**Busn 216: Access**

**Define Database:**

1. Stores raw data
   1. Store data in small parts:
   2. Instead of storing “1143 14th Ave., Seattle, WA 98106” as one piece of data, store it as 4 pieces of data:



1. Creates information from raw data
   1. Useful reports used for decision making.
   2. We can search through 10,000 Nationwide addresses & return only the Seattle area addresses:



**Databases must allow:**

1. Easy data entry and updating
2. Queries (questions):
   1. Users must be allowed to ask questions of the database, such as “Show all addresses in Seattle area”
3. Forms:
   1. Users must be allowed to use “easy to use user interfaces” (use the Form instead of a table filled with 10,000 database records)
4. Reports:
   1. Users must be allowed to create easy to read reports that present the answers to the Queries

**Four important objects in a database:**

1. Tables (Heart of any database)
2. Forms (User interface)
3. Queries (Ask a question of the database)
4. Reports (Useful information created from database)

**All objects in database are stored in one place and are together considered “the database”.**

1. You create a blank database and save it before you create the objects in it

**Double click objects in the Navigation Pane to Open Objects**

**Access Work Area has Object Tabs: Click on Tab to view object**

**All objects have two basic views:**

1. Regular View
   1. Table: Datasheet view
   2. Form: Form view
   3. Query: Datasheet view
   4. Report: Print Preview
2. Design View (“Underneath view”)
   1. Design view allows us to change all structural elements in the object
   2. Although some structural elements can be added or changed in, Regular view, Design allows you to change all elements

**Navigation Pane Views:**

1. Table and Related Views:
   1. Shows Table and related objects below table
2. Object Type – All Access Objects
   1. Groups by Objects:
      1. Example:
         1. All Tables are grouped together
         2. All Queries are grouped together

* **Tables**
* The heart of any database
* Every database must have at least one table
* Tables are where we store the raw data
* First we create the tables, and then from tables we can make:
* Forms
* Queries
* Reports
* Table Structure:
* Shorthand to represent this table:
* Employee(No, FirstName, LastName, Address, City, State, Zip)



* Creating Fields:
* You can create some elements of Table in Datasheet View
* You can create all elements of Table in Datasheet View
* **Forms**
* “User interface”
* Forms are easy to use interfaces for the tables
* Used to:
* Search for data (example: find a person’s phone number)
* Enter data into database (Use tab to move between fields)
* Delete data from database
* **Queries**
* Queries are used to ask questions of the database and then return the data into a smaller table (dynaset)
* Queries can then be used to create reports
* **Reports**
* Nicely presented informational reports used to make decisions
* Reports are often based on queries
* **Some of the differences between Access & the other MS programs:**
* While in Access, you can only have one database open at a time
* To view multiple databases, use Windows Explorer
* Save:
* When you enter raw data into database, Access saves the data automatically
* Use the Save button only when you are creating or changing the structure of:
* Tables
* Forms
* Queries
* Reports
* Undo/Redo
* Only works when you are working on:
* A record before it is saved (moved on to next record)
* Creating an object (Table, Form, Query, Report)