

A.I.S. Class 21: Outline

- Group Projects Stages 4, 5 & 6
- Learning Objectives for Chapter 7
- Chapter 7 Quiz
- Group Work for Chapter 7
- New ACCESS Features
- ACCESS – Control and Ease of Use
- College Computing

Group Projects Stages 4

- Too many fields identified as mandatory for completeness (e.g., cell phone #)
- User Controls confused with Output Controls
- Insufficient detail as to how control will be implemented
- Range test with no defined bounds
- Primary keys numeric
- All primary keys autonumber
- Some controls with no obvious purpose or value

Group Projects Stages 5 & 6

- Does the software implement the design:
 - ★ Are all the specified tables implemented?
 - ★ Are the primary keys correct (including for link tables)?
 - ★ Are the attributes in accordance with the data repository structure?
 - ★ Are the relationships as per the REA diagram?
 - ★ Are there forms to maintain every (non-event) table?
 - ★ Are there forms + subforms to capture every event?
 - ★ Are the controls identified in Stage 4 implemented?
 - ★ Are there enough reports (in particular, are all the reports in Stage 3 implemented)?

Group Projects Stages 5 & 6

■ Does the software work correctly?

- ★ Are the required switchboard menus implemented?
- ★ Do the switchboard menus run automatically when the database is started?
- ★ Do the switchboard menus work?
- ★ Does ACCESS close on exit from the main switchboard?
- ★ Do any buttons have unanticipated actions?
- ★ Do switchboard forms close correctly as the user moves between them?
- ★ Are ACCESS menus and toolbars eliminated throughout the system?
- ★ Are the tables correctly updated by the forms?

Group Projects Stages 5 & 6

- Does the software work correctly?
 - ★ Are **all** the link tables correctly updated (e.g., event-event links such as Shipments-Receipts)?
 - ★ Does test data on the tables appear to have been entered via the forms or is there invalid data on the tables?
 - ★ Are there procedures to update any balance attributes stored on the tables?
 - ★ Does data validation work correctly?
 - ★ Do the database manipulation buttons work correctly?
 - ★ Do the navigation buttons work correctly?
 - ★ Do the forms visually distinguish editable from non-editable controls?

Group Projects Stages 5 & 6

■ Does the software work correctly?

- ★ Is the user supported by look-up lists from combo boxes etc. whenever possible?
- ★ Are form and report titles meaningful to the user?
- ★ Are forms and reports attractively presented?
- ★ Have unnecessary labels generated by ACCESS been removed from forms and reports?
- ★ Do reports include the appropriate data from different tables (especially link tables)?
- ★ Are items in reports and queries properly sorted?
- ★ Are reports appropriately totaled?
- ★ Are there any unexpected error messages generated?
- ★ Is the required documentation complete?

Group Projects Stages 5 & 6

■ Additional points to watch for:

- ★ Input Masks
- ★ Validation Rules
- ★ Validation Macros - quantities & amounts
- ★ Text v. Number (& effect on sequence)
- ★ Sorting queries & reports
- ★ Remove fsub labels
- ★ Use Captions to avoid “ObtInQuantity”
- ★ Kill: “Summary for ‘Receive#’ = 100019 (2 detail records)”
- ★ Naming conventions:
tblShipments-FinishedGoodsInventory etc.

Group Projects Stages 5 & 6

- Create a directory on your C: drive called C:\AIS
- Copy both your databases there
- Rename them "Groupx.mdb and TablesGroupx.mdb respectively (x = 1, 2, . . . 18)
- Link them (or re-link them) as required
- Submit them to me using the Digital Drop-Box on Blackboard (be SURE to SEND not just ADD)

Learning Objectives for Chapter 7

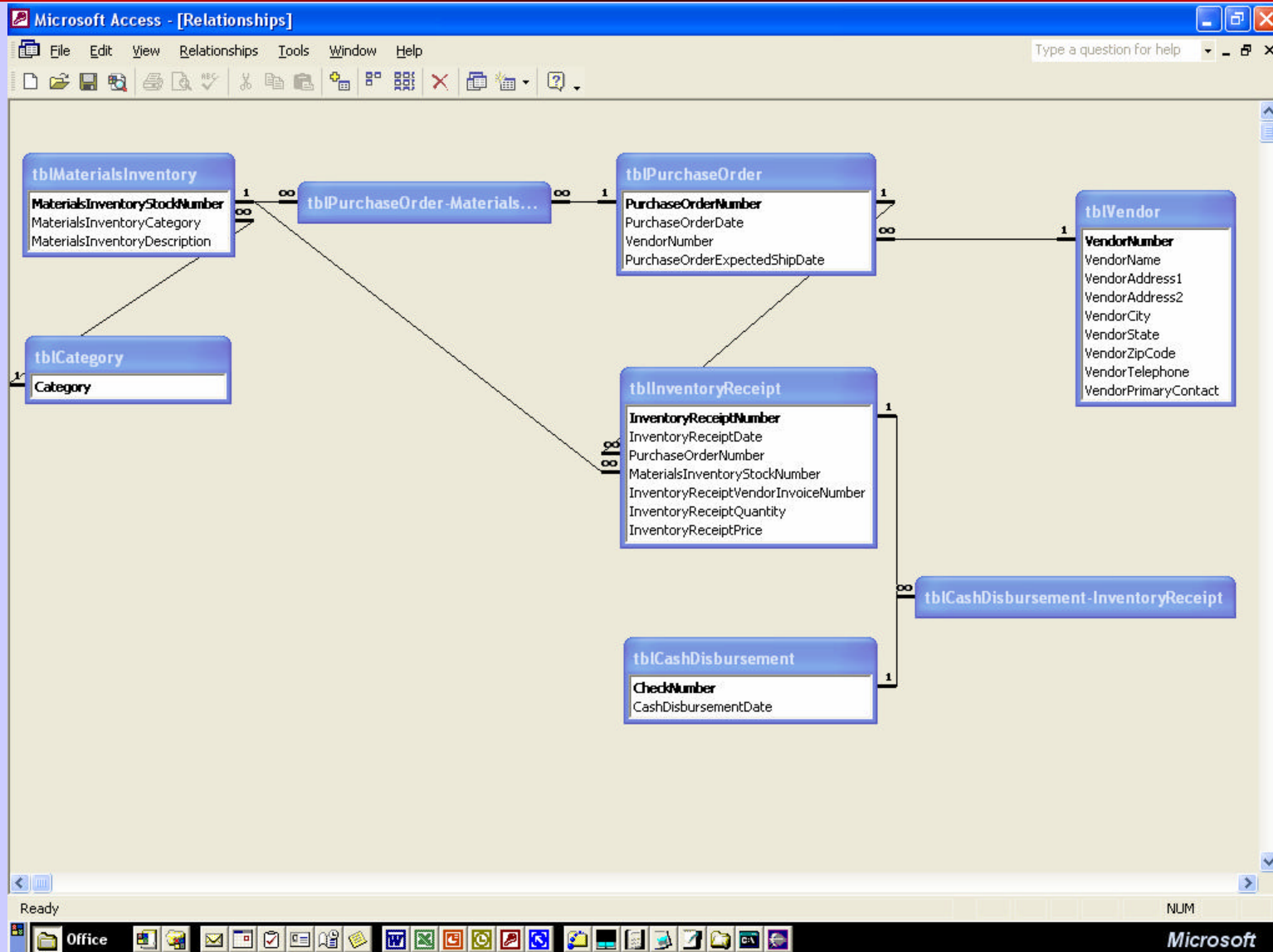
- In this chapter you will learn how to use Access to design tables, queries, forms, and reports that can help you to:
 - ◆ Create and maintain vendor records
 - ◆ Create and maintain materials inventory records
 - ◆ Print purchase orders
 - ◆ Summarize and report purchase order information
 - ◆ Record the receipt of ordered materials
 - ◆ Print checks and record disbursements to vendors
 - ◆ Summarize purchases and accounts payable information

Chapter 7 Quiz

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Group Work for Chapter 7

- Draw an REA diagram for the tables discussed in Chapter 7 of Perry & Schneider
- Identify at least 3 (minor) new features of ACCESS introduced in Chapter 7
- One difference between the M&G and P&S Purchasing models emerges at Exercise 7.24 paragraph 5 on page 350. Explain!



New ACCESS Features

- Chr() (see page 360)
 - ★ Chr(13) – carriage return – beginning of line
 - ★ Chr(10) – line feed – new line
- IIF() (see page 360)
- Also, note the “trick” in TRY IT on page 353

ACCESS – Control and Ease of Use

■ Tables

- ★ Input masks control format (e.g., upper case)
- ★ Validation Rules (+Text) control content
- ★ Referential Integrity can be established

ACCESS – Control and Ease of Use

■ Queries

- ★ “Selection” determines what rows of a table are seen by users
- ★ “Projection” determines what columns of a table are seen by users
- ★ Facilitate calculation of new information
- ★ Allow data from multiple tables to be used simultaneously

ACCESS – Control and Ease of Use

■ Forms

- ★ Provide a user-friendly interface to minimize stress and cognitive load on users
- ★ Facilitate input to several tables at once
- ★ Restrict which attributes can be seen by a particular user
- ★ Restrict which attributes can be updated by a particular user
- ★ Prevent users from changing the table structure while allowing data entry
- ★ Can be improved by use of Combo boxes (+ “Limit to List”)

ACCESS – Control and Ease of Use

■ Reports

- ★ Flexible presentation of information facilitates use in decision making
- ★ Can present “subset” views of data on a controlled basis

ACCESS – Control and Ease of Use

■ Macros/VBA

- ★ Can validate data immediately it is entered (rather than waiting until the whole form is completed – controls at table level are activated when the form is ready to write the whole of data to the table)
- ★ Can check values in relation to other tables and objects
- ★ Can be as complex as necessary

ACCESS – Control and Ease of Use

■ Switchboard Forms/Menus

- ★ Are user friendly and familiar
- ★ Facilitate use of the application by users unfamiliar with ACCESS
- ★ Reduce stress and cognitive load
- ★ Limit users to just those facilities of ACCESS that they need to perform their jobs, while preventing use of tools needed by designers

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