# CSIS 2300 – Database I

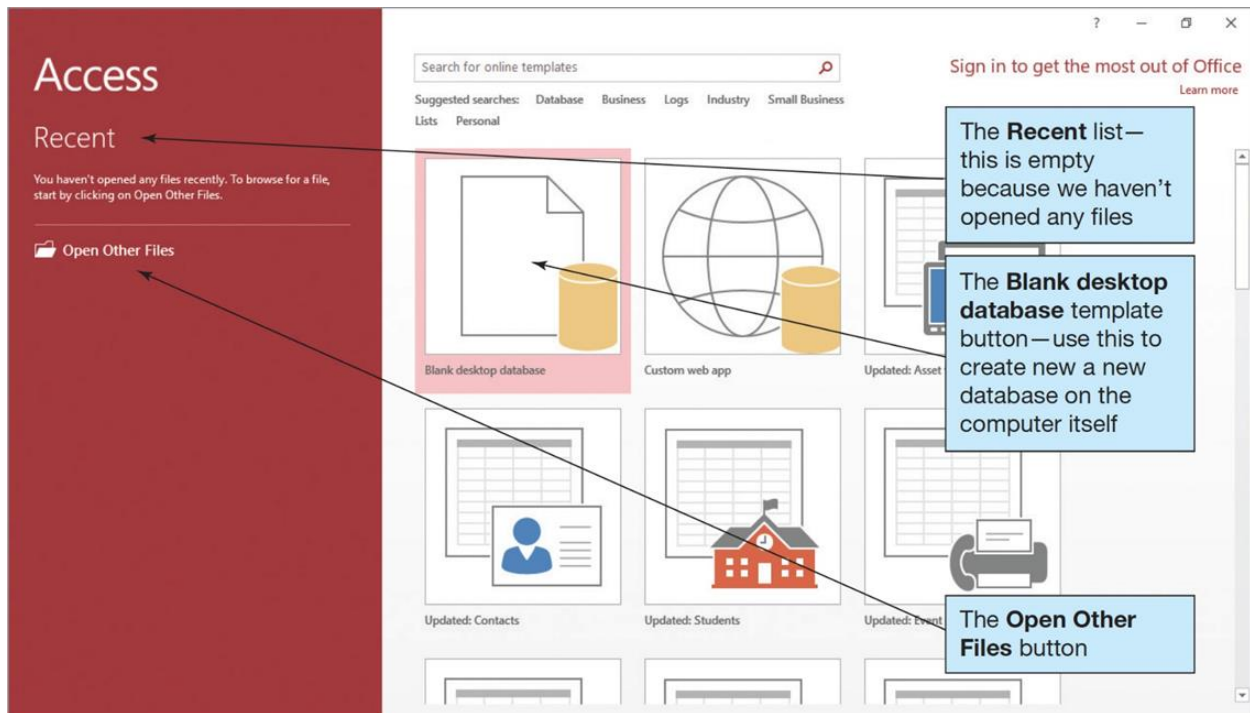**Laboratory 1- Introduction to MS Access**

Objectives:

1. Review the basics of Microsoft Access
2. Learn how to create a Microsoft Access database
3. Learn how to work with basic forms and reports
4. Learn how to close and exit Microsoft Access
5. Learn how to open an existing Microsoft Access database
6. Learn how to create a Microsoft Access table
7. Learn how to insert data into tables
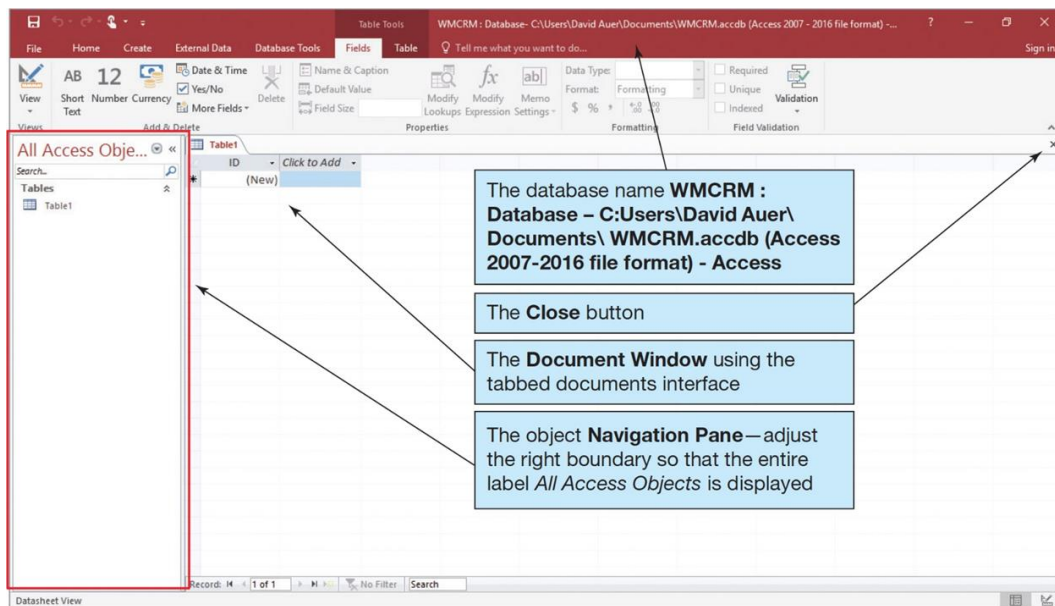8. Learn how to modify data in tables

1. Open Microsoft Access
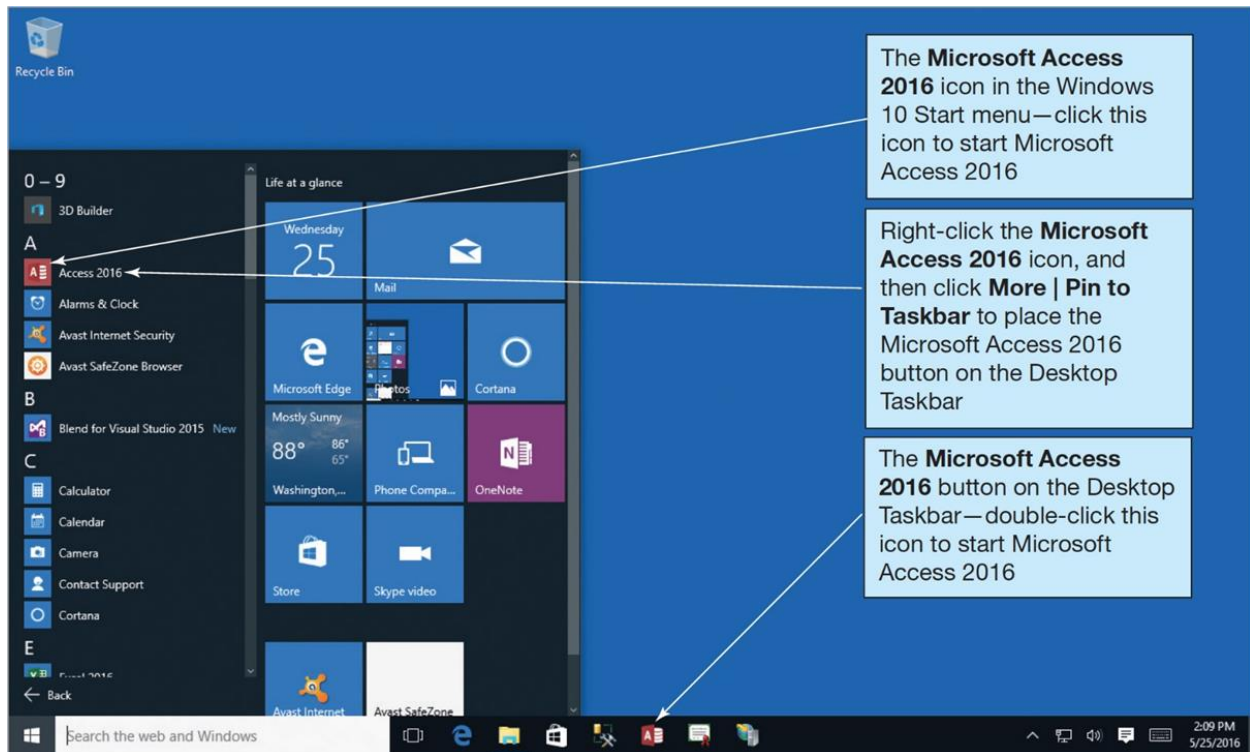
Access 2016, Windows 10, Microsoft Corporation.

2. Click the blank database button to create a new database

The **Recent** list—
this is empty
because we haven't
opened any files

The **Blank desktop database** template
button—use this to
create new a new
database on the
computer itself

The **Open Other Files** button

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3. Type the database name **WMCRM** then click create. The MS Access interface will appear.

The database name **WMCRM :
Database – C:Users\David Auer\
Documents\ WMCRM.accdb (Access
2007-2016 file format) - Access**

The **Close** button

The **Document Window** using the
tabbed documents interface

The object **Navigation Pane**—adjust
the right boundary so that the entire
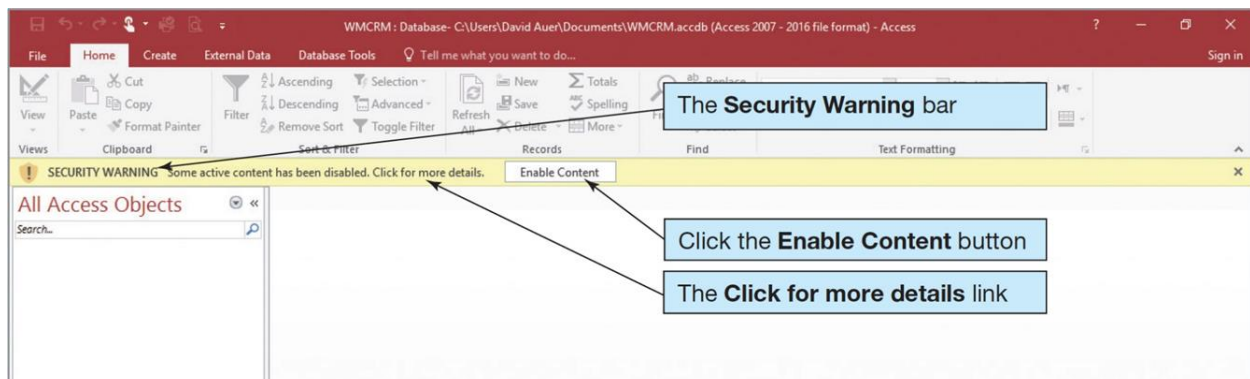label *All Access Objects* is displayed

Access 2016, Windows 10, Microsoft Corporation.

4. To close a database, click the close button in the file menu. Close the database.
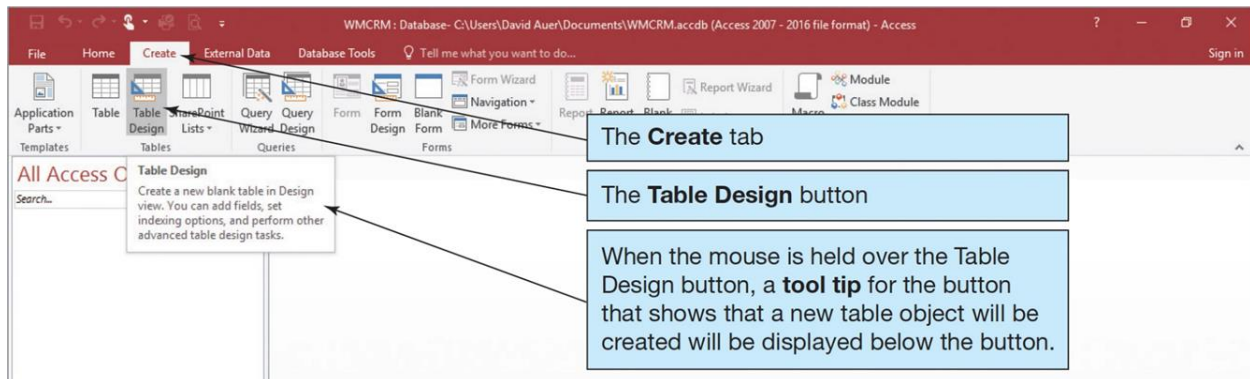5. Open MS Access again and from the recent files, click the WMCRM database.
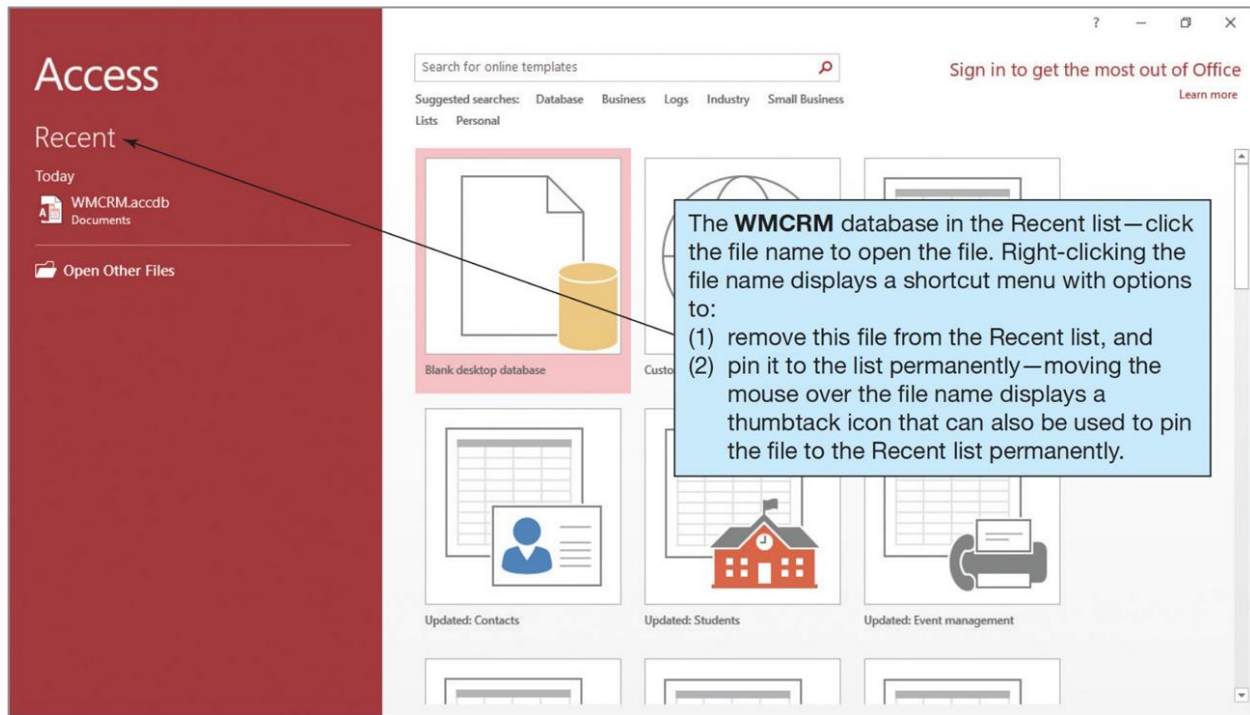
Access 2016, Windows 10, Microsoft Corporation.

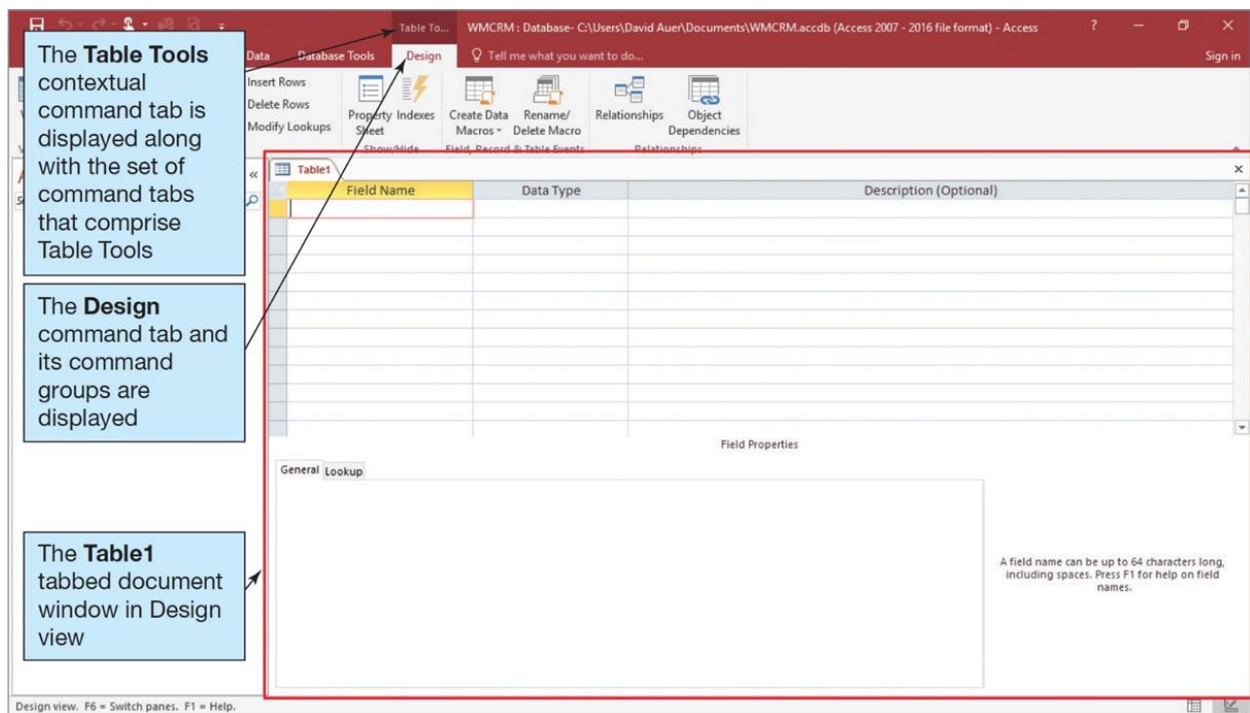6. Click enable content in order for us to begin creating objects.

Access 2016, Windows 10, Microsoft Corporation.

7. Now we are ready to create a table, click the create tab and then click the table design button.


The **Create** tab

The **Table Design** button

When the mouse is held over the Table Design button, a **tool tip** for the button that shows that a new table object will be created will be displayed below the button.

Access 2016, Windows 10, Microsoft Corporation.

The **Table Tools** contextual command tab is displayed along with the set of command tabs that comprise Table Tools

The **Design** command tab and its command groups are displayed

The **Table1** tabbed document window in Design view

Access 2016, Windows 10, Microsoft Corporation.

8. Write the field names in the field column and change to the appropriate data type. For example the table below shows CustomerID with the data type of Autonumber.
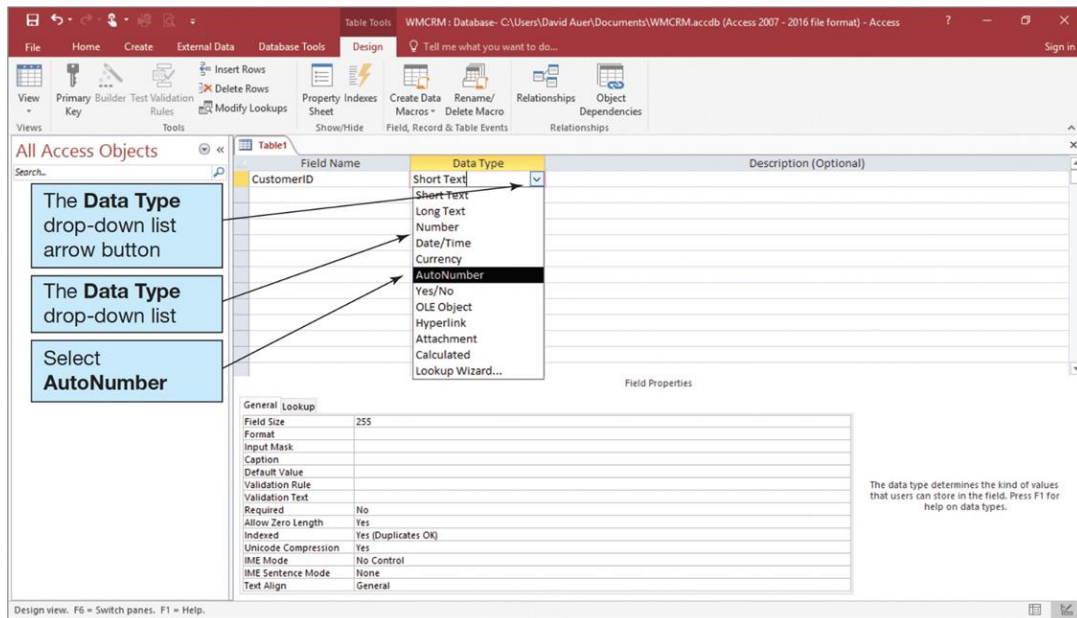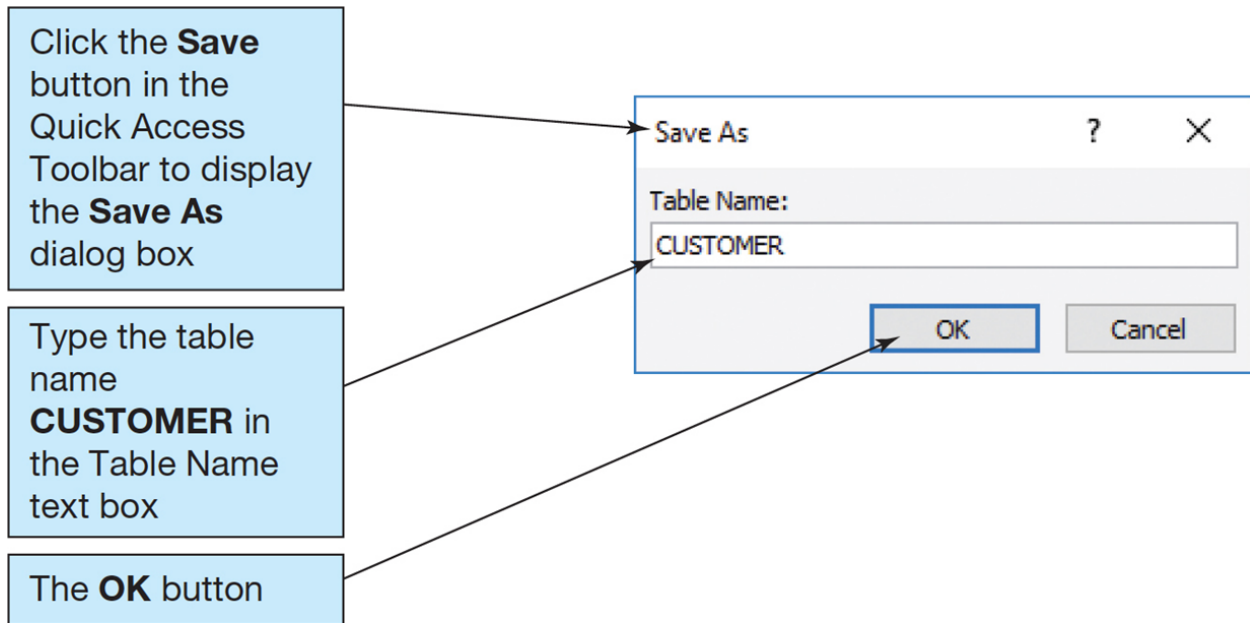

Access 2016, Windows 10, Microsoft Corporation.

9. Use the guide below to fill out the remaining fields.

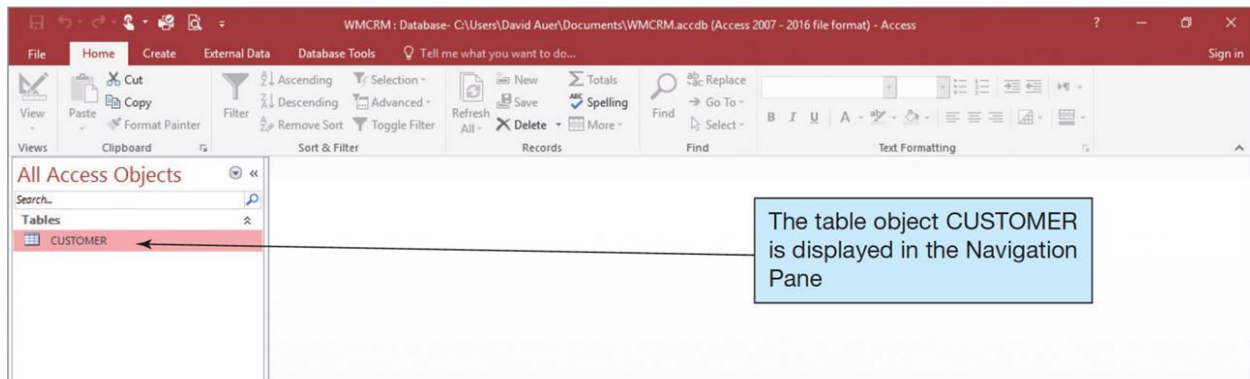| Column Name	Type	Key	Required	Remarks
CustomerID	AutoNumber	Primary Key	Yes	Surrogate Key
LastName	Short Text (25)	No	Yes	.
FirstName	Short Text (25)	No	Yes	.
Address	Short Text (35)	No	No	.
City	Short Text (35)	No	No	.
State	Short Text (2)	No	No	.
ZIP	Short Text (10)	No	No	.
Phone	Short Text (12)	No	Yes	.
Fax	Short Text (12)	No	No	.
EmailAddress	Short Text (100)	No	No	.

Note: to make the field required toggle the yes or no button in the required section of each field. The primary key is the one with a key icon beside it. Change the field size to reflect what is inside the parenthesis in the type column.

10. When you are done inputting the fields, click the save button and name the table **CUSTOMER.**

Click the **Save** button in the Quick Access Toolbar to display the **Save As** dialog box

Type the table name **CUSTOMER** in the Table Name text box

The **OK** button

Save As	?	✕

Table Name:

CUSTOMER

OK   Cancel

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11. We are now ready to insert data inside the CUSTOMER table. In the navigation pain, double click the CUSTOMER table object.

All Access Objects

Search...

Tables

CUSTOMER

The table object CUSTOMER is displayed in the Navigation Pane

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12. Enter the **first two records** following data:

LastName	FirstName	Address	City	State	Zip
Griffey	Ben	5678 25th NE	Seattle	WA	98179
Christman	Jessica	3456 36th SW	Seattle	WA	98189
Christman	Rob	4567 47th NW	Seattle	WA	98167
Hayes	Judy	234 Highland Place	Edmonds	WA	98210

LastName	FirstName	Phone	Fax	EmailAddress
Griffey	Ben	206-456-2345	.	Ben.Griffey@somewhere.com
Christman	Jessica	206-467-3456	.	Jessica.Christman@somewhere.com
Christman	Rob	206-478-4567	206-478-9998	Rob.Christman@somewhere.com
Hayes	Judy	425-354-8765	.	JudyHayes@somewhere.com

We can modify the data by clicking the cell and changing the value similar to an excel sheet.

13. To delete a record, select the row representing the data you want to delete and press write click. For example, select Jessica Christman's data and delete it.
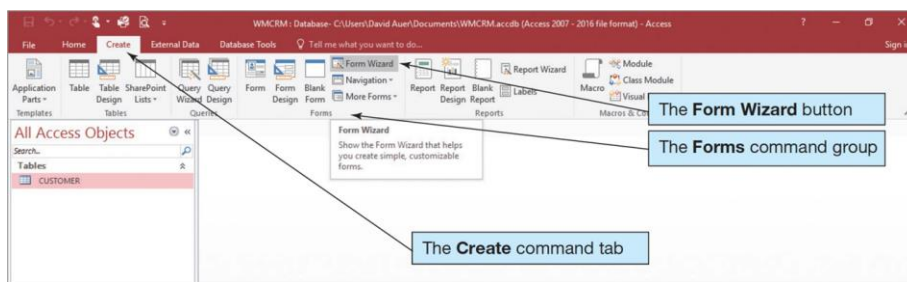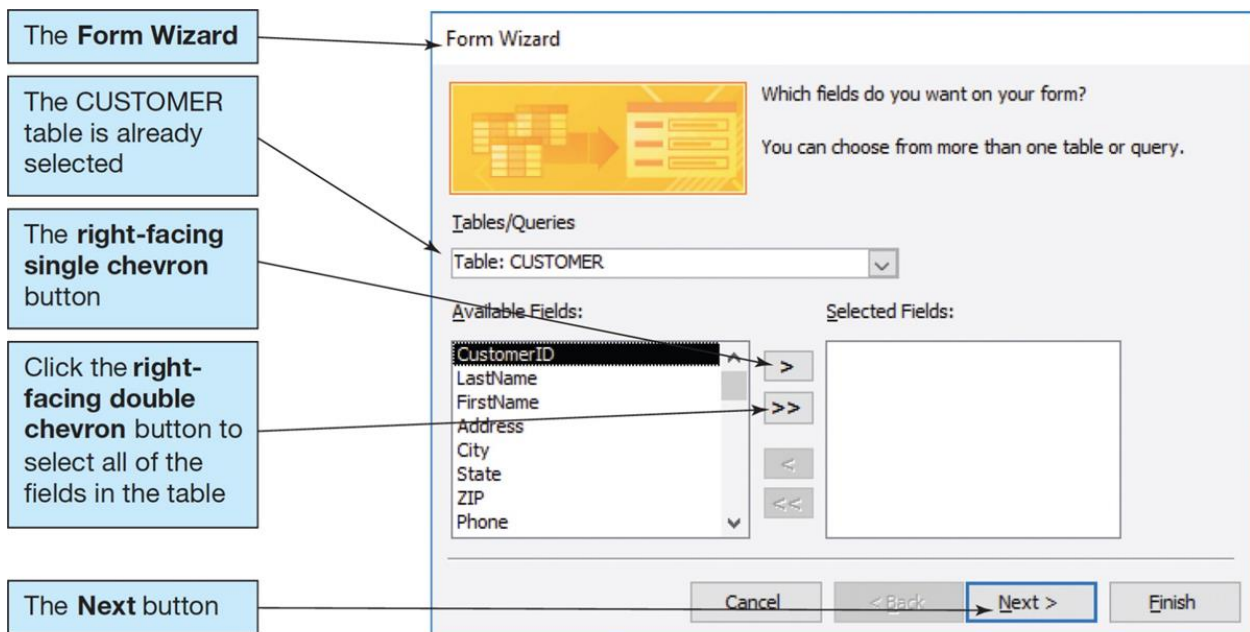

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The row with Jessica Christman's data has already been visually removed!

Microsoft Access

You are about to delete 1 record(s).

If you click Yes, you won't be able to undo this Delete operation. Are you sure you want to delete these records?

Yes   No

Click the **Yes** button to actually delete the row
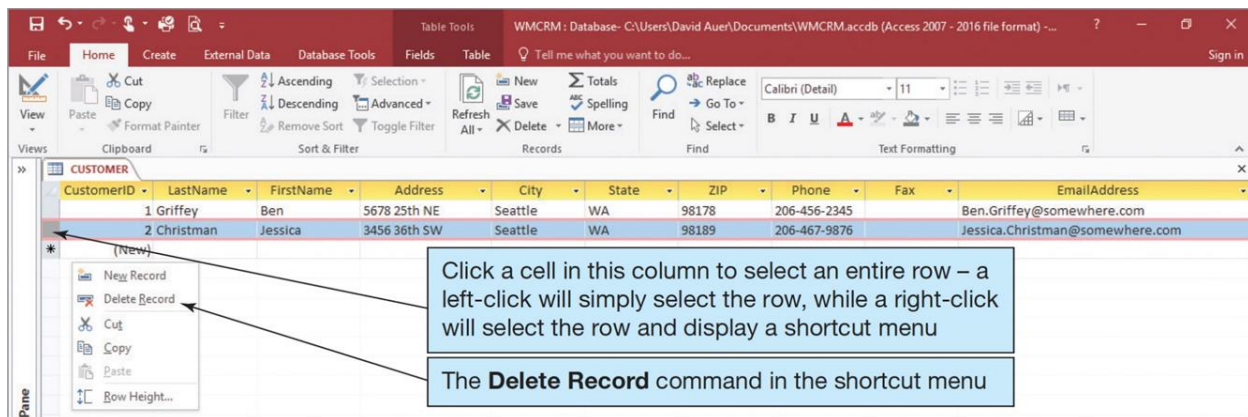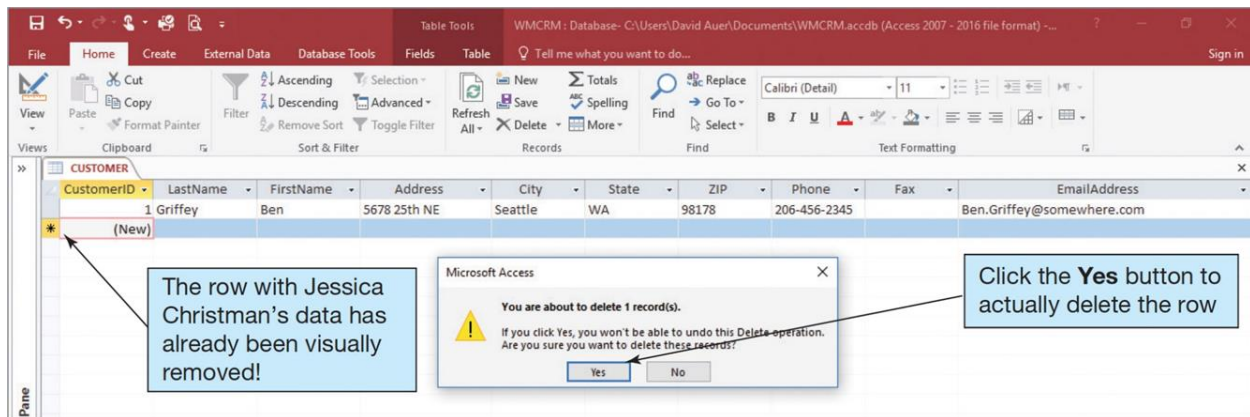
Access 2016, Windows 10, Microsoft Corporation.

14. We do not want to lose Jessica record as this point so renter the data.
15. We can also insert records using a data form. Click the create command and click form wizard.

The **Form Wizard** button

The **Forms** command group

The **Create** command tab

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The **Form Wizard**

The CUSTOMER table is already selected

The **right-facing single chevron** button

Click the **right-facing double chevron** button to select all of the fields in the table

The **Next** button

Form Wizard

Which fields do you want on your form?

You can choose from more than one table or query.

Tables/Queries

Table: CUSTOMER

Available Fields:

CustomerID
LastName
FirstName
Address
City
State
ZIP
Phone

Selected Fields:

Cancel   < Back   Next >   Finish

Access 2016, Windows 10, Microsoft Corporation.

16. In the form wizard, you will be asked to do the following:
   a) Select a table. Since we only have one table, the table customer is already selected for you
   b) Select the fields. In this case we want to select all fields so transfer all available fields to selected fields.
   c) When asked about the layout, use the default this means you will not change anything and just click next.
   d) Type WMCRM as the form title then click the finish button.
   - Your finished form should look like the one the figure below:

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17. To insert a record using the data form, click the New Record button. Enter the remaining two records (Rob and Judy) using this method.
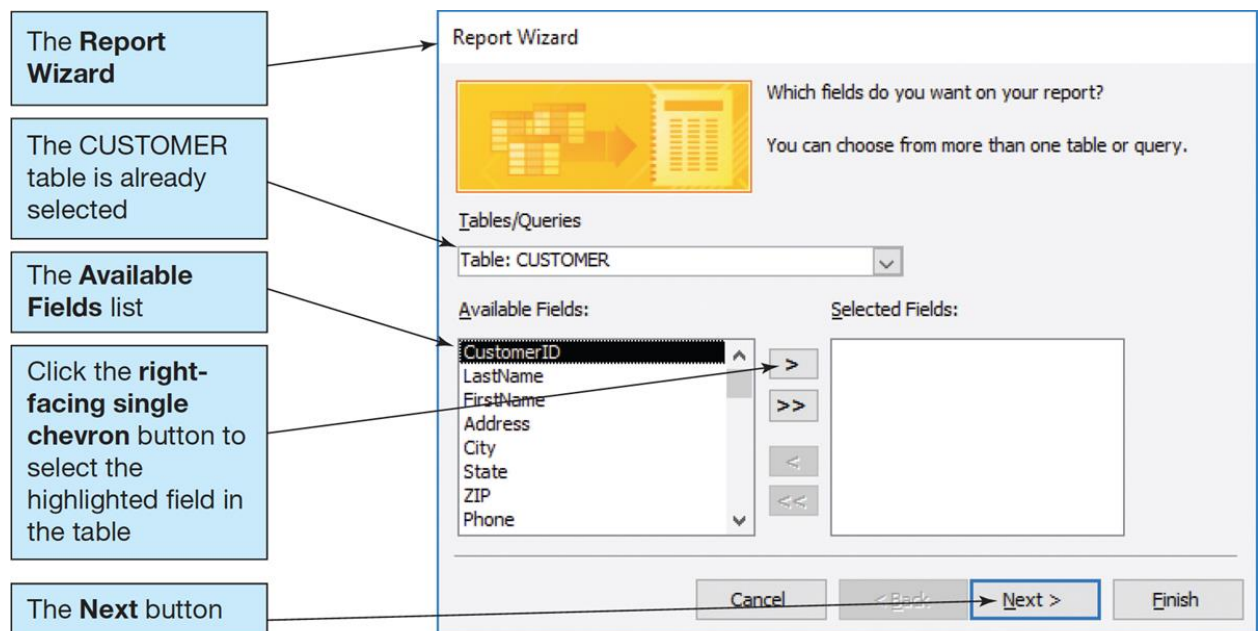

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18. You can also modify or delete the records using the form. We will not delete any record for now.
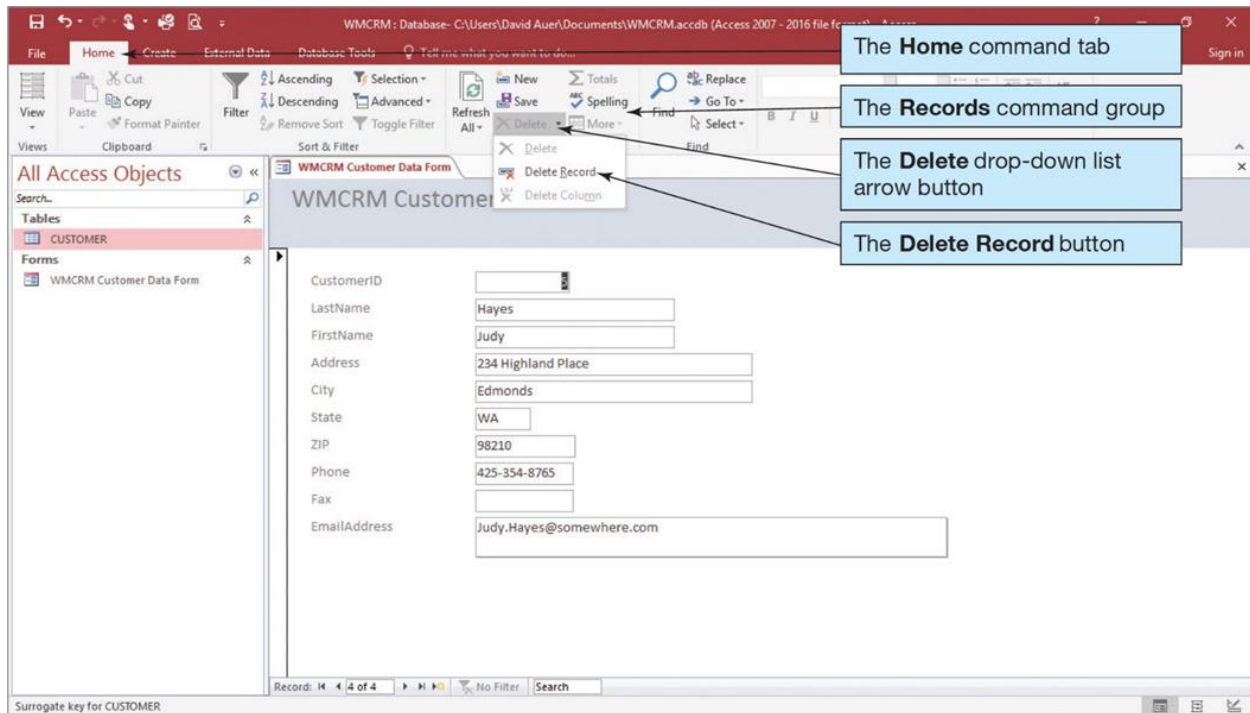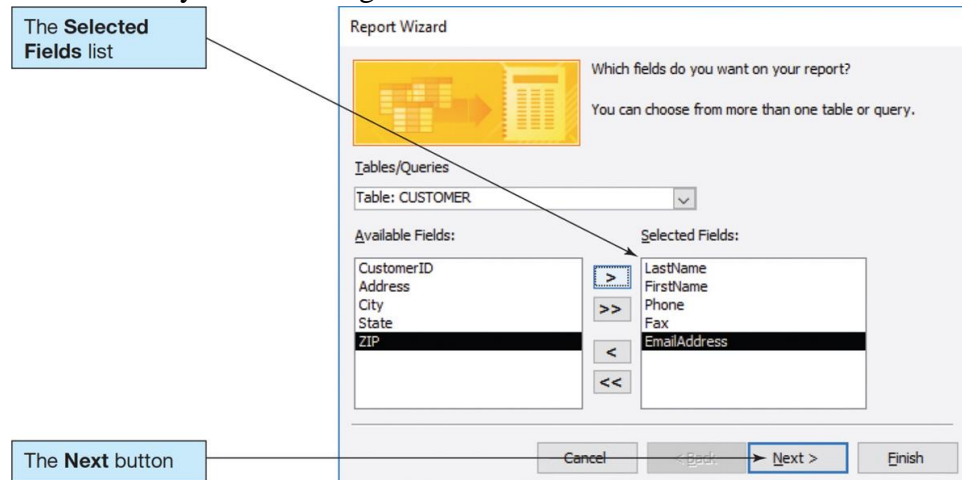

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19. Now we are ready to create a report. Click the Create and click Report Wizard.

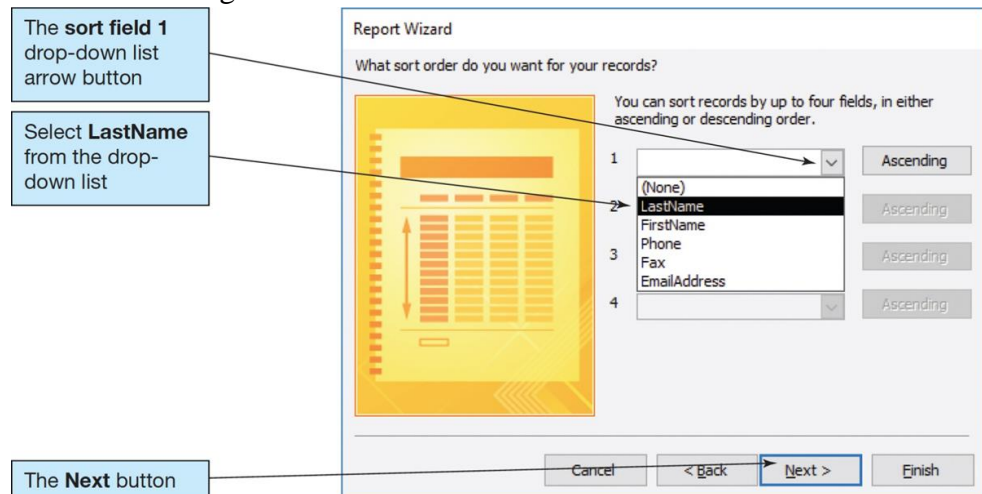Access 2016, Windows 10, Microsoft Corporation.

20. Do the following:

    a) Select the table or query the report will be based upon. In this case, Customer.

    b) Select the fields you want to appear in the report. In this case we will select only the following fields:

The **Selected Fields** list

Report Wizard

Which fields do you want on your report?

You can choose from more than one table or query.

Tables/Queries

Table: CUSTOMER

Available Fields:

CustomerID
Address
City
State
ZIP

Selected Fields:

LastName
FirstName
Phone
Fax
EmailAddress

The **Next** button

    c) Click the next button.

    d) We will not add any grouping at this point so click next.

    e) When asked about the sort order, we choose last name and we want to sort it in an ascending format.

The **sort field 1** drop-down list arrow button

Select **LastName** from the drop-down list

Report Wizard

What sort order do you want for your records?

You can sort records by up to four fields, in either ascending or descending order.

1   Ascending

(None)
LastName
FirstName
Phone
Fax
EmailAddress

2   Ascending

3   Ascending

4   Ascending

The **Next** button

Cancel   < Back   Next >   Finish

    f) Click next and for the orientation we will use the default so we click next again.

    g) Type **Wallingford Motors Customer Report** as the title.

h) Click the finish button.

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