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Accounting Information Systems

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A.I.S. Class 14: Outline

- Identifying Attributes – Step 6
- COBIT
- Learning Objectives for Chapter 3
- Chapter 3 Quiz
- Database Foundations
- Group Work for Chapter 3
- ACCESS Classes
- Mid-Term Examination Review

Identifying Attributes – Step 6

- Cash Account
  - Cash Account Number
  - Cash Account Name / Description
  - Bank Name
  - Bank Branch
  - Bank Account Number
  - *Balance ?*

These items are each stored once per record

Identifying Attributes – Step 6

- Raw Materials Order
  - Purchase Order #
  - Purchase Order Date
  - Requisition #
  - Purchase Order Clerk
  - Vendor #
  - Target Delivery Date

  These items are each stored once per record

  - {Raw Materials #, Order Quantity, Order Price}

  These sets of three items are each stored multiple times per record

Identifying Attributes – Step 6

- Shipper
  - Shipper #
  - Shipper Name
  - Shipper Address Line 1
  - Shipper Address Line 2
  - Shipper City
  - Shipper State
  - Shipper Zip
  - Shipper Telephone Number
  - Shipper Contact Person Name

  These items are each stored once per record – note that there are two distinct address lines, each stored once

Identifying Attributes – Step 6

- Shipper
  - Shipper #
  - Shipper Name
  - {Shipper Address Line}
  - Shipper City
  - Shipper State
  - Shipper Zip
  - Shipper Telephone Number
  - Shipper Contact Person Name

  These items are each stored once per record

  – except that there may be an unknown number of address lines

Identifying Attributes – Step 6

- Shipper
  - Shipper #
  - Shipper Name
  - Shipper Address
  - Shipper City
  - Shipper State
  - Shipper Zip
  - Shipper Telephone Number
  - Shipper Contact Person Name

  These items are each stored once per record

COBIT

- Internal Control Frameworks
  - SAS 55, 78, 94 – COSO
    - Internal Control is a process effected by an entity's board of directors, and other personnel, that is designed to provide reasonable assurance regarding the achievement of objectives in the following categories:
      - effectiveness and efficiency of operations
      - reliability of financial reporting
      - compliance with applicable laws and regulations
  - Sarbanes-Oxley Act (SOX) focuses on internal controls over *financial reporting*
  - COBIT
  - ISO/IEC 17799:2005 (The Code of Practice for Information Security Management)

COBIT

- Control OBjectives for Information and related Technology
- Information Systems Audit and Control Association
- Management "best practices"
- 34 high level control objectives
- 215 detailed control objectives
- IT processes in four domains
  - Planning & organization
  - Acquisition & implementation
  - Delivery & support
  - Monitoring & evaluation

COSO / COBIT

- COSO
  - Effectiveness
  - Efficiency
  - Reliability
  - Compliance
- COBIT
  - Effectiveness
  - Efficiency
  - Confidentiality
  - Integrity
  - Availability
  - Compliance
  - Reliability

COBIT 4.1 – May 2007

- The complete COBIT package is a set consisting of six publications:
  * Executive Summary
  * Framework
  * Control Objectives
  * IT Assurance Guide (formerly Audit Guidelines)
  * Implementation Tool Set
  * Management Guidelines

COBIT – High level Control Objectives

- Plan and Organize
  * PO1 Define a Strategic IT Plan and direction
  * PO2 Define the Information Architecture
  * PO3 Determine Technological Direction
  * PO4 Define the IT Processes, Organization and Relationships
  * PO5 Manage the IT Investment
  * PO6 Communicate Management Aims and Direction
  * PO7 Manage IT Human Resources
  * PO8 Manage Quality
  * PO9 Assess and Manage IT Risks
  * PO10 Manage Projects

COBIT – High level Control Objectives

- Acquire and Implement
  * AI1 Identify Automated Solutions
  * AI2 Acquire and Maintain Application Software
  * AI3 Acquire and Maintain Technology Infrastructure
  * AI4 Enable Operation and Use
  * AI5 Procure IT Resources
  * AI6 Manage Changes
  * AI7 Install and Accredit Solutions and Changes

COBIT – High level Control Objectives

- Deliver and Support
  - DS1 Define and Manage Service Levels
  - DS2 Manage Third-party Services
  - DS3 Manage Performance and Capacity
  - DS4 Ensure Continuous Service
  - DS5 Ensure Systems Security
  - DS6 Identify and Allocate Costs
  - DS7 Educate and Train Users
  - DS8 Manage Service Desk and Incidents
  - DS9 Manage the Configuration
  - DS10 Manage Problems
  - DS11 Manage Data
  - DS12 Manage the Physical Environment
  - DS13 Manage Operations

COBIT – High level Control Objectives

- Monitor and Evaluate
  - ME1 Monitor and Evaluate IT Performance
  - ME2 Monitor and Evaluate Internal Control
  - ME3 Ensure Compliance with External Requirements
  - ME4 Provide IT Governance

Learning Objectives for Chapter 3

- Details about creating and maintaining tables including:
  * Define a table's structure
  * Modify a table's structure and establish data integrity between related tables
  * Set table field properties including those restricting data ranges allowed for columns
  * Enter data into a table
  * Modify a table's datasheet display properties
  * Customize the Navigation Pane dislay to hide or display objects as well as create new Navigation Pane categories
  * Explain the advantages of separating tables from other database objects

Chapter 3 Quiz

?

Creating ACCESS Tables

- 6 Key Steps:
  1. Create a table
  2. Select and type each field name corresponding to a table column and assign a unique data type to it
  3. Modify column properties and enter others for each column when needed
  4. Create indexes for selected columns to speed data access
  5. Select a primary key from one or more table columns
  6. Save the newly created table design

ACCESS Data Types

- Text
- Memo
- Number
- Date/Time
- Currency
- AutoNumber
- Yes/No
- OLE Object
- Hyperlink
- Attachment
- Lookup Wizard

Creating ACCESS Tables

- Tables can be created from Templates
- Tables can be created from Scratch
  * This is what we will generally do for Ash Accounting
- Defining the Table's Columns
- Adding a Column
- Inserting a Column
- Adding a Column using a Lookup Field

Creating ACCESS Tables

- Deleting Columns
- Renaming Columns
- Moving Columns
- Establishing Intertable Referential Integrity
- Editing and Removing Intertable Relationships
- Deleting, Copying, Renaming, Hiding and Showing Tables

Creating ACCESS Tables

- Setting Field Properties
  - Field Sizes
  - Format
  - Input Mask
  - Caption
  - Default Value
  - Validation Rule and Validation Text
  - Required
  - Allow Zero Length
  - Indexed property
  - Lookup Properties

Creating ACCESS Tables

- Establishing Table-Level Data Validation
- Establishing a Primary Key
- Removing a Primary Key
- Designating Two Columns as a Table's Composite Primary Key
- Examining and Setting Table Properties
- Saving the Table Design
- Printing the Table Structure Information

Creating ACCESS Table

- Populating a Table
- Modifying a Table's Datasheet
- Resizing and Rearranging Columns
- Hiding and Freezing Columns
- Formatting the Datasheet
- Displaying Column Totals
  - * New in ACCESS 2007
- Printing Records

Creating ACCESS Table

- Organizing Tables in the Navigation Pane
- Creating New Categories
- Organizing Tables into Custom Categories
- Separating Tables from Other Database Objects
  - *This will be required in Stages 5, 6 and 7 (Final) of the Group Project*
- Linking to External Access tables

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

ACCESS Classes

- The next three classes, on October 21, 26 & 28, will all be held in Levin Lab 005
- From now on, there is no purpose in reading the ACCESS textbook by itself – it is vital you read at the computer, and follow the exercises with the keystrokes given
- If you have not done this, you will find the Lab classes a waste of your time, and may wish to consider how best to use your limited time . . .

Mid-Term Examination Review