systems**

Dr. Peter R. Gillett

Associate Professor

Department of Accounting, Business Ethics and Information Systems

Rutgers Business School–Newark and New Brunswick

A.I.S. Class 17: Outline

- Learning Objectives for Chapter 10
- Chapter 10 Quiz
- Chapter 10 Highlights
- Group Projects
- Group Work for Chapter 10
- Sheldon Shirts

Learning Objectives for Chapter 10

- In Chapter 10 students will learn:
 - * What events are and how they propagate throughout your application
 - * How actions are recognized and triggered by events
 - * How to write a macro and attach it to a command button that activates the macro

Learning Objectives for Chapter 10

- In Chapter 10 students will learn:
 - * How to write Visual Basic for Applications (VBA) code and attach the code to event procedures
 - * How to create form navigation buttons
 - * How to incorporate small code segments that reside behind a form and that provide data validity, range, and reasonableness checks on form fields

Chapter 10 Quiz

?

Implementing the Design

- 1 Create the Access tables required by the design
- 2 Designate the primary keys
- 3 Establish relationships between tables
- 4 Create forms to maintain the tables for each resource and agent
- 5 Create (multi-table) forms for event recording processes
- 6 Create queries to generate desired information
- 7 Develop report formats for the desired reports
- 8 *Build a custom menu system*

Implementing the Design

- *Most importantly, in this chapter you will learn how to implement various forms of input and processing controls within your database applications*

Chapter 10 Highlights

- Automating database applications with Code
 - * **Macros**
 - * **VBA**
- States, events, and event properties
- Creating a Command Button
- Creating a Macro and attaching it to a Command Button
- Creating other form navigation buttons with VBA
- Printing a Macro, Macro Group, or VBA code

Chapter 10 Highlights

- ACCESS events
- Improving navigation buttons
- Buttons for file maintenance
 - * Save Record
 - * New Record
 - * Delete Record
 - * Cancel Changes
- Modifying VBA Code

Chapter 10 Highlights

- Validating user input
- Enforcing business rules
- Using a switchboard form
- Adding buttons and labels to switchboard forms
- Modifying a form's properties
- Making a switchboard form open automatically

Chapter 10 Highlights

- **DLOOKUP (p. 490)**
 - * **DLookup (expression, domain, criteria)**
 - * **DLookup (attribute, table, row)**
 - * **DLookup (“[OnHand]”, “[tblInventory]”, “[ItemID]=12345”)**
 - * **DLookup (“[OnHand]”, “[tblInventory]”, “[ItemID]=Forms![frmOrder]![fsubOrder].Form![ItemID]”)**
 - * **[Quantity] >DLookup (“[OnHand]”, “[tblInventory]”, “[ItemID]=Forms![frmOrder]![fsubOrder].Form![ItemID]”)**
- **IsNull (p. 471)**

Implementation Naming Conventions

- We now add to our Camel Code naming convention, consistent with the Perry & Schneider text:
 - * **tbl** as a preface for table names
 - * **qry** as a preface for query names
 - * **frm** as a preface for form names
 - **fsub** as a preface for sub-form names
 - * **rpt** as a preface for report names
 - * **mcr** as a preface for macro names
 - * **cmd** as a preface for command button names
 - * **mnu** as a preface for menu names
- Thus we will have tblSalesOrder, etc.

Group Projects

- Use Switchboard forms to implement an easy-to-use Menu system

Group Projects

- Top Level – buttons for:
 - * Purchases (or Materials Acquisition)
 - * Fixed Assets
 - * Services
 - * Conversion (or Production)
 - * Sales (or Revenue)
 - * Human Resource Management (or Payroll)
 - * Finance
 - * Cash Transfers
 - * Exit

Group Projects

- Sales – buttons for
 - * Enter sales transactions
 - * Maintain sales tables
 - * Generate sales reports
 - * Return to previous Menu

Group Projects

- Enter transaction – buttons e.g.
 - * Record sales orders
 - * Record picking of goods
 - * Record shipments/deliveries
 - * Record cash receipts
 - * Record returned goods
 - * Record credit allowances
or whatever your events are
 - * Return to previous Menu

Group Projects

- Maintain tables – buttons e.g.:
 - * Maintain finished goods inventory
 - * Maintain cash accounts
 - * Maintain customers
 - * Maintain staff
 - * Maintain directors
 - * Maintain shippers
 - or whatever your resources and agents are*
 - * Return to previous Menu

Group Projects

■ Generate reports

- * Print sales orders
- * Print pro-forma invoices / remittance advices
- * Print shipping notices / bills of lading
- * Print sales invoices
- * Print cash receipts
- * Print returned goods forms
- * Print credit notes
- * Print accounts receivable
- * Print unfulfilled orders
- * Print sales analyses

or whatever reports your system needs – you may have to split onto several pages if you have many reports – e.g, current, period end

- * Return to previous Menu

Group Work for Chapter 10

- Problems 1, 2 – using **MACROS** *NOT* VBA

Sheldon Shirts

- Stage 3 needs to be fixed, completed and posted
- Stage 4 is due in the binders on Monday
- Remember that I have canceled many parts of Stage 4:
 - * You are no longer responsible for General Controls
 - * You are responsible for Application Controls only for the one or two cycles your group has been assigned
 - * You are responsible for designing controls for the NEW system you are developing but NOT for documenting controls in the existing manual system
- However, for the cycles you ARE working on, you should plan on being very specific and detailed
 - * The plan is that you do all your thinking about the specifics of controls NOW, so that at Stage 5 you only have to think about how to enter them in ACCESS

Sheldon Shirts

- For example:
 - * Type of Control: Range Test
 - * Control Activity: The software will reject all Hourly Wages entered that are not >0 and ≤ 10.00
 - * This is a programmed preventive control
 - * It contributes to achieving our Control Objectives for Accuracy and Validity
- *Sometimes*, it may be possible to document multiple control activities in one box:
 - * Type of Control: Field Test
 - * Control Activity: Non-numeric input will be rejected for the following attributes:
 - AAAA
 - BBBB
 - CCCC
 - DDDD

Finally . . .

- Classes will meet in Beck 213 on Monday November 3