

TECHNOPlanner

Teacher Guide

Lessons for High School Students: Grades 9 - 12



Technology Project using

Microsoft Access 365

Become an event planner.

In this project, students become event planners. They own a company that plans special occasions such as weddings, birthday parties, reunions, or proms. They must create a database to help them organize client and event information. This database will help students offer top quality service to their customers, since no detail will be forgotten.

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Project Overview

Introduction to TechnoPlanner

In this project, students become event planners. They own a company that plans special occasions such as weddings, birthday parties, reunions, or proms. They must create a database to help them organize client and event information. This database will help students offer top quality service to their customers, since no detail will be forgotten.



Students complete the following tasks:

- In session 1, students use Microsoft Access to study the Planner database. It organizes customer and event information for an event planning company. Students study the table, form, query, and report to gain an understanding of the purpose and structure of a database.
- In session 2, students become event planners. To make business operations run smoothly they begin construction of a database to store customer and event details. Students complete a planning sheet to organize the content of their database. Afterwards, they create the Customers table by adding the fields and setting the field properties. Next, students use their skills to build the Events table. Upon completion, students create a relationship between the tables to allow the event planner to connect customers to their booked events.
- In session 3, students produce forms that allow for easy data entry. To begin, they create a Customers form using the Form Wizard. The layout of the form is modified to create a customized design. Afterwards an Events form is made in Design View. Upon completion, the forms are combined so that when a customer record is displayed, any events that are related to that client are also displayed. This is a great way to not only enter data but also easily look up client history.
- In session 4, students add records to their database. They then learn how to organize data by sorting it alphabetically, numerically, and chronologically. Next students retrieve information from their database using the Search Box, Selection, and Find features. Afterwards, they consider how an event planner would use each search method to find information FAST!
- In session 5, students follow up on potential leads. They have several clients who have contacted them to plan an event but have not yet confirmed. Event planners design a query by combining data from the Customers and Events tables. This allows them to locate only customers who have not yet confirmed the event. Students produce a report that displays a printout of clients and their telephone numbers. Now event planners can call potential customers to confirm the possibility of working together.
- In session 6, students create a report that summarizes upcoming events. To start, they produce a query in Design View that filters the records to list only those that are scheduled for the upcoming month. This information is summarized in a report created in Design View. This professional document can be used at a staff meeting to discuss job duties, as a guide when booking other events, or as a reference document for scheduling services.

This is a preview of the teacher guide.
Pages have been omitted.

SAMPLE

Assignment 8: Become an Event Planner

You are going to operate an event planning business. To stay organized you will design a database that will store customer and event information.

Before you can get started, you need to make some decisions. For example, pick the type of event you will plan, as well as the services you will offer to customers.

Answer the questions to plan the content of your database.



What is Your Business Name?

1. What is the name of your business?

Plan the Content of the Database

Customer Information

2. You need to organize customer information. Think about the type of customer that will want to hire your company. For example, are they a person, school, or company? Make a list of the details required for each customer. For example, you will need to know the customer's name, address, and phone number. Each item in the list will become a field in your *Customers* table.

First Name

Last Name

Address

City

Province/State

Postal/Zip Code

Phone Number

Email Address

Customer ID

When you make your database, you will take each item in the list and enter it as a field in the *Customers* table. Microsoft Access will then create a unique identification number for each record in the table.



3. You need to have a *unique* identification number for each customer record. You will label this field *Customer ID*. The field will automatically assign a number to each record.

I added the field *Customer ID* to the list in question 2.

Event Information

4. You will be operating an event planning business. What type of event will you plan?

5. Your event planning business will offer services to customers. Select seven services from the list or create your own. Each service will become a field in your *Events* table.

- | | | | | |
|---|---------------------------------------|---------------------------------------|---|--|
| <u>entertainment</u> | <u>services</u> | <u>party supplies</u> | <u>site</u> | <u>transportation</u> |
| <input type="checkbox"/> band | <input type="checkbox"/> caterer | <input type="checkbox"/> florist | <input type="checkbox"/> selection | <input type="checkbox"/> limousine |
| <input type="checkbox"/> deejay | <input type="checkbox"/> baker | <input type="checkbox"/> decorations | <input type="checkbox"/> staging/lighting | <input type="checkbox"/> valet |
| <input type="checkbox"/> quartet | <input type="checkbox"/> photographer | <input type="checkbox"/> invitations | <input type="checkbox"/> video screen | <input type="checkbox"/> travel arrangements |
| <input type="checkbox"/> impersonators | <input type="checkbox"/> marketing | <input type="checkbox"/> tableware | | |
| <input type="checkbox"/> balloon artist | | <input type="checkbox"/> party favors | other: | <div style="background-color: #e0e0e0; width: 100px; height: 15px;"></div> |

6. Often events revolve around a theme. You will offer your clients a selection of themed events. List six themes. *Theme* will become a field in your *Events* table.

7. You need to organize event information. For example, you need to record the date, time, number of guests, whether the plans have been confirmed, and other important event details. Make a list of the information required about the event. Each detail will become a field in your *Events* table.

Event Date
Start Time
End Time
Guests
Description
Confirmed
Event ID
Customer ID

When you make your database, you will take each item and enter it as a field in the *Events* table. Microsoft Access will then create a unique identification number for each record in the table.

To connect customers to their booked events you need to include a field to join the *Customers* table to the *Events* table.



8. You need to have a *unique* identification number for each event record. This field will be an ID. The field will automatically assign a number to each record.

I added the field *Event ID* to the list in question 7.

9. You need to include a field in the *Events* table that will connect to the *Customers* table. This field will be used to form a relationship between the two tables.

I added the field *Customer ID* to the list in question 7.

Assignment 9: Build the Customers Table

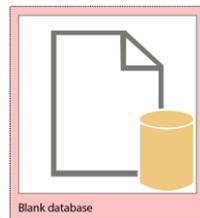
You will use Microsoft Access to create a database to organize customer and event information. The database will have two tables to hold data, a form and subform to make data entry simple, a query to filter records, and a report that summarizes information.

To get started, you need to create a *blank database* and then make the *Customers* table. You will edit the properties of some of the fields to make data entry simple. You will then test the design by entering a record.

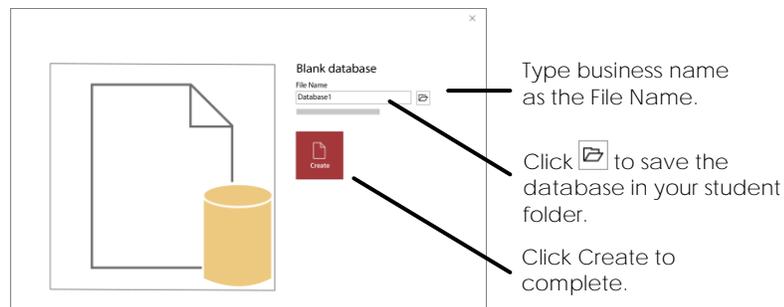


Create a Blank Database

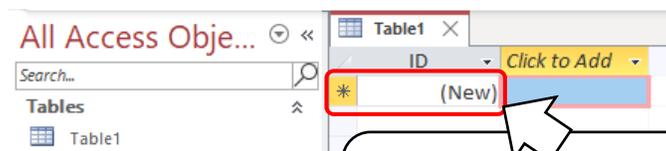
- ▷ Open Microsoft Access.
Click *Blank Database*.



- ▷ Type your business name as the name of the database.



- ▷ ASK YOUR TEACHER WHERE YOU SHOULD SAVE THE DATABASE. To change the location, click *Browse*. When you have picked the location, click *OK*.
- ▷ Click *Create*.
- ▷ A blank database opens with a table in datasheet view.



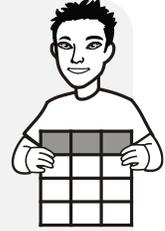
Microsoft Access needs each record to have a unique ID. This is called a *primary key*. Microsoft Access will automatically assign an ID number to each record.



Add Fields to the Table in Datasheet View

There are two ways to add fields to a table. You can use *Datasheet View* OR *Design View*.

Datasheet View displays a table with rows and columns. You can add fields in this view by typing the field name into the column heading. You can also set some field properties in Datasheet View using commands on the ribbon.



Design View lists fields in rows with the active row displaying field properties in a pane at the bottom of the window. You can add fields by typing the field name into a row. You can set all field properties in Design View.

Use *Datasheet View* to add fields to create a table that holds customer information. In this view, you will rename the ID field, set the default value for State, and set the field size for Zip Code. Switch to *Design View* to add an input mask for Phone Number, as this field property cannot be set in Datasheet View.

- ▷ The following fields will be added to the table. Each field in your table is a different data type.

- First Name
- Last Name
- Address
- City
- Province Or State
- Postal Code Or Zip Code
- Phone Number
- Email Address

You may have other fields you would like to include in the table. Add them to the list.



Add the Fields to the Table

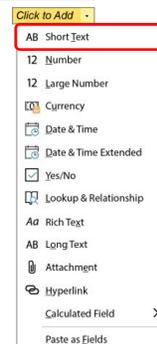


You need to pick the data type for each field. For this table, you will set each field to *Short Text*. A *Short Text* field can hold 225 characters. This type of field is used to hold words. It can also hold numbers and symbols.

- ▷ Click the column heading *Click to Add*. Select *Short Text* from the menu.
- ▷ The column heading now reads *Field1*. Type *First Name*. Press ENTER.

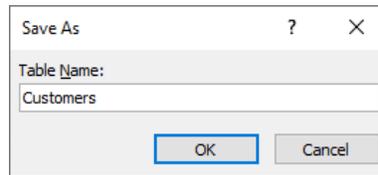
ID	First Name	Click to Add
(New)		AB Short_Text
		12 Number

- ▷ ADD THE REMAINING FIELDS. *Make them all Short Text.*



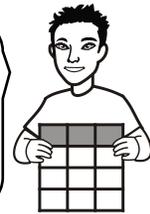
Save the Table

- ▷ Click Save. 
- ▷ Type **Customers** in the Save As box and then click OK.



Set Field Properties in Datasheet View

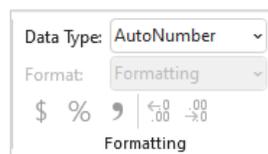
To make data entry consistent it is a good idea to set field properties such as size and default value. Follow the instructions to rename the ID field, set the default value for State, and set the field size for Zip Code in Datasheet View.



- ▷ Your table should look similar to this:

ID	First Name	Last Name	Address	City	Province	Postal Code	Phone Num	Email Address
* [New]								

- ▷ Select the ID field.
- ▷ Look at the commands on the *Table Fields* tab. They allow you to set field properties.
- ▷ Look in the Formatting group. The Data Type is set to AutoNumber.

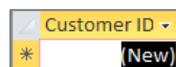


Microsoft Access automatically creates an ID field. This field is used to assign a unique number, or AutoNumber, to each record. Rename the field Customer ID.



Rename ID to Customer ID

- ▷ Double click inside column heading for the field ID. Type **Customer** in front of ID.
- ▷ Press ENTER.



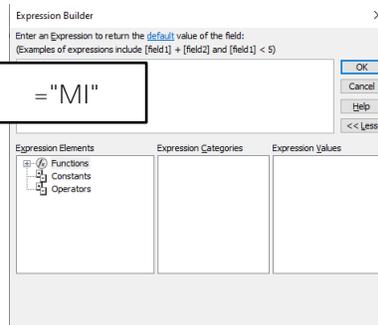
Set Default Value for Province or State

One way to speed up data entry is to create a default value for a field. For example, the province or state is likely to be the same for your customers.



- ▷ Select the *Province or State* field.
From the Properties group of the *Table Fields* tab, click *Default Value*. 
- ▷ Type a "province name" or "state name" (include the quotation marks) in the Expression Builder pane and then click *OK*.

Type a province or state name.
Some values are restricted such as ON (short for Ontario) or MI (short for Michigan).
To avoid problems, add " " around the value.



Set Field Size for Postal or Zip Code



It is a good idea to restrict the field size to keep data entry consistent. Your postal or zip code has a standard number of characters. Set the field size.

- ▷ Select the *Postal or Zip Code* field.
- ▷ From the Properties group of the *Table Fields* tab, click inside the *Field Size* box.



- ▷ Replace the default size (255) with the number of characters in your postal or zip code.

TIP

If you receive the message, *Some data may be lost*, click *Yes*. This message warns you that if there is already data in the table that has more characters than the field size set, the data will be deleted. You do not have any data in your table yet, so you do not need to worry about losing data.

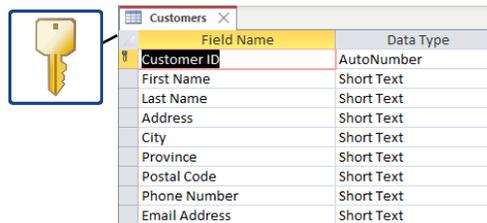
Create an Input Mask for Phone Number in Design View

An *input mask* is a set of characters that control the format used to enter data into a field. A phone number has a standard form.

Unlike the field properties such as data type, default value, and field type, an input mask CANNOT be set in Datasheet View. Instead, you must switch to Design View.



- ▷ Click **View**  on the Table Fields tab.
- ▷ Choose *Design View*  from the options.



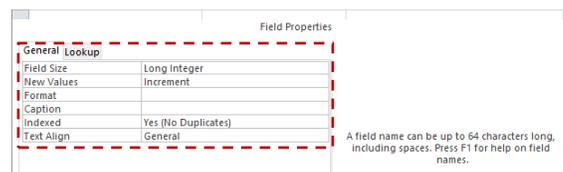
Field Name	Data Type
Customer ID	AutoNumber
First Name	Short Text
Last Name	Short Text
Address	Short Text
City	Short Text
Province	Short Text
Postal Code	Short Text
Phone Number	Short Text
Email Address	Short Text



Notice that Customer ID has a key symbol. This shows that the field is a *primary key*. A primary key is a field used to uniquely identify each record. The data type is set to *AutoNumber*. This means that Microsoft Access will automatically assign a unique number to each record.

Look at the Properties for each Field

- ▷ Look at the bottom of the window. You will see a list of Field Properties. The list changes depending on the type of data set for the field.



Field Properties	
General	
Field Size	Long Integer
New Values	Increment
Format	
Caption	
Indexed	Yes (No Duplicates)
Text Align	General

A field name can be up to 64 characters long, including spaces. Press F1 for help on field names.



You can set the field properties to make data entry fast, simple, and consistent.

Set the Field Property for Phone Number

- ▷ Select the *Phone Number* row.

Field Name	Data Type
Customer ID	AutoNumber
First Name	Short Text
Last Name	Short Text
Address	Short Text
City	Short Text
Province	Short Text
Postal Code	Short Text
Phone Number	Short Text
Email Address	Short Text

- ▷ In the *Field Properties* pane click inside *Input Mask*.

General	Lookup
Field Size	255
Format	
Input Mask	
Caption	

- ▷ Click the *Build* button.
- ▷ Select *Phone Number* from the list. Click *Next*.

Input Mask:	Data Look:
Phone Number	(206) 555-1212

- ▷ From the *Placeholder character* menu, choose *#*.
- ▷ Click in the *Try It:* box to see a sample of how the number will display. Click *Next*.

Do you want to change the input mask?
Input Mask name: User Defined
Input Mask: (999) 000-0000
What placeholder character do you want the field to display?
Placeholder character: #
Try It: [(###) ###-####]

- ▷ Select the *With the symbols in the mask like this: (655) 337-0776*. Click *Next*. Click *Finish*.

How do you want to store the data?
<input checked="" type="radio"/> With the symbols in the mask, like this: (655) 337-0776
<input type="radio"/> Without the symbols in the mask, like this: 64672813

- ▷ Save the changes to the table.

Test the Table by Entering a Record in Datasheet View

Now that you have renamed the ID field, added a default value to province or state, set the field size for postal or zip code, and created an input mask for phone number, it is time to test the table to see if it is easy to add information.

Switch to Datasheet View and add a record. USE YOUR INFORMATION FOR THE CUSTOMER RECORD.



▷ Click View  on the Table Design tab.

▷ Enter in a record:

- Look at the ID field. It should say Customer ID.
- Click in the empty cell below First Name. Type a name.

▷ Press TAB to move to each data entry field:

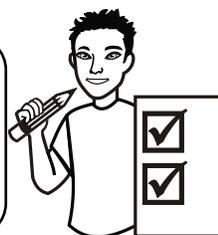
- Type a name in the *Last Name* field.
- Type an address in the *Address* field.
- Type a city in the *City* field.
- The *Province* or *State* field should already have a default value.
- Type a zip code or postal code in the *Zip Code* or *Postal Code* field. Now try to add extra numbers or letters in the *Zip Code* or *Postal Code* field. You should not be able to add any extra characters in the field.
- In the *Phone Number* field. You should see (###) ###-#### as you begin to type. Add a phone number to the field.
- Type an email address into the *Email Address* field.
- Continue to add remaining information to the table if you have extra fields.
- Notice that there is now a value in the Customer ID field.



TIP: The record is automatically saved as you type.

Your table should have the following items.

- Renamed ID field that says Customer ID
- Default value in Province or State field
- Limited field size for Zip or Postal code
- Input mask for phone number



Look at the list of fields in the table. Are there other fields that you can edit to make data entry fast, simple, and consistent?

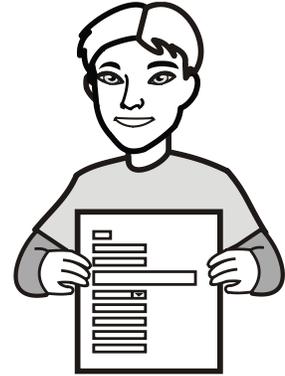
Close the Table and Exit Microsoft Access

This is a preview of the teacher guide.
Pages have been omitted.

SAMPLE

Assignment 12: Form Wizard: Create a Customers Form

You are going to make a simple data entry form from the *Customers* table you made in the previous session. You will use the Form Wizard. The Form Wizard is a quick and simple method used to create a form that prompts the user to select fields from a table or query. The form will be used to organize customer information. You will:



- Open your database.
- Create a form from the *Customers* table using the Form Wizard.
- Resize the controls in Layout View.
- Test the form design by adding a record.

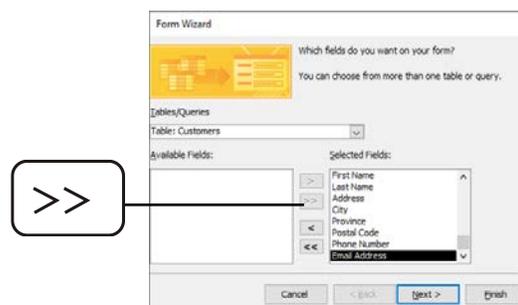
Open Your Database in Microsoft Access

Create a Form Using the Form Wizard

- ▷ Select the *Customers* table in the Navigation Pane.

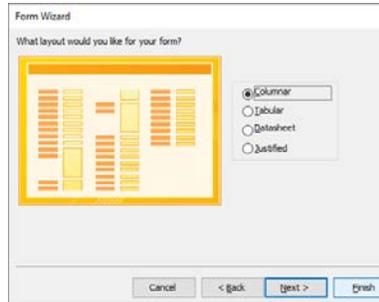


- ▷ From the *Create* tab, click *Form Wizard*  in the Forms group. If prompted by a Microsoft Access Security Notice, click *Open*.
- ▷ The Form Wizard starts. Click the *Select All Fields* button  to move all the Available Fields to the Selected Fields pane.

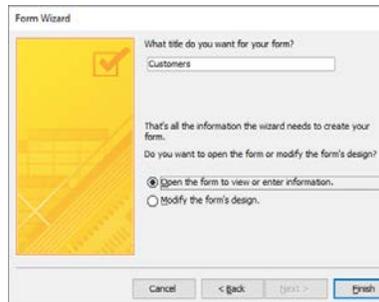


- ▷ Click *Next*.

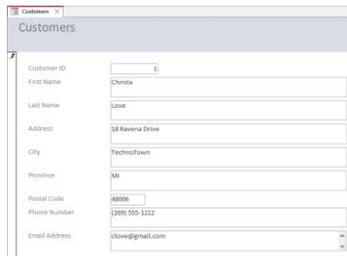
- ▷ Select *Columnar* from the layout options.



- ▷ Click *Next*.
- ▷ Type *Customers* for the form title.
- ▷ Select the *Open the form to view or enter information* option.



- ▷ Click *Finish*.
The form opens in Form View:



Edit the Form in Layout View

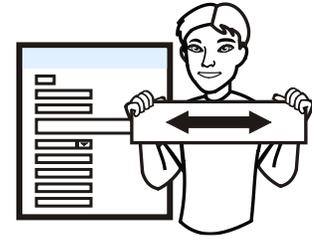


Layout View lets you edit a form. In this view, you can resize controls. A control is an object on a form, such as a text box.

- ▷ Click the *View* arrow on the Home tab.
 - ▷ From the list, select *Layout View*.
- The *Property Sheet* pane is displayed.

Resize a Control on a Form

You may want to resize the controls. For example, the *Customer ID* field may be too wide.



- ▷ Click on a control you want to change.
- ▷ Place the mouse pointer over the border of a control.
- ▷ When the mouse pointer changes to a two-way arrow, drag IN to make the control smaller or OUT to make the control larger.

Customer ID

- ▷ REPEAT UNTIL EACH CONTROL IS A SIZE YOU LIKE.



Do you want to move a control? Click on the control. Hold the SHIFT key. Click on the label of the same field. Now use the ARROW keys on the keyboard to move the control OR click and drag the control to a new place on the form.

Do you want to move more than one control? Click the first one. Hold the SHIFT key. Now click on each item you want to move. Use the ARROW keys or the mouse to move the entire selection.

Save the Form

- ▷ Click Save. 

Test the Form by Entering a Record in Form View



Now that you have resized the controls, it is a good idea to test data entry. Switch to Form View and add a record.

Switch to Form View

- ▷ Click the *Form Layout Design* tab. Click View. 
- OR right click the mouse on the form. Click *Form View*  from the menu.

Add a Record to Test Each Field

- ▷ Click the *New (blank) record* button on the Customers form Navigation Bar. ▶✱
- ▷ Type a name in the *First Name* field.
- ▷ Type a name in the *Last Name* field.
- ▷ Type a home address in the *Address* field.
- ▷ Type a city in the *City* field.
THE PROVINCE OR STATE FIELD SHOULD ALREADY HAVE A DEFAULT VALUE.
- ▷ Type a zip code or a postal code in the *Zip Code or Postal Code* field.
- ▷ Click inside the *Phone Number* field. Type a phone number into the field.
- ▷ Type an email address into the *Email Address* field.
- ▷ Continue to add remaining information to the table if you have extra fields.



If a control is TOO SMALL or LARGE, return to Layout View and make changes to the form.

If you return to layout view, the data you entered will show in the fields. This will help you resize the controls.

Close the Form and Exit Microsoft Access

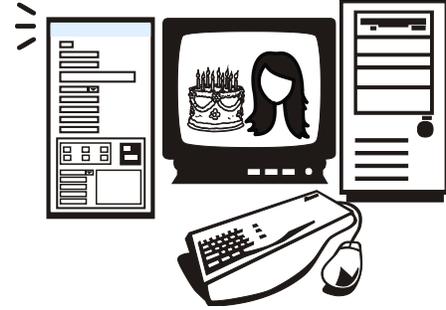
This is a preview of the teacher guide.
Pages have been omitted.

SAMPLE

Assignment 15: Enter Records

You need to organize customer events. Use the data entry form created in the previous session to add customer information and event details.

- You must have six customer records.
- Each customer must have one event booked.
- At least one customer must have two event records.
- Two customer records must have the same last name as the student's last name.
- Three events must not be confirmed.
- Four events must have an *Event Date* scheduled for next month. Two of those events must be on the same day.



Open the Customers Form in Microsoft Access

About the Form

- ▷ Study the form:

The Navigation Bar at the bottom of the *Events* subform can be used to see all the events booked by the customer. The **New Record** button on the bar is used to create a blank *Events* form.

Customers main form

Events subform

The Navigation Bar at the bottom of the *Customers* main form can be used to see all the customers. The **New Record** button on the bar is used to create a blank *Customers* form.

Add Records to the Database

- ▷ Click **New (blank) record**  on the Customers form navigation bar.
- ▷ Add information about a customer.
In the subform, add event information.

TIP

To add a second event for a customer, click **New (blank) record**  on the Events subform navigation bar.

Database Checklist (Optional)

Use the list to be sure you have added all the required information to the database.



Database Checklist	✓
SIX customer records	
An event booked for EACH customer	
One customer that has TWO events booked	
TWO customer records that have the same last name as the student	
THREE event records that are NOT confirmed	
FOUR events that are scheduled for next month	
TWO of the events scheduled for next month are on the SAME DAY	
Customer information that is suitable	
Event details that fit the theme	

Close the Form and Exit Microsoft Access

This is a preview of the teacher guide.
Pages have been omitted.

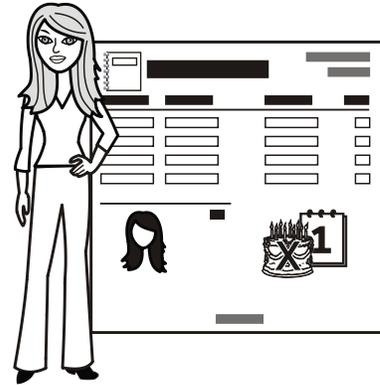
SAMPLE

Assignment 19: Create a Calling List

You can create a report from a table or query. A report is a summary of information in a database organized to create an attractive printout that includes numbers, dates, times, headings, and totals.

You never need to run the query again. Each time the report is opened it will display the latest information. You can add new customers, edit data, and remove records from the database. The report will ALWAYS be current!

Follow the instructions to generate a report that creates a calling list based on the query *Unconfirmed Events*. This attractive printout can be used to contact customers to verify party plans.



Open Your Database in Microsoft Access

Create a Report From a Query

- ▷ Select the *Unconfirmed Events* query from the Navigation Pane.



- ▷ Click the *Create* tab.
- ▷ From the *Reports* group, click *Report*.  A report is automatically created. It is displayed in *Layout View*.

First Name	Last Name	Phone Number	Confirmed
Nafale	Troy	(905) 326-8471	<input type="checkbox"/>
Rowland	Franke	(905) 824-7154	<input type="checkbox"/>
Christa	Love	(905) 235-4141	<input type="checkbox"/>



Layout View lets you edit a report. In this view, you can apply a style and resize controls.

Sort the Records Alphabetically by Last Name

You will sort the objects in each group by *Last Name*. This will alphabetize the information on the report.



- ▷ Click *Group & Sort*  on the *Report Layout Design* tab.
- ▷ Click *Add a sort*  in the *Group, Sort, and Total* pane.



- ▷ Click the *select field* arrow and pick *Last Name* from the list.



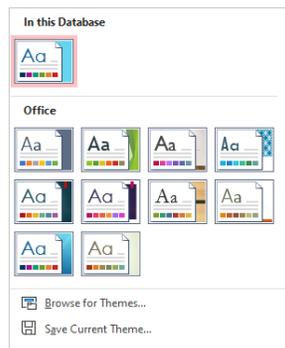
AutoFormat the Report using a Theme

You can change the style of a report by selecting a theme from the gallery. A *theme* applies a pattern to the header, changes the background fill color, adjusts the font, and sets the borderline around a control.



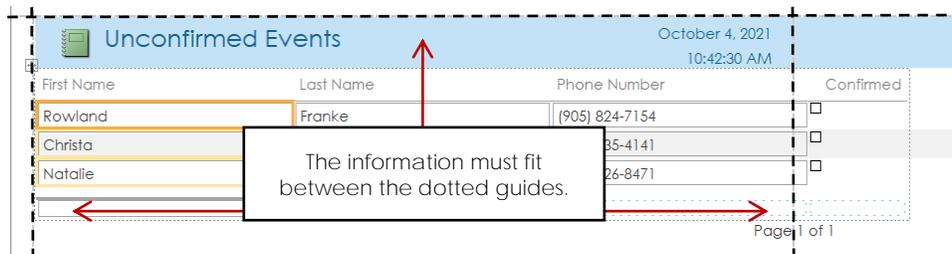
Pick an option from the Theme gallery:

- ▷ On the *Report Layout Design* tab, click *Themes*. 
- ▷ Choose a style from the gallery.



Resize a Control on a Report

- ▷ Look at the page. There are dotted lines to show the page margins. You need to place all the information between the top, bottom, left, and right margins. To do this you need to change the size of the controls.



- ▷ Click on a control you want to change. Place the mouse pointer over the border of a control.
- ▷ When the mouse pointer changes to a two-way arrow, drag IN to make the control narrower or OUT to make the control wider.
- ▷ Repeat until each control is a size you like and everything falls between the dotted guides.

Add Student Name to the Report Heading

You will be printing a copy of your report. It is a good idea to put your name on the document.

- ▷ Double click inside the report title.
- ▷ Position the cursor and add your name to the title.



You may need to reformat the size of the font or adjust the size of the box to accommodate your name.



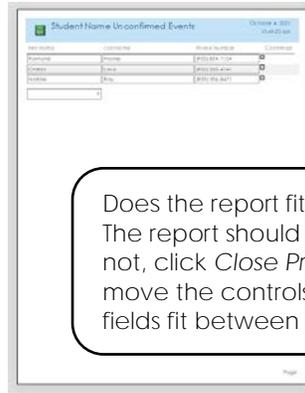
Save the Report

- ▷ Save the changes. 
- ▷ Name the report, **Unconfirmed Events**.
- ▷ Click OK.

Print the Report

You will print the report.

- ▶ Click the *Report Layout Design* tab.
- ▶ Click the *View* arrow. Select *Print Preview*. 



Does the report fit on one page?
 The report should fit on ONE page. If it does not, click *Close Print Preview*. Resize and move the controls in *Layout View* so that all fields fit between the dotted guides.



- ▶ Click *Print*. 
Click *OK*.
- ▶ Close *Print Preview*. 

Close the Report and Exit Microsoft Access

Report Checklist (Optional)

Report Design and Layout	✓
The field <i>Last Name</i> , sorts customers alphabetically.	
The report has an attractive style.	
The controls on the report fit between the page margins.	
<i>Student name</i> is in the report title.	
The controls on the report have an appealing layout.	
Report Content	
There are at least three records on the report.	
Each record is for a customer that has not confirmed their plans.	
The customer's name and phone number are included in the report.	

Session 5 Review: About Queries and Reports

1. Fill in the blanks using the words from the Word Bank:

design	sort	results	themes	layout
query	report	create	preview	datasheet

- a) **Sort** records to list the customers on a report alphabetically.
- b) Query results are displayed in **datasheet** view.
- c) The command to make a report is on the **Create** tab.
- d) Print **preview** lets you see how a report will look when it is printed.
- e) Run the query to view the query **results**.
- f) **Themes** apply a design to a report.
- g) A **report** can be made from a table or query.
- h) **Layout** view can be used to edit the layout of a report.
- i) A **query** is a saved search question used to filter records.
- j) A query must be in **design** view to add a criterion to filter records.

/10

2. List a benefit to displaying information in a report compared to query.

A report has additional information such as page numbers, title, date, time, and totals when summarizing the results.

A report can have a design applied to the results, whereas a query is just a simple table.

A report can have the information rearranged to fit on one page easily, whereas a query cannot be modified easily.

/1

3. An event planner would like to answer the question "Which customers have booked an event with the Starry Night theme?"
- a) Pick two fields from the *Customers* table and one field from the *Events* table that should be included in the query.

First Name

Last Name

Theme

Customers Table	Events Table
First Name	List of Services
Last Name	Theme
Address	Event Date
City	Start Time
Province or State	End Time
Postal or Zip Code	Guests
Phone Number	Confirmed
Email Address	Description
(optional) Company Name or School Name	

- b) What criteria should be added to the Theme field to filter the records?

Starry Night

/4

TOTAL: /15

Session 5 Skill Review: About an Event Theme

You would like to answer the question "Which customers have booked an event with _____ theme." Create a query and make a simple report that displays the results in an attractive printout.

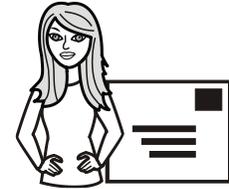
1. What theme would you like to learn about?
2. Open the database in Microsoft Access.
3. Create a query using the Query Wizard:
 - a) Click the *Create* tab. From the *Queries* group, click *Query Wizard*.
 - b) Select *Simple Query Wizard*. Click *OK*.
 - c) Pick Table: Customers from the list. (DO NOT PICK THE QUERY).
 - d) Select the fields.
 - e) Pick the Table: Events and select the fields. When done, click *Next*.
 - f) Select *Detail (show every field of every record)*. Click *Next*.
 - g) Title the query **Theme: Theme Name**.
 - h) Select *Open the query to view information*. Click *Finish*.
4. Click the *Home* tab. Click *View* to switch to Design View. 
5. In the *Theme* field in the *Criteria* row add a **theme name**. For example:

Field:	First Name	Last Name	Theme
Table:	Customers	Customers	Events
Sort:			
Show:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Criteria:			Starry Night
or:			

6. Click **Run !** on the Query Design tab.
7. Save the changes to the query. 
8. Select the *Theme Name* query in the Navigation Pane. 
9. Click the *Create* tab. Click *Report*. 
10. Apply a design to the report using *Themes*. 
11. Resize the controls.
12. Add **Student Name** to the report title.
13. Save the report as *Theme Name Report*.
14. Click *File* and choose *Print*. Click *Print Preview*. 
15. Click *Print*.  Click *OK*.
16. **Close Print Preview.** 
17. Close the report. Exit Microsoft Access.
18. Which customers booked an event with the theme?

Session 5 Extension Activity: Mailing Labels

You may want to send an advertisement to all the customers in your database. Microsoft Access can automatically create mailing labels that contain mailing information for each customer and can be printed to stickers. This method of addressing an envelope is much quicker than writing the address for each customer by hand.

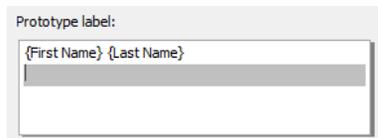


1. Open your database in Microsoft Access.
2. Select the *Customers* table. Click the *Create* tab.
3. From the Reports group, click *Labels*. 
4. In the Label Wizard, make a product selection from the list. (e.g., Avery USA 5160). Click *Next*.

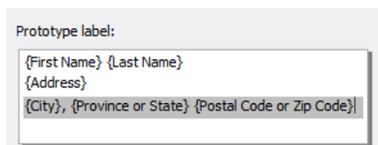
TIP

When you purchase labels from the store, they are on one sheet of paper. The labels are arranged in rows with two or three labels per row, 30 labels per sheet. Typically, the labels will have a product number printed at the top.

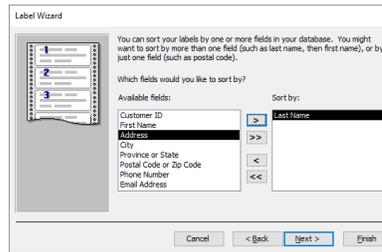
5. Select a font and font weight for the labels. Keep the font size SMALL such as 8 or 10. Click *Next*.
6. From the *Available* fields pane select *First Name*. Click the *Select Field* button. 
7. Click inside the *Prototype* label to the right of *First Name*. Press the SPACEBAR to create a space after *{First Name}*.
8. From the *Available* fields pane select *Last Name*. Click the *Select Field* button. 
9. Click inside the *Prototype* label. Click the line below *{First Name} {Last Name}*.



10. From the *Available* fields pane select *Address*. Click the *Select Field* button. 
11. Click inside the *Prototype* label. Click the line below *{Address}*.
12. From the *Available* fields pane select *City*. Click the *Select Field* button. 
13. Click inside the *Prototype* label. Add a comma, after *{City}*. Press the SPACEBAR.
14. From the *Available* fields pane select *State*. Click the *Select Field* button. 
16. Click inside the *Prototype* label. Click the line below *{City}, {State}*.
17. From the *Available* fields pane select *Zip Code*. Click the *Select Field* button. 



18. Click *Next*.
19. Sort the labels by *Last Name*. From the *Available* fields pane select *Last Name*. Click the *Select Field* button.



20. Click *Next*.
21. Name the document **Labels Customers**.
22. Select *See the labels as they will look printed*. Click *Finish*.
23. To print the labels, click *Print*. 



24. Close the report and exit Microsoft Access.

This is a preview of the teacher guide.
Pages have been omitted.

SAMPLE

TechnoPlanner Rubric

	Excellent - Wow!	Competent - Great Work!	Emerging - Getting There!	Incomplete - Keep Trying!
Database	<ul style="list-style-type: none"> demonstrates an exceptional understanding of database tools adds database records; data is complete and includes creative details 	<ul style="list-style-type: none"> demonstrates a strong understanding of database tools adds database records; data is complete 	<ul style="list-style-type: none"> demonstrates a basic understanding of database tools adds some database records but data is incomplete 	<ul style="list-style-type: none"> demonstrates an incomplete understanding of database tools missing database records
Table	<ul style="list-style-type: none"> builds tables to organize essential information; field selection is creative controls data entry by setting field types and properties to make it easy to use connects tables to form a suitable relationship and adjusts settings correctly 	<ul style="list-style-type: none"> builds tables to organize essential information controls data entry by setting field types and properties connects tables to form a suitable relationship and adjusts most settings correctly 	<ul style="list-style-type: none"> builds tables but some key information is missing controls data entry but some field types or properties are inappropriate or missing connects tables but the wrong fields are joined, or the settings are incorrect 	<ul style="list-style-type: none"> builds some or all tables but key information is missing missing data entry controls for all or most field types and properties missing a connection between tables
Form	<ul style="list-style-type: none"> creates attractive forms; design suits the topic and looks professional arranges fields on forms clearly and logically; placement, labels, and tab order streamline data entry adds a subform to a form; all information is easy to read 	<ul style="list-style-type: none"> creates attractive forms; design suits the topic arranges fields on forms clearly; placement, labels, and tab order are logical adds a subform to a form; most of the information is easy to read 	<ul style="list-style-type: none"> creates forms but design does not suit topic arranges fields on forms but placement, labels, or tab order are not always logical adds a subform to a form but some information is difficult to read 	<ul style="list-style-type: none"> creates no or some forms arranges some fields on forms; placement, labels, and tab order are poor missing a subform
Query	<ul style="list-style-type: none"> designs queries to filter records; sets criteria to show desired information; adjusts display of query report 	<ul style="list-style-type: none"> designs queries to filter records; sets criteria to show desired information 	<ul style="list-style-type: none"> designs queries to filter records but key fields are inappropriate or missing 	<ul style="list-style-type: none"> missing queries
Report	<ul style="list-style-type: none"> generates reports to summarize information effectively; design looks professional 	<ul style="list-style-type: none"> generates reports to summarize information 	<ul style="list-style-type: none"> generates incomplete reports 	<ul style="list-style-type: none"> missing reports

Form Marking Sheet

Evaluate the Form

Main Form	
The form has an attractive style.	/1
The controls are large enough to read all the information in a field.	/1
Customer contact information is in each field.	/1
The form fits onto one piece of paper.	/1
Subform	
The text in each control is easy to read.	/1
The line style for controls on the form are formatted.	/1
Services are organized in a box with a label to identify the fields.	/1
The fields are organized in a logical manner.	/1
Event information is in each field.	/1
Relationship	
The customer ID in the subform is the same as the customer ID in the main form.	/1
TOTAL	/10

Unconfirmed Events Marking Sheet

Report Design and Layout	
The field <i>Last Name</i> , sorts customers alphabetically.	/1
The report has an attractive style.	/1
The controls on the report fit between the page margins.	/1
<i>Student name</i> is in the report title.	/1
The controls on the report have an appealing layout.	/1
Report Content	
There are at least three records on the report.	/3
Each record is for a customer that has not confirmed their party plans.	/1
Each customer name and phone number is included in the report.	/1
TOTAL	/10

Upcoming Events Marking Sheet

Report Design and Layout	
The report has a suitable title.	/1
The report includes the date and time.	/1
Student name is on each page.	/1
A page number is on the bottom of each page.	/1
The event date is used to group the information in the report.	/1
The event date is listed with the first record in the group.	/1
The fields are organized on the report to create a professional document.	/4
Report Content	
There are at least four records with an event date scheduled for next month.	/4
Two of the events are scheduled for the same date.	/2
Details included in the report would be useful when preparing for each event.	/6
Event information is suitable to the theme.	/8
TOTAL	/20