Lecture 5 - Create queries

What's a query?

A query is a way to get specific information from the database.

1. Click the **Create** tab.

In the Ribbon, click Query Wizard.



2. When the **New Query** window appears, make sure **Simple Query Wizard** is selected.

New Query	~ ?
	Simple Query Wizard Crosstab Query Wizard Find Duplicates Query Wizard Find Unmatched Query Wizard
This wizard creates a select query from the fields you pick.	OK Cancel

Then click the OK button.

3. When the Simple Query Wizard opens, double-click **First Name** in the **Available Fields** list.

	You ca	n choose from	more than on		
				e table or qu	Jery.
[ables/Queries					
Table: Friends of Mine					
<u>A</u> vailable Fields:		Selected Fiel	ds:		
ID First Name					
Last Name City	>>				
State					
Zip					
Phone Number	<<				

First Name should appear in the Selected Fields column:

in your query?
e than the table of quely.

4. Click the button.

This should add the Last Name field to the Selected Fields list:

imple Query Wizard	
	Which fields do you want in your query?
	You can choose from more than one table or query.
Tables/Queries	
Table: Friends of Mine	
<u>A</u> vailable Fields:	Selected Fields:
ID City	> Lest Mane
State Zip	
Phone Number	
	<<

5. Double-click Phone Number.

₩•È	Which fields do you want in your query? You can choose from more than one table or query
ables/Queries	
able: Friends of Mine	
vailable Fields:	Selected Fields:
D	First Name
itate	
hone Number	
Hone Humber	
	<<

This should add the Phone Number field to the Selected Fields list:

imple Query Wizard	
	Which fields do you want in your query?
	You can choose from more than one table or query.
Tables/Queries	
Table: Friends of Mine	*
Available Fields:	Selected Fields:
ID City	> First Name
State	>> Phone Number
Zip	
	<<
	Cancel Canich Newby Circle

- 6. Click the <u>Mext</u> > button.
- 7. When the final screen appears, type:

Names and Numbers

	Names and Numbers
	That's all the information the wizard needs to create your query. Do you want to open the query or modify the query's design
\	 Open the query to view information. Modify the query design.
9///i++++++	



8. Click the **Einish** button.

The query is automatically saved and executed. It should look like this:

4	First Name 🔹	Last Name 🔹	Phone Numl 🗸	
	Elvis	Presley	4105551212	
	Во	Diddley	8005557890	
*				

4	ID 🔹	First Name 🔹	Last Name 🔹	Phone Numl •	City •	State •	Zip 🔹	Add New Field
	1	Elvis	Presley	4105551212	Baltimore	MD	21212	
	3	Во	Diddley	8005557890	Richmond	VA	23230	
*	(New)							

re

Essentially, it's a question. You use queries to ask the database things like, "Who are my patients in basra?", or "How many pipe fittings have I sold this month?"

- 1. Start Access, then open the FoodStore1 database.
- 2. Click the **Create** tab.

In the Ribbon, click Query Design.



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The query Design View window should appear:

able Table SharePoint Table Templates - Lints - Tables Tables	Form Split M	Points	form Form Re Some Design	Dort Labets Blank Report Report Wita Reports	Report Design Witzerd D	P 2 Nery Macro		
Security Warning Certain conten	t in the data has to	Show Tabled Show Table Tables Custome Produces	optionse				Property Sheet Selection type: Query Prop General recognition Query Sheet Selection Telefor Top traine Unique records RoutPer Network Source Conject Str Records Top Nake Records Subdataineet Relyne Unic Master Fieldo Subdataineet Relyne Subdataineet Relyne Subdataineet Relyne Subdataineet Relyne	erties Datasheet No All No Use's Use
	4 IIII Factor Tabler Sort Show Criteria or		8	264 C			Filter On Load Order By On Load	Ne Yei
ay a		2	11			,		100

3. In the **Show Table** window, click **Customers**, then click the Add button.

Show Table Tables Queries Both Customers Employees Order Details Orders Products Products			601	
Tables Queries Both Customers Employees Order Details Orders Products	1	Show Table		? ×
Add Close		Tables Queries Both Customers Employees Order Details Orders Products	Add	Close



4. Click the Close button.





This adds the **Customers** table to the query.

The query window should look like this:

Cu	istomers			
	* Customer ID First Name Last Name Company Name Address 1 Address 2			
]				
Field: Table: Sort: Show: Criteria: or:				
Field: Table: Sort: Show: Criteria: or:				

Add fields to query

1. Drag the **Customer ID** field from the **Customers** table to the first column of the query design grid.

Query1				
	Stomers Customer ID First Name Last Name Company Name Acdress 1 Acdress 2			
- <u>Lun</u>	_	r	 	
Field: Table: Sort: Show: Criteria: or:				
	4			

Release the mouse button.

The query design grid should look like this:

		 	_
Field: Customer ID Table: Customers Sort:			
Show: Criteria: or:			
4			

2. Drag the First Name field and Last Name field to the design grid the same way.

The design grid should look like this:

4				
Field: Table:	Customer ID Customers	First Name Customers	Last Name 🔍	
Show: Criteria:	V	V		
or:				
	4			

The query is now set up to show the Customer ID, First Name, and Last Name of each customer in the **Customers** table.

Run the query

1. In the Ribbon, click Run.



The query window should now look like this:

F	Query1			
2	Customer ID -	First Name 🔹	Last Name 🔸	
	1	John	Smith	
	2	Jane	Doe	
	3	Adrian	McKinney	
	4	Klaus	Hoffmeister	
	5	Stacey	Munson	
	6	Lucy	Redman	
	7	Jane	Doe	
*	(New)			



The query shows the Customer ID, First Name, and Last Name of each customer in the **Customers** table:

đ	Query1			
	Customer ID 🔹	First Name 🔹	Last Name 🔹	
	i	John	Smith	
	2	Jane	Doe	
	3	Adrian	McKinney	
	4	Klaus	Hoffmeister	
	5	Stacey	Munson	
	6	Lucy	Redman	
	7	Jane	Doe	
*	(New)			

SORT RESULTS

1. In the Ribbon, click **View**, then **Design View**.

Home Create	External Data Database Too	ols		
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PivotChart View	- Ouend			
-	Customer ID +	First Name	Last Name	
SQL View	Customerio	lohn	Smith	
		lane	Doe	
Design View	3	Adrian	McKinney	
The second se		Klaus	Hoffmeister	
		in a s	Muncon	
	5	Stacev	101111151151111	
	5	Stacey	Redman	
	5	Stacey Lucy Jane	Redman	
	5 : 6 7 . * (New)	Stacey Lucy Jane	Redman Doe	

2. In the Last Name field, click in the Sort row.

When the drop-down arrow appears, click it, then click Ascending.

First Name	Last Name		
Customers	Customers		
V	Ascending Descending		[1]
	(not sorted)		
	First Name Customers	First Name Last Name Customers Customers	First Name Customers Customers Ascending Descending (not sorted)

3. In the Ribbon, click **Run**.

The query should run, and sort the records alphabetically by Last Name:

Custor	mer ID •	First Name 🔹	Last Name 🔹	
	7	Jane	Doe	
11 I.	2	Jane	Doe	
	4	Klaus	Hoffmeister	
	3	Adrian	McKinney	
	5	Stacey	Munson	
	6	Lucy	Redman	
	1	John	Smith	
*	(New)			



4. In the Ribbon, click View, then Design View

5. In the **Customer Last Name** field, click in the **Sort** row, then click **(not sorted)**.

Customer ID	First Name	Lact Name	
customer ib	Flist Name	Lascivalle	
Customers	Customers	Customers	
		Ascending	
J	V	Ascending	
		Descending	
	((not sorted)	
	· · · · ·		-
4			

ADD CRITERIA

1. In the query's **Customer** table, scroll down to the **State** field.

)		
	Address 1 Address 2 City State ZIP Phone Number Fax Number			
<u></u>				
Field	Customer ID	First Name	Lact Name	
Field: Table:	Customer ID Customers	First Name Customers	Last Name Customers	
Field: Table: Sort:	Customer ID Customers	First Name Customers	Last Name Customers	
Field: Table: Sort: Show: Criteria: or:	Customer ID Customers	First Name Customers	Last Name Customers	
Field: Table: Sort: Show: Criteria: or:	Customer ID Customers	First Name Customers	Last Name Customers	

2. Add the **State** field to the query design grid.

Customer ID Customers	First Name Customers	Last Name Customers	State Customers	
	V			
4				

- 3. In the State field, click in the Criteria row.
- 4. Type:

FL

Customer ID Customers	First Name Customers	Last Name Customers	State Customers	
	V		FL	
		`	Ť	

5. Press the **ENTER** key.

It should look like this:

Eustomer ID	First Name	Last Name	State	
Customers	Customers	Customers	Customers	
\checkmark	V	V	(FL")	
			\smile	

TIP: Notice that Access automatically surrounded the **FL** criterion with double quotes. That's because the **State** field stores text data. In database query language, double quotes signify a string of text.

If this field held date data, Access would have surrounded it with hash marks (#).

If the field stored number data, Access wouldn't have added anything.

6. In the Ribbon, click **Run**.

The query results should look like this:

@ Query1									
	Customer ID 🗸	First Name 🔹	Last Name 🔹	State 🔹					
	1	John	Smith	FL					
	2	Jane	Doe	FL					
*	(New)								

It has returned all customers who live in the State of FL.