

### Designing Effective Tables

1. Make sure all fields in the table follow the table's "theme".
2. Circle fields with repeating information – avoid redundancy.
3. Every Table Must Include a Unique ID.
4. Remember to include one field that joins the tables.

### Terminology

**Database** – a collection of information.

**Relational database** – a file that stores information in multiple tables.

**Object** – a tool that is used to store and/or work with data.

**Table** – a storage container of data stored in rows and columns –contains records and fields.

**Record** – a set of data about one person or thing.

**Field** – a category of information that pertains to all records.

**Query** – an object that requests information from a database.

**Form** – an interface that displays the table data in a meaningful manner

**Report** – an output object that defines what data will be printed to a printer or the screen and how it will be formatted.

**Macro** - a mini-program which will execute a series of commands.

**Module** - VBA codes that perform tasks within the database

### Starting Access

1. Click the Windows Start  button on the Task Bar.
2. Select **All Programs** from the Start menu.
3. Select **Microsoft Office** from the Start menu.
4. Click **Microsoft Access 2007** from the menu.
5. Choose to create a new or open and existing databases.

### Working with the Navigation Pane

The area on the left side of the screen is called the Navigation Pane. The Navigation Pane displays all of the database objects in the current database project.




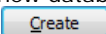
1. Click the arrows to expand and collapse the objects.

### Navigating with Tables

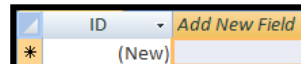
1. Expand the Navigation Pane.
2. Select the Tables group header.
3. Access 2007 expands the Tables listing.
4. Double-click the desired table.
5. Use the navigation buttons at bottom to scroll through records.
6. Right-click a field to use the quick filter feature.



### Creating a Database

1. Click the  button and choose **New**.
2. Select the location and name for new database and click the  button.

The **table** is automatically created with an ID field.



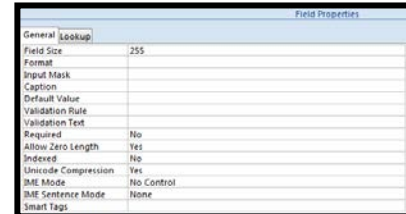
3. Add additional fields in either the **table view** or the **design view**.





The design view's upper-half contains columns for the **Field Name**, **Data Type**, and **Description**. The lower-half



displays the **Field Properties** for the currently selected field above.

4. In **Design View**, type the name for the field in the upper section and define the properties for that field below.



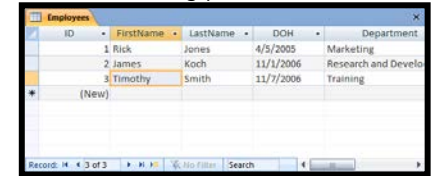
5. In **Datasheet View**, click the  button, from the Datasheet tab, double-click the **Add Field** box, or right-click table and choose **Insert Column**.
6. To change the field properties from the Datasheet view, select the field to change.
7. Select the Datasheet tab on the Ribbon.
8. Select the Data Type from the drop-down list located in the Data Type & Formatting group.
9. To reorder the fields, click the heading name and drag to new location.
10. When complete click the  button and type a name for the new table.

### Working with the Table

1. Open the table.
2. Click  in the Navigation Pane or Press [Ctrl + +] on the keyboard or Click  in the Records group on the Home tab.
3. Type the data in the blank record.
4. Press [Tab] or [Enter] to move to the next field.

### The Record Selector

1. As you select records, the **Record Selector** changes to help identify functions being performed.



### Shortcut Keys

#### Keystroke

[Ctrl + ' ] – copies value from field above


[Ctrl + ;] – inserts current date

[Ctrl + : - inserts current time


### Finding and Replacing Data

1. Select the **Home** tab.

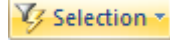
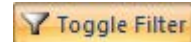


2. Click  in the Find group.
3. Type text to find.
4. Select the replace tab and type text to replace.

### Deleting a Record


1. Click  in the Records group on the Home tab.
2. Click **Yes** to confirm delete.



### Filtering Data

1. Select the value in a field.
2. Click  in the Sort & Filter group on the Home tab.
3. To further limit the set of records, select another value and repeat the process.
4. To clear the filter, Click  in the Sort & Filter group on the Home tab



### Querying Data using Design View

1. Select the Create tab on the Ribbon.

- Click  in the Other group.
- Select the table from the list and click **Add**.
- Click **Close**.
- Double-click each field you want in the query.
- Add any desired criteria.

- Click the  button to execute the query.
- Click  to close the query.
- Save the changes.

#### Querying Data using the Query Wizard

- Select the Create tab on the Ribbon.
- Click the  in the Other group.
- Double-click desired fields
- Click Next
- Name the Query.
- Click Finish.
- To add additional criteria, select the Home tab on the Ribbon.
- Click  to enter the Design View of the query

#### Using Query Criteria

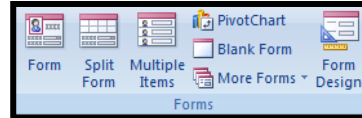
You can use wildcard characters to help define the criteria.




Wildcard	
*	any number of characters
?	any single character
#	a single digit
NULL	any record that has nothing in it
NOT	used in conjunction with others
=	Equals
>	Greater than

- Click the Sort cell under the Heading field in the grid.
- Select Ascending or Descending in the drop-down list.

#### Creating Forms using the Form AutoForm


To create a new Form, use the Forms group on the Create tab.



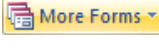
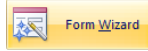
- Open the Table or Query to use as the source.
- Select the Create tab on the Ribbon.
- Select , , or  in the Forms group

Access 2007 automatically creates the form based on the selected table and places the form in the Layout View

#### Creating Forms in Design View

- Select the Create tab.
- Click  in the Forms group
- Access 2007 opens a new, blank form with the Field List and Fields available in other tables view

#### Creating Forms using the Forms Wizard

- Select the Create tab on the Ribbon.
- Click  in the Forms group.
- Select  in the drop-down menu.
- The Form Wizard will open.

#### Editing Forms in the Design Window

- Select the Form in the Navigation Pane.
- Right-click the mouse on the Form Name.

- Select Design View from the shortcut menu

#### Editing with Form Controls


Click the Controls group on the Design Tab for a complete list of controls.

**Bound:** Controls that are tied to a field in a table or query.




**Unbound:** Controls that are *not* tied to a field in any way

**Calculated:** Show a calculation in the field. Calculated controls are created and always start with the "=" sign.

#### Selecting/Moving, Resizing and Deleting Controls

- Click in the control to select it.
- To move it, click and drag with the .
- To resize it, click and drag with double-headed arrows.
- To delete, select the control and press Delete.


#### Changing the Format of the Form

- Select the Home tab on the Ribbon.
- Click the View button in the Views group Select the Form Layout View.
- Click  and  to scroll through the AutoFormat listing, or Click  to open the full list.
- Select the desired AutoFormat option.




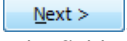

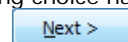

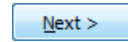
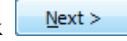
#### Report Design Issues

- Define the report's layout on paper.
- Design and implement the underlying query.
- Design the report in Access
- Preview or print the Report.

#### Simple Reports using the AutoReport

- Select the Table or Query from the Navigation Pane.
- Select the Create tab.
- Click  in the Reports group.
- Select the Report Layout view or the Design View to alter the appearance of the report.

#### Using the Report Wizard

- Highlight the Table or Query to be used in the Navigation Pane.
- Select the Create tab on the Ribbon.
- Click  in the Reports group. Access 2007 will open the Report Wizard.
- To include a single field, highlight the field name and click  or
- To include all fields from the table, click  or
- Double-click the field name to include just that field.
- When all fields are selected, click .
- Select the field to group the report in the list on the left.
- Click the  to add the field to the Group List.
- When the grouping choice has been made, click .
- Select the field from the drop-down list.
- Click  to change the sort order..
- When the sort choices have been made, click .
- Select the style you desire.
- When the style choice has been made, click .
- Choose the option for opening the report and click Finish.

#### The Report Design View

- Double-click the report from the Navigation Pane.
- Right click the report.
- Select **Design View**.