Economic Development Conference

Shelly Cashman Access 2019 | Modules 1-3: SAM Capstone Project 1a



Creating Tables, Queries, Forms, and Reports in a Database

# GETTING STARTED

* Open the file **SC\_AC19\_CS1-3a\_*FirstLastName*\_1.accdb**, available for download from the SAM website.
* Save the file as **SC\_AC19\_CS1-3a\_*FirstLastName*\_2.accdb** by changing the “1” to a “2”.

If you do not see the .accdb file extension in the Save As dialog box, do not type it. The program will add the file extension for you automatically.

* To complete this SAM Project, you will also need to download and save the following data files from the SAM website onto your computer:

Support\_AC19\_CS1-3a\_Advertisers.xlsx

* Open the **\_GradingInfoTable** table and ensure that your first and last name is displayed as the first record in the table. If the table does not contain your name, delete the file and download a new copy from the SAM website.
* PROJECT STEPS

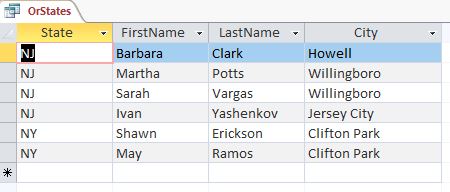
1. ~~The Economic Development Professional Organization hosts an annual conference for its members, college students, and other interested persons to share new ideas, discuss problems, and brainstorm solutions. You are a conference coordinator responsible for registration.   
     
   Create a new table in Datasheet View with the following options:~~
   1. ~~Rename the default primary key~~ *~~ID~~* ~~field to~~ **~~AdvertiserID~~** ~~and change the data type to~~ **~~Short Text~~**~~. (~~*~~Hint:~~**~~AdvertiserID~~* ~~should remain the primary key.)~~
   2. ~~Add a new field with the name~~ **~~AdvertiserName~~** ~~and the~~ **~~Short Text~~** ~~data type.~~
   3. ~~Add a third field to the table with the name~~ **~~ContactLName~~** ~~and the~~ **~~Short Text~~** ~~data type.~~
   4. ~~Add a fourth field to the table with the name~~ **~~ContactFName~~** ~~and the~~ **~~Short Text~~** ~~data type.~~
   5. ~~Add a fifth field to the table with the name~~ **~~Cost~~** ~~and the~~ **~~Currency~~** ~~data type.  
        
      Save the table with the name~~ **~~Advertisers~~** ~~and close the table.~~
2. ~~Use the Import Spreadsheet Wizard to import the data from the~~ **~~Support\_AC19\_CS1-3a\_Advertisers.xlsx~~** ~~file and~~ **~~append~~** ~~to the~~ *~~Advertisers~~* ~~table. Do not save the import steps.~~
3. ~~Create a new table in Design View with the following options:~~
   1. ~~Add a field with the name~~ **~~SponsorID~~** ~~and the~~ **~~Short Text~~** ~~data type. Change the field size to~~ **~~4~~**~~.~~
   2. ~~Set~~ *~~SponsorID~~* ~~as the primary key for the table.~~
   3. ~~Add a field with the name~~ **~~SponsorName~~** ~~and the~~ **~~Short Text~~** ~~data type.~~
   4. ~~Add a third field with the name~~ **~~Amount~~** ~~and the~~ **~~Currency~~** ~~data type.~~  
      ~~Save the table with the name~~ **~~Sponsors~~** ~~and switch to Datasheet View.~~
4. ~~With the~~ *~~Sponsors~~* ~~table open in Datasheet View, add the record shown in Table 1.~~ **~~Resize~~** ~~the~~ *~~SponsorName~~* ~~field so that the field value is completely visible. Save the changes and close the~~ *~~Sponsors~~* ~~table.~~

* ~~Table 1: New Record for Sponsors Table~~

|  |  |  |
| --- | --- | --- |
| *~~SponsorID~~* | *~~SponsorName~~* | *~~Amount~~* |
| **~~S020~~** | **~~Dynamic Growth~~** | **~~$5,000~~** |

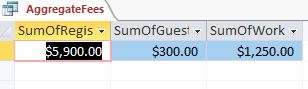
1. ~~Open the~~ *~~Attendees~~* ~~table in Datasheet View and~~ **~~delete~~** ~~the record for the attendee with an~~ *~~AttendeeID~~* ~~of~~ **~~TL001~~**~~.~~
2. ~~Switch to Design View for the~~ *~~Attendees~~* ~~table and make the following changes:~~
   1. ~~Change the name of the~~ *~~Street~~* ~~field using~~ **~~Address~~** ~~as the new field name.~~
   2. ~~Add a new field to the end of the table with the name~~ **~~CellPhone~~** ~~and the~~ **~~Short Text~~** ~~data type.   
        
      Save the changes and close the table.~~
3. ~~Use the~~ **~~Simple Query Wizard~~** ~~to create a query based on the~~ *~~Attendees~~* ~~table with the following options:~~
   1. ~~Include the~~ *~~AttendeeID~~*~~,~~ *~~FirstName~~*~~,~~ *~~LastName~~*~~, and~~ *~~CellPhone~~* ~~fields in that order.~~
   2. ~~Save the query using~~ **~~AttendeeContactInfo~~** ~~as the query name.   
        
      View the query results and then close the query.~~
4. ~~Use the~~ **~~Form Wizard~~** ~~to create a form for the~~ *~~Advertisers~~* ~~table with the following options:~~ 
   1. ~~Include the~~ *~~AdvertiserID~~*~~,~~ *~~AdvertiserName~~*~~, and~~ *~~Cost~~* ~~fields.~~
   2. ~~Select the~~ **~~Columnar~~** ~~layout.~~
   3. ~~Assign the title~~ **~~AdvertiserCostData~~** ~~to the form.  
        
      View the form and then close it.~~
5. ~~Use the~~ **~~Report Wizard~~** ~~to create a report for the~~ *~~Attendees~~* ~~table with the following options:~~
   1. ~~Include the~~ *~~LastName~~*~~,~~ *~~FirstName~~*~~,~~ *~~City~~*~~, and~~ *~~State~~* ~~fields.~~
   2. ~~Do not add any grouping levels.~~
   3. ~~Sort the records in ascending order by~~ *~~LastName~~*~~.~~
   4. ~~Select the~~ **~~Tabular~~** ~~layout and the~~ **~~Portrait~~** ~~orientation.~~
   5. ~~Assign the title~~ **~~AttendeeLocations~~** ~~to the report.  
        
      View the report and then close it.~~
6. ~~Create a query in Design View for the~~ *~~Attendees~~* ~~table with the following options:~~
   1. ~~Include the~~ *~~LastName~~*~~,~~ *~~FirstName~~*~~,~~ *~~City~~*~~, and~~ *~~State~~* ~~fields in the design grid.~~
   2. ~~Sort the records in ascending order by~~ *~~LastName~~*~~.~~
   3. ~~Add criteria to select only those records where~~ **~~Philadelphia~~** ~~is the City.~~
   4. ~~Save the query using~~ **~~PhiladelphiaAttendees~~** ~~as the query name.  
        
      Open the query in Datasheet View and then close it.~~
7. ~~Open the~~ *~~GuestAndWorkshop~~* ~~query in Design View and make the following changes to the query:~~
   1. ~~Add the~~ *~~RegistrationFee~~* ~~field to the query grid immediately following the~~ *~~AttendeeID~~* ~~field.~~
   2. ~~Add criteria to select only those records where the~~ *~~GuestFee~~* ~~field value~~ **~~equal 0~~** ~~and the~~ *~~WorkshopFee~~***~~equal 0~~**~~.  
        
      Open the query in Datasheet View and confirm that 16 records appear in the GuestAndWorkshop query results. Close the query, saving if necessary.~~
8. ~~Create a query in Design View based on the~~ *~~Attendees~~* ~~and~~ *~~Registration~~* ~~tables with the following options:~~
   1. ~~Add the~~ *~~Attendees~~* ~~table and the~~ *~~Registration~~* ~~table to the Design window. The tables should be automatically joined by the common field~~ *~~AttendeeID~~*~~.~~
   2. ~~Add the~~ *~~FirstName~~* ~~and~~ *~~LastName~~* ~~fields from the~~ *~~Attendees~~* ~~table to the query grid.~~
   3. ~~Add the~~ *~~RegistrationID~~*~~,~~ *~~RegistrationFee~~*~~, and~~ *~~WorkshopFee~~* ~~fields from the~~ *~~Registration~~* ~~table.~~
   4. ~~Save the query using~~ **~~AttendeeRegistration~~** ~~as the query name.  
        
      Open the query in Datasheet View and then close it.~~
9. ~~Open the~~ *~~OrStates~~* ~~query in Design View and make the following changes to the query:~~
   1. **~~Move~~** ~~the~~ *~~State~~* ~~field so that it is the first field in the query grid.~~
   2. ~~Add criteria to select only those records where the value in the~~ *~~State~~* ~~field is~~ **~~NY~~** ~~or~~ **~~NJ~~**~~.~~
   3. ~~Sort the records in ascending order by~~ *~~State~~* ~~and then by~~ *~~LastName~~*~~.  
        
      Open the query in Datasheet View and confirm that it matches Figure 1. Close the query, saving if necessary.~~

* ~~Figure 1: OrStates Query Result~~

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1. ~~Use the~~ **~~Crosstab Query Wizard~~** ~~to create a crosstab based on the~~ *~~Attendees~~* ~~table with the following options:~~
   1. ~~Use the~~ *~~State~~* ~~field for the row headings.~~
   2. ~~Use the~~ *~~City~~* ~~field for the column headings.~~
   3. ~~Use a~~ **~~Count~~** ~~of~~ *~~AttendeeID~~* ~~as the calculated value for each row and column intersection.~~
   4. ~~Save the query using~~ **~~State\_CityCrosstab~~** ~~as the query name.  
        
      View the query and then close it.~~
2. ~~Open the~~ *~~AttendeeFirstName~~* ~~query in Design View and add criteria to select only those records where the~~ *~~FirstName~~* ~~field value begins with~~ **~~Lau~~** ~~followed by any other letters. Save the changes to the query. Open the query in Datasheet View, confirm that two records appear in the query results, and then close it.~~
3. ~~Open the~~ *~~StateAttendees~~* ~~query in Design View. Add~~ **~~parameter~~** ~~criteria to the~~ *~~State~~* ~~field to replace the current "PA" criteria. The new parameter criteria should prompt the user with~~ **~~Enter desired state~~** ~~as the text. Save the query, then view it in Datasheet View. Enter~~ **~~IL~~** ~~when prompted. Confirm that three records appear in the query results and then close it.~~
4. ~~Open the~~ *~~TotalFees~~* ~~query in Design View. Modify the query by creating a~~ **~~calculated~~****~~field~~** ~~that~~ **~~sums~~** ~~the total of~~ *~~RegistrationFee~~*~~,~~ *~~GuestFee~~*~~, and~~ *~~WorkshopFee~~*~~. Use~~ **~~TotalFees~~** ~~as the name of the calculated field. Save the query. Open the query in Datasheet View and then close it.~~
5. ~~Open the~~ *~~ConferenceFees~~* ~~query in Design View. Modify the query by sorting the records in~~ **~~descending~~** ~~order by the calculated field~~ *~~ConferenceFees~~* ~~and display only the~~ **~~top 5%~~** ~~of the records. Save the query. Open the query in Datasheet View and then close it.~~
6. ~~Open the~~ *~~SortedStates~~* ~~query in Design View. Modify the query to sort the~~ *~~State~~* ~~field in~~ **~~ascending~~** ~~order. Each state should appear only once. Save the query. Open the query in Datasheet View and then close it.~~
7. ~~Create a query in Design View for the~~ *~~Registration~~* ~~table with the following options:~~
   1. ~~Add the~~ *~~RegistrationFee~~*~~,~~ *~~GuestFee~~*~~, and~~ *~~WorkshopFee~~* ~~fields to the query grid.~~
   2. ~~Add the~~ **~~Total~~** ~~row to the query grid.~~
   3. ~~Calculate the~~ **~~sum~~** ~~of each of the three fields.~~
   4. ~~Save the query using~~ **~~AggregateFees~~** ~~as the query name.  
        
      Open the query in Datasheet View, confirm that it matches Figure 2, and then close it.~~

* ~~Figure 2: AggregateFees Query Result~~

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1. ~~Open the~~ *~~Exhibitors~~* ~~table in Design View and perform the following tasks:~~
   1. ~~Make~~ *~~ExhibitorID~~* ~~the primary key of the table.~~
   2. ~~Change the~~ **~~field size~~** ~~of the~~ *~~ExhibitorID~~* ~~field to~~ **~~4~~**~~.~~
   3. ~~Change the~~ **~~data type~~** ~~for the~~ *~~BoothCost~~* ~~field to~~ **~~Currency~~** ~~with~~ **~~0~~** ~~decimal places.~~
   4. ~~Add the text~~ **~~Basic cost to rent a 10 x 10 booth~~** ~~as the description for the~~ *~~BoothCost~~* ~~field.  
        
      Save the changes to the table and close it.~~ *~~(Hint:~~* ~~Because a field size was reduced, a warning message appears asking if you want to test the data, The data is valid, so ignore this message and continue saving the table.)~~
2. ~~Open the~~ *~~Attendees~~* ~~table in Design View and perform the following tasks:~~
   1. ~~Add a field with the name~~ **~~Status~~** ~~to the end of the table.~~
   2. ~~Select~~ **~~LookupWizard~~** ~~at the data type.~~
   3. ~~Select the option to type in your own values.~~
   4. ~~Type in the following three values (in the order shown) as the list of possible values for the field:~~ **~~Member~~**~~,~~ **~~NonMember~~**~~, and~~ **~~Student~~**~~. Limit the field values to only the items in the list and do not allow multiple values for the field.  
        
      Save the changes to the table and close it.~~
3. ~~Most of the attendees are members of the Economic Development Professional Organization. Use an~~ **~~Update~~** ~~query to update the values in the~~ *~~Status~~* ~~field of the~~ *~~Attendees~~* ~~table to~~ **~~Member~~** ~~for all records. Run the query and save it using~~ **~~UpdateStatus~~** ~~as the name of the query.~~
4. ~~Open the~~ *~~Attendees~~* ~~table in Datasheet View and change the~~ *~~Status~~* ~~value for the attendee with an~~ *~~AttendeeID~~* ~~of~~ **~~CB001~~** ~~(Cynthia Brown) to~~ **~~Student~~**~~. Add the caption~~ **~~PostalCode~~** ~~to the~~ *~~ZIP~~* ~~field. Close the table.~~
5. ~~Create a~~ **~~split form~~** ~~for the~~ *~~Registration~~* ~~table. Save the form using~~ **~~Registration Split Form~~** ~~as the form name. Close the form.~~
6. ~~The~~ *~~PotentialDonors~~* ~~table contains records that should be appended to the~~ *~~Sponsors~~* ~~table. Create an~~ **~~Append~~** ~~query with the following options:~~
   1. ~~Select all the fields from the~~ *~~PotentialDonors~~* ~~table in the same order that they are listed in the field list.~~
   2. ~~Select~~ *~~Sponsors~~* ~~as the destination table in the Append dialog box.~~
   3. ~~Save the query using~~ **~~AppendPotentialDonors~~** ~~as the name, run it, and then close it. The query should append 10 records.~~
7. ~~Open the Relationships window and add the~~ *~~Attendees~~* ~~table and the~~ *~~Registration~~* ~~table to the Relationships window. Create a relationship between the~~ *~~AttendeeID~~* ~~field in the~~ *~~Attendees~~* ~~table and the~~ *~~AttendeeID~~* ~~field in the~~ *~~Registration~~* ~~table. Make the relationship enforce~~ **~~referential integrity~~**~~. Save the relationship and close the window.~~
8. ~~Use the~~ **~~Find Unmatched Query Wizard~~** ~~to find attendees who do not have a matching registration.~~
   1. ~~Select the~~ *~~Attendees~~* ~~table as the table to display in the query results.~~
   2. ~~Select the~~ *~~Registration~~* ~~table as the related table.~~
   3. ~~Select the~~ *~~AttendeeID~~* ~~as the common field in both tables.~~
   4. ~~Display all fields in the query result.~~
   5. ~~Save the query using~~ **~~UnmatchedRegistration~~** ~~as the query name.  
        
      View the query results, confirm there is one record, and then close it.~~
9. ~~Members who registered early paid a reduced registration fee. Create a~~ **~~Make Table~~** ~~query that selects all fields from the~~ *~~Registration~~* ~~table in the same order that they are listed in the field list. Select the fields individually for the query grid, do not use the (\*) asterisk.~~
   1. ~~Add criteria to select only those records where the~~ *~~RegistrationFee~~* ~~field value~~ **~~equals 175~~**~~.~~
   2. ~~In the Make Table dialog box, assign the name~~ **~~EarlyRegistration~~** ~~to the new table.~~
   3. ~~Save the query using~~ **~~MakeEarlyRegistration~~** ~~as the query name, run it, and then close the query. The new~~ *~~EarlyRegistration~~* ~~table should contain 13 records.~~
10. ~~Open the~~ *~~Registration~~* ~~table in Design View and perform the following tasks:~~
    1. ~~Enter a~~ **~~validation rule~~** ~~for the~~ *~~RegistrationFee~~* ~~field to ensure that values in the field are~~ **~~greater than or equal to 100~~**~~.~~
    2. ~~Enter the text,~~ **~~Must be greater than or equal to $100~~** ~~in the~~ **~~Validation~~****~~Text~~** ~~property box.  
         
       Save the changes to the~~ *~~Registration~~* ~~table and close it. (~~*~~Hint:~~* ~~Because a validation rule was added, a warning message appears asking if you want to test the data. The data is valid, so ignore this message and continue saving the table.)~~
11. ~~Create a~~ **~~Delete~~** ~~query for the~~ *~~Sponsors~~* ~~table with the following options:~~
    1. ~~Select the~~ *~~SponsorName~~* ~~field from the~~ *~~Sponsors~~* ~~table.~~
    2. ~~Add criteria to delete only those records where~~ **~~Comor~~** ~~is the~~ *~~SponsorName.~~*
    3. ~~Save the query using~~ **~~DeleteSponsor~~** ~~as the query name, run it, and then close it. The query should delete one record.~~
12. ~~Open the~~ *~~Sponsors~~* ~~table in Datasheet View and perform the following tasks:~~
    1. ~~Sort the records in ascending order by~~ *~~SponsorName~~*~~.~~
    2. ~~Add the~~ **~~Total~~** ~~row to the datasheet and calculate the~~ **~~sum~~** ~~for the~~ *~~Amount~~* ~~field.  
         
       Save the changes to the table and close it.~~

Save and close any open objects in your database. Compact and repair your database, close it, and then exit Access. Follow the directions on the SAM website to submit your completed project.