MS Access Lab 1

Topic: Introductory tour of MS Access

Summary

- What is Microsoft Access?
- Ways to get help
- MS Access: Overview
- Table, Query, Form, Report
- Terminology

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1. MS Access

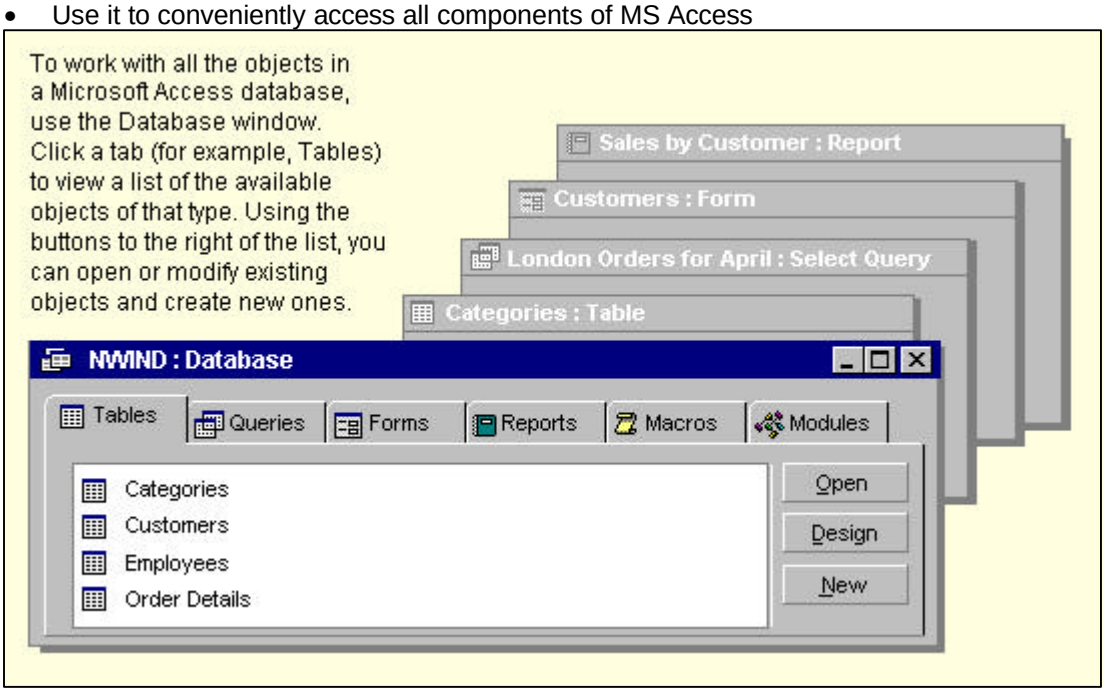
In this lab, we will be implementing the theories on database design that we learned in class with a program called Microsoft Access (MS Access). MS Access is a commercial Relational Database Management System (RDBMS) from Microsoft. It sells for about $300(stand alone) and is included in MS Office Professional. If you do not have a copy of MS Access on your home PC, you can launch it on any of our lab machines with Start → Programs → Microsoft Access **OR** clicking on the  icon on the office toolbar. To use the lab machines, you will need to have a Windows NT account within the IEOR Department. To obtain more information on how to set up your account, please visit:

http://www.ieor.berkeley.edu/labs/general.html#accounts

Most of the information given out in this lab can be accessed in greater detail under Microsoft Access's extensive help files. We will start by giving an introduction to MS Access and then we will be discussing ways to access help files in Microsoft Access.

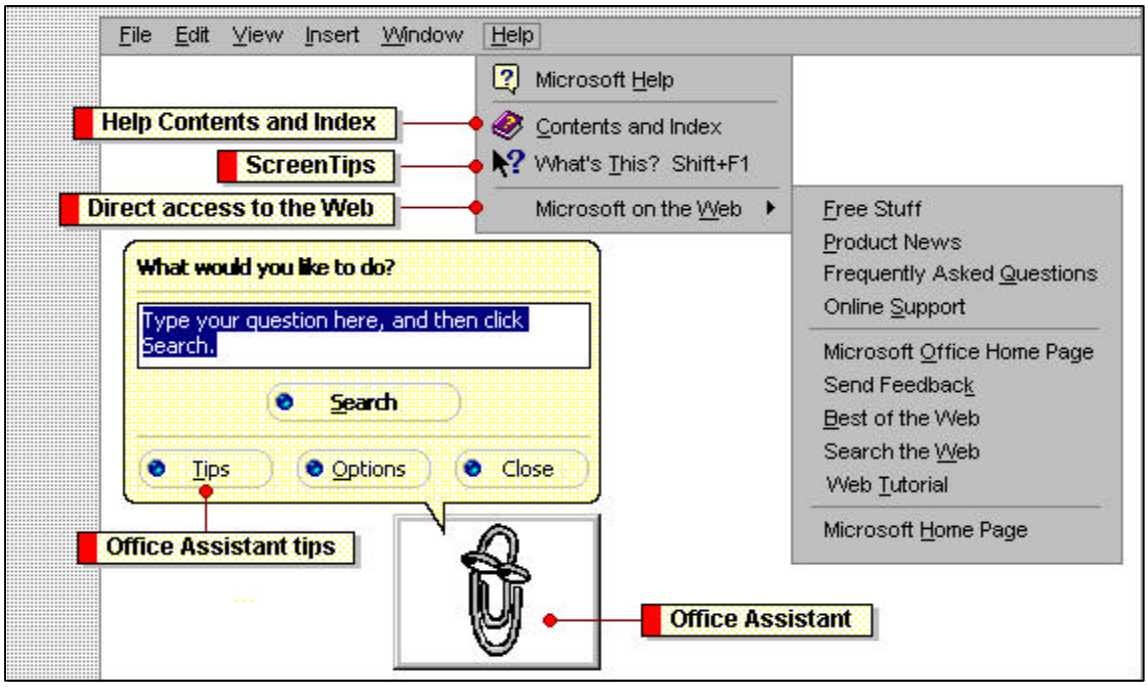
Database Window

- When you open a new or existing database, you will be greeted by the database window
- Use it to conveniently access all components of MS Access

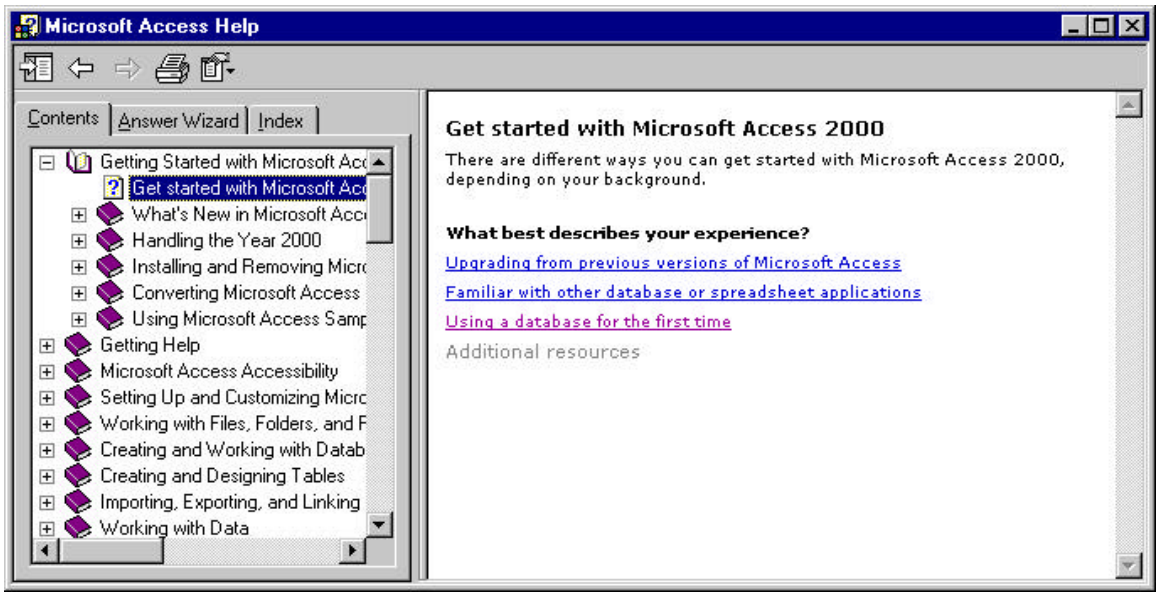


2. Ways to get help

- In MS Office programs, you can get help by pressing F1 key, or
- Click **Microsoft Help** on the **Help** menu (If the Assistant is turned on, it appears. If the Assistant is turned off, the Help window appears)
- To type a question in the Help window, click the **Answer Wizard** tab. To scroll through a table of contents for Help, click the **Contents** tab. When you want to search for specific words or phrases, click the **Index** tab.

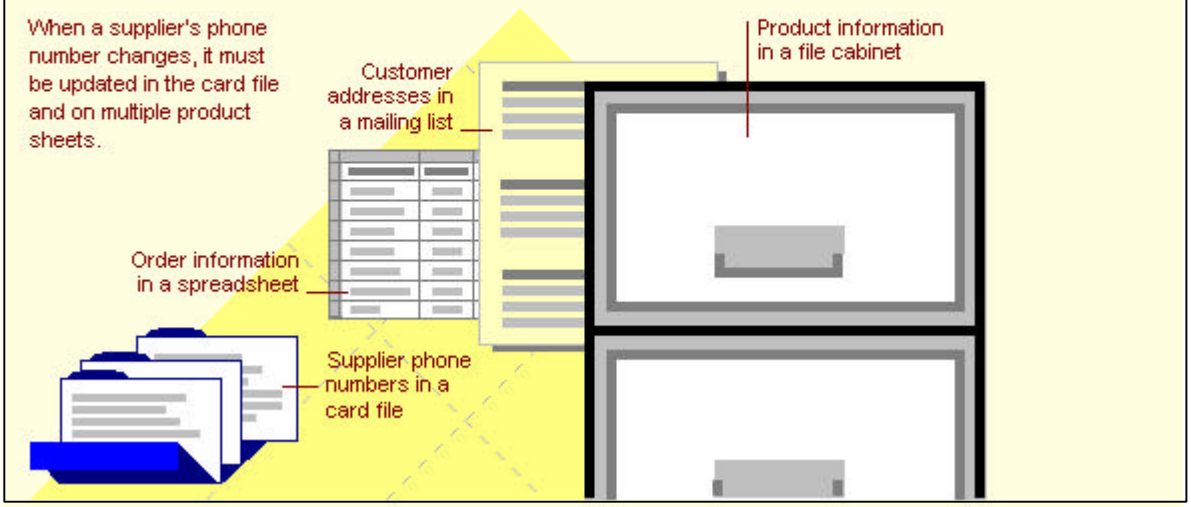


To get help on the topics discussed in this particular lab, we will go to the Help Microsoft Help Help Window Contents Getting Started … "Using a database for the first time" , as shown:



What is a database?

A database is a collection of information related to a particular subject or purpose, such as tracking customer orders or maintaining a music collection. If your database isn't stored on a computer, or only parts of it are, you may be tracking information from a variety of sources that you're having to coordinate and organize yourself.



3. MS Access Overview

- Microsoft Access's Components: Tables, Queries, Forms, Reports
- Each has its own special function to allow the user to manage information

Using Microsoft Access, you can manage all your information from a single database file. Within the file, divide your data into separate storage containers called tables; view, add, and update table data using online forms; find and retrieve just the data you want using queries; and analyze or print data in a specific layout using reports.

Store data once in one table, but view it from multiple locations. When you update the data, it's automatically updated everywhere it appears.

Customers : Table

Customer ID	Company Name	City
BSBEV	B's Beverages	London
EASTC	Eastern Connection	London

London Orders for April : Select Query

Company Name	City	Order Date
B's Beverages	London	11-Apr-96
Eastern Connection	London	12-Apr-96

Customers : Form

Customers

Customer ID: BSBEV

Contact Name: Victoria Ashworth

Company Name: B's Beverages

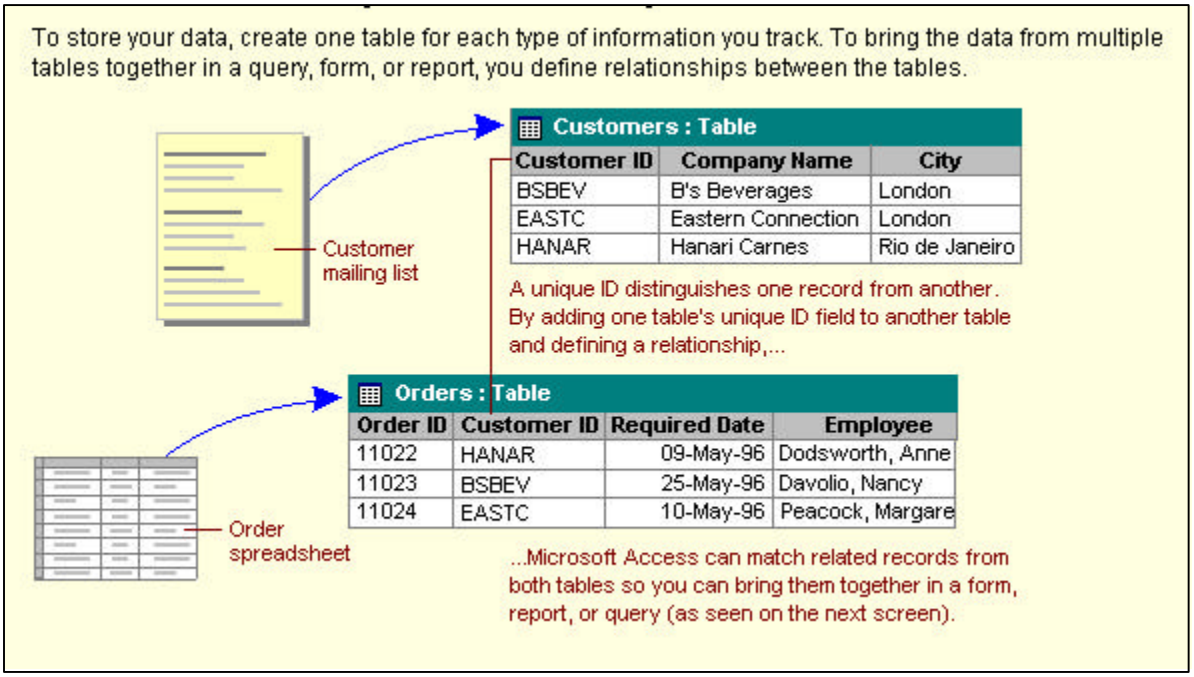
Sales by Customer : Report

Customer: B's Beverages

Order ID:	Sale Amount:
10943	$711.00
10947	$220.00
11023	$1500.00
Total:	$2431.00

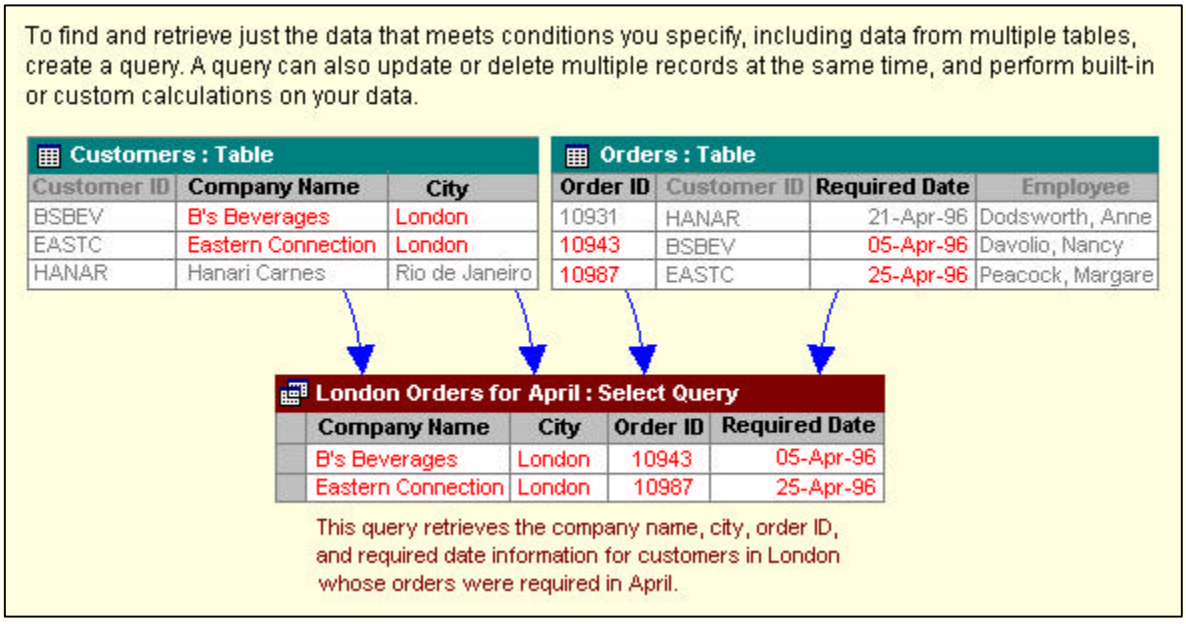
Table

- A table allows the user to store a collection of data about a specific topic like Customers or Orders



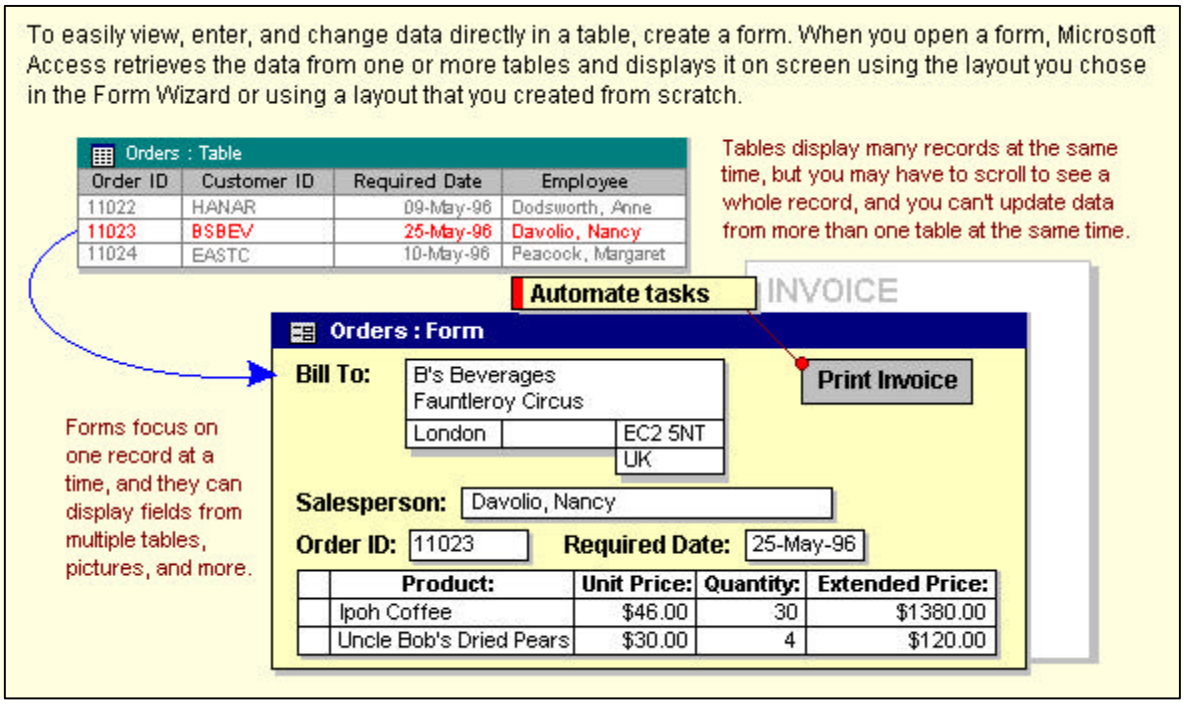
Query

- A query allows the user to view, change, and analyze data in different ways like combining data from two different tables (Customers and Orders) to create a user's own custom view (London Orders for April)
- Can also be used as the source of records for forms, reports, and data access pages.



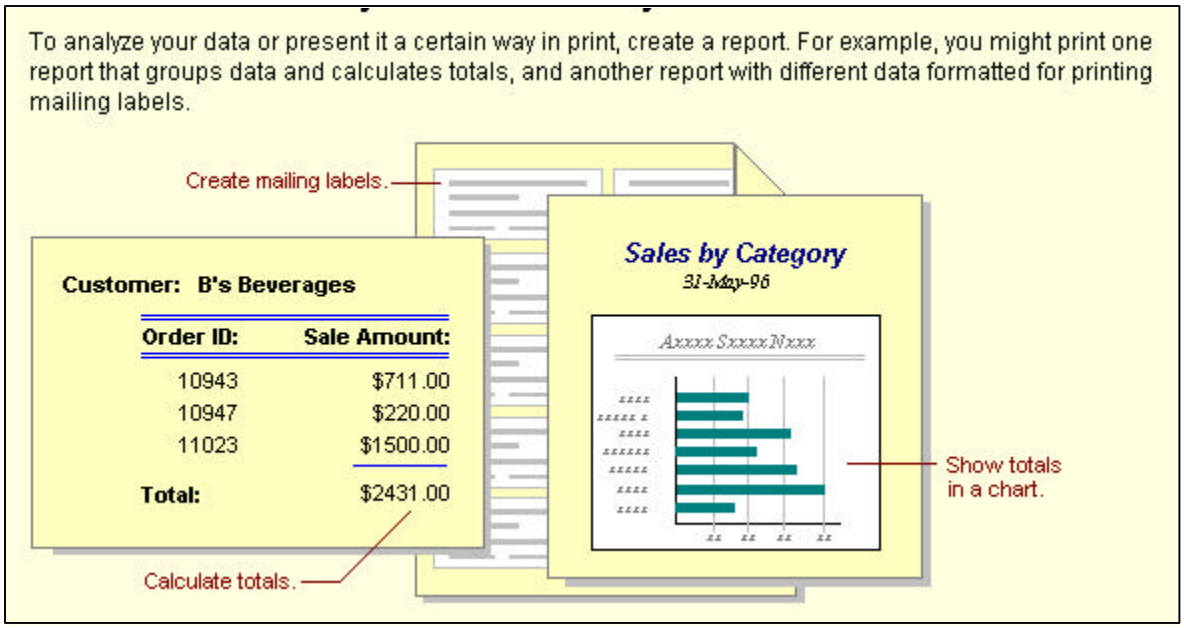
Form

- A form allows a user to enter/change/update data to table(s)



Report

- A report is an effective way to output your data in a printed format in the way you want it



4. Terminology

Note that MS Access sometimes uses terms that differ from those used in class and the textbook.

MS Access	Lecture/Text
Table (Lab 2)	Relation (Ch. 7)
Column/Field (Lab 2)	Attribute (Ch. 3)
Row/Record (Lab 2)	Tuple (Ch. 7)
Relationship View* (Lab 3)	Lines indicate foreign keys (Ch. 8)

* Note that the Relationship View in MS Access looks similar but is different from ER Diagram.