

# Microsoft Access

Relationships, Reports and Queries

# Relating tables:

- Creating a relationship between tables allows the user to get information from more than one table at a time (SubDataSheet).
- Establish a relationship (join) between tables by connecting fields (with the same data type and size) from different tables.

**Exhibit 18-12 One-to-many relationship and query**

The diagram illustrates a one-to-many relationship between two tables: **Customer** (primary table) and **Contract** (related table). Both tables share a common field, **Customer ID**. A query named **CustomerContracts** is shown, which joins fields from both tables. The query results show two contracts for one customer (customer ID 16).

Customer ID	Last Name	First Name	Company
8	Colberg	Chung	
9	Selin	Xenia	Jack's Café
10	Kennison	Pamela	Pleasanton Waldorf School
11	Christofferson	Khali	
12	Tedeschi	Anthony	M. Doufay Financial
13	Miga	Manda	Oak Roots Development
14	Walker	Frank	
15	Stille	Tamara	Prentice College
16	Ferebee	Julianne	Oakland Neighborhood Development
17	Lemaire	Alexa	

Contract Num	Customer ID	Contract Value	Date Signed
1303-MP	16	\$1,150.00	3/16/2013
1304-MP	22	\$1,200.00	4/10/2013
1305-KF	3	\$800.00	4/22/2013
1306-MP	23	\$1,100.00	4/29/2013
1307-MP	34	\$68,000.00	7/7/2013
1308-RR	5	\$620.00	7/7/2013
1309-KF	32	\$650.00	7/23/2013
1310-KS	32	\$14,000.00	7/30/2013
1311-RR	25	\$800.00	8/9/2013
1312-KF	11	\$450.00	8/16/2013
1313-MP	16	\$89,000.00	8/26/2013

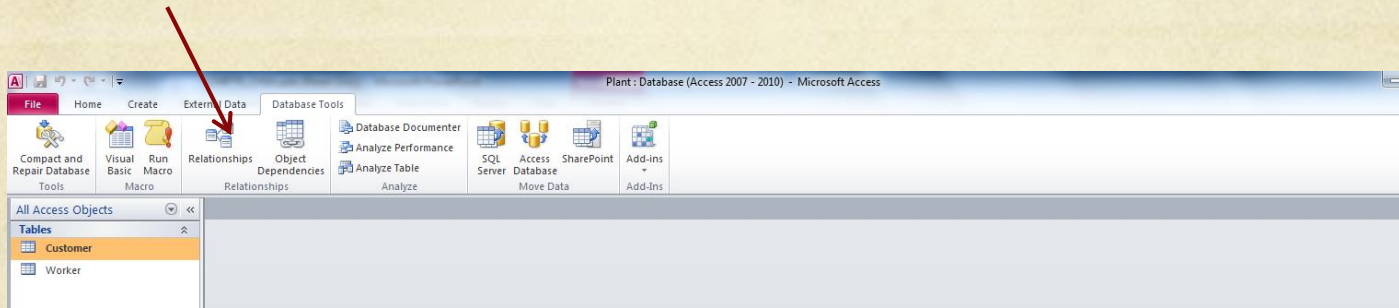
City	Company	First Name	Last Name	Contract Num	Date Signed	Contract Value
Palo Alto		Your	Name	1301-KS	2/9/2013	\$500.00
Palo Alto		Barbara	Derrick	1302-KS	3/3/2013	\$14,000.00
Oakland		Barbara	Derrick	1318-MP	9/30/2013	\$690.00
Oakland		Barbara	Derrick	1403-MP	1/26/2014	\$20,000.00
Redwood City		Sumiko	Sharma	1305-KF	4/22/2013	\$800.00
Redwood City		Sumiko	Sharma	1322-KF	10/20/2013	\$18,000.00
Brisbane	Brisbane Engineering Dept.	Misti	Stanwood	1425-KS	8/9/2014	\$6,500.00
Dublin		Leopold	Faries	1308-RR	7/7/2013	\$620.00
Dublin		Leopold	Faries	1317-RR	9/17/2013	\$16,500.00
San Francisco		Bradley	Schumer	1421-KS	6/29/2014	\$25,500.00
San Rafael	San Rafael Medical Partners	Yvette	Grady	1429-MP	8/23/2014	\$875.00
Oakland		Chung	Colberg	1426-RR	8/10/2014	\$15,000.00
Oakland	Jack's Café	Xenia	Selin	1411-MP	4/23/2014	\$16,500.00
Pleasanton	Pleasanton Waldorf School	Pamela	Kennison	1413-RR	4/29/2014	\$22,800.00
San Francisco		Khali	Christofferson	1312-KF	8/16/2013	\$450.00
San Francisco		Khali	Christofferson	1321-KF	10/15/2013	\$15,500.00
Concord	M. Doufay Financial	Anthony	Tedeschi	1417-RR	6/1/2014	\$1,150.00
Oakland	Oak Roots Development	Manda	Miga	1419-RR	6/12/2014	\$575.00
Oakland	Oak Roots Development	Manda	Miga	1427-AD	8/11/2014	\$38,500.00



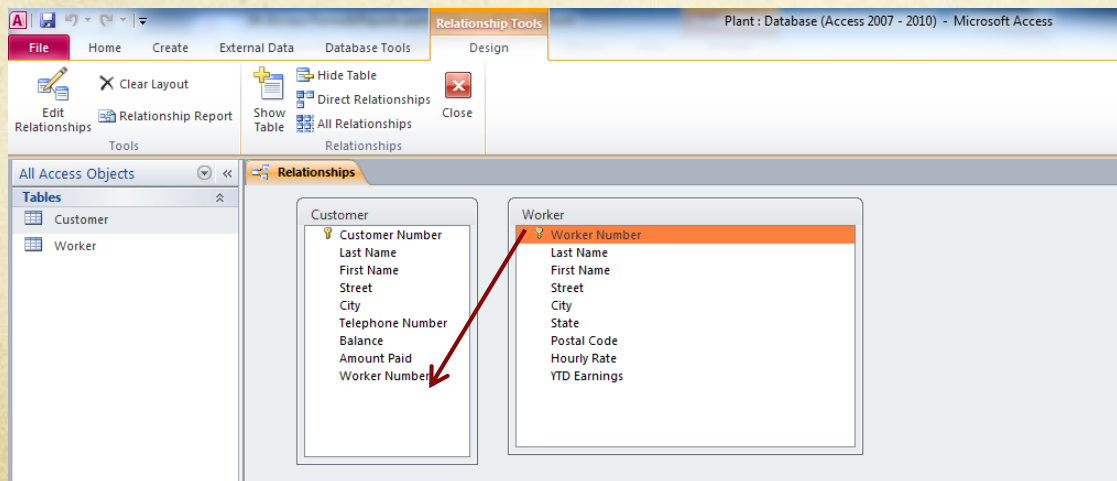
# Terms to know

- A **Primary Key**: a field which is unique for every record (like SS#).
- **Relationship**: ties tables together through a common field.
- **Enforce Referential Integrity**: means that you can't enter a record in a related table if that record is not in the primary table.
- **Cascade**: Deletes records in related tables if you delete record in primary table.

# Creating a Relationship



- Close the tables before creating a relationship between them
- Relationship button is on the Database Tools Ribbon



Drag your mouse from the primary field to the related field in the other table



# Reports

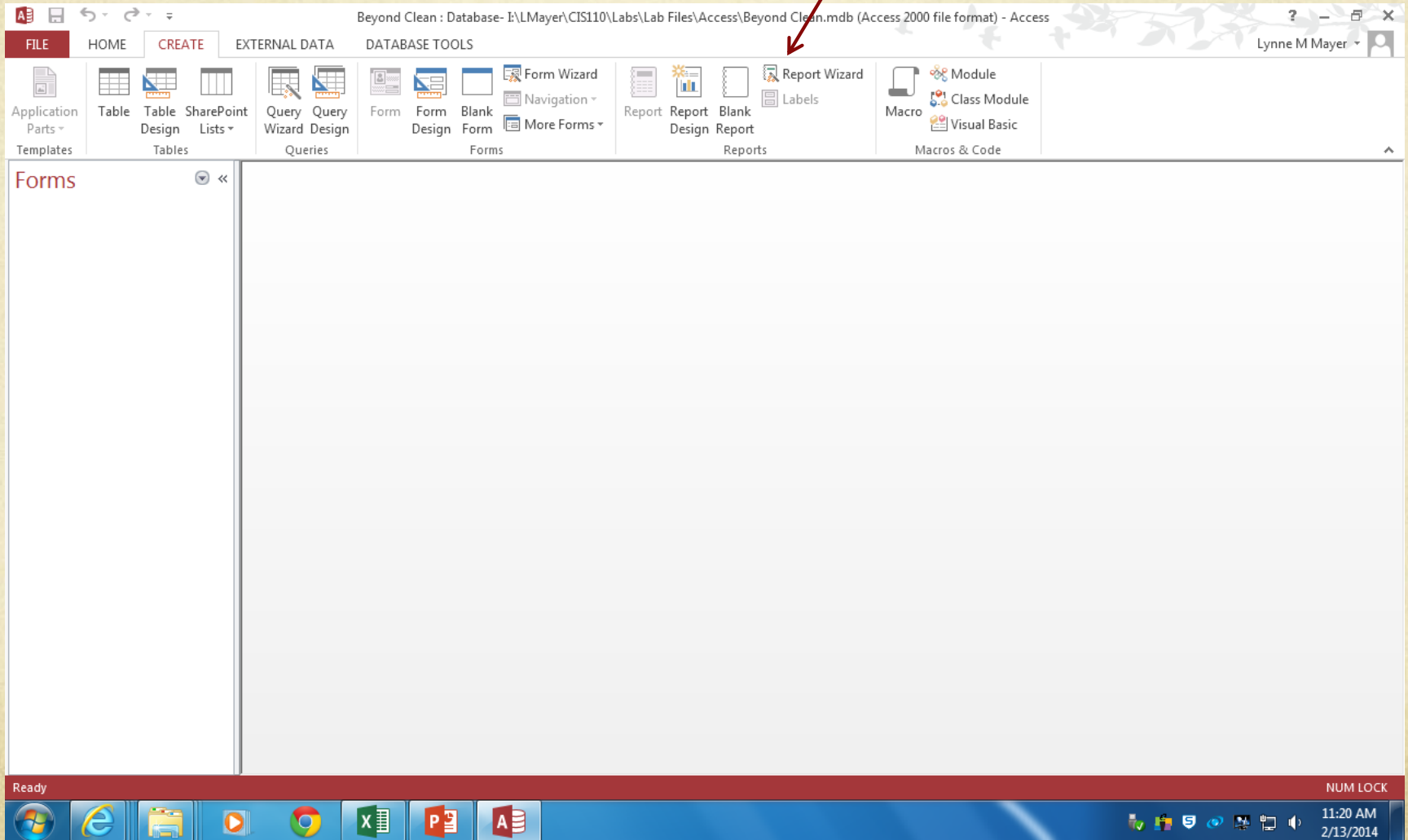
Reports allow you to organize the data into information. Like Forms, Reports can be created by

- Selecting a table (or query) and clicking the Report button (uses all fields in the table)
- Using a blank report or creating the report in Design View (not recommended)



- Using the **Report Wizard** (Let the Wizard do the work for you - You can always modify the report later in Design view)
- Using the Label Wizard if you want mailing or other labels

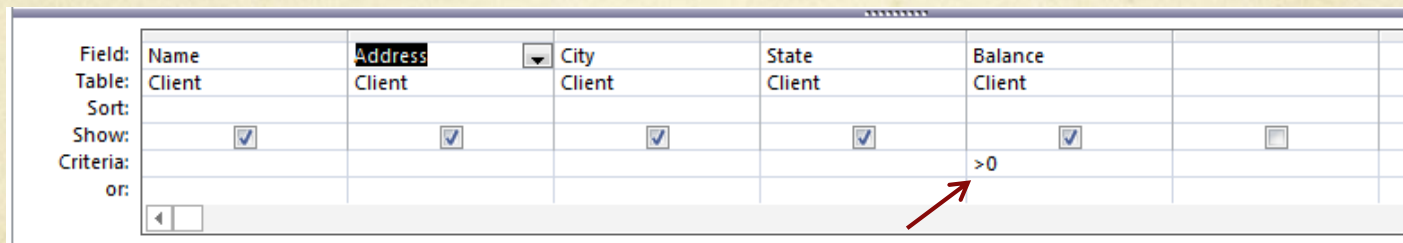
# Report Wizard



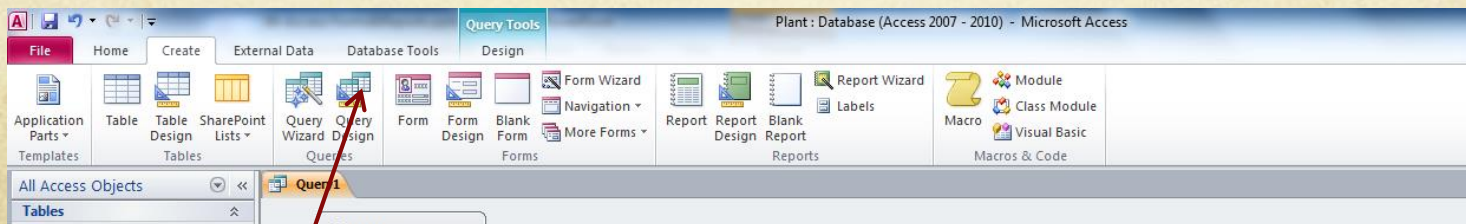
# Queries

Queries allow you to “ask a question” of the database.

For example, which customers have balances  $> \$0$ ?



Create the Query in Design View to add criteria (like  $>0$ ) OR to calculate a field (a cool feature we did not discuss in class, but is discussed in Chapter 18 of the book).





# Other Stuff

There are many features in Access that we did not cover in class.

- Go into design view to add a logo to a form or report.
- Use a **wildcard character** (a placeholder you use when you know only part of a value or when you want to match a certain pattern) to search for something using the Find command.
- Use a query to calculate a total.

Challenge yourself and see if you can do these on your own.



# Required Skills

- Implement **relationships** between tables
- Create a **report** using the Report Wizard
- Modify report properties in **Design View**
- Create a **query** in Design View
- Create **mailing labels**