

ASSIGNMENT #2 : DATABASE Data and information

Microsoft Access Installation procedure for Windows users

The videos below can help you to achieve this:

- table creation: <http://youtu.be/hd7XpwlBOK0>
- relationships creation: <http://www.youtube.com/watch?v=xjhuhZI20Ho>
- Enter the records specified in the excel sheets to the respective tables of your Microsoft Access Database. Make sure to create the records for the parent tables first (the ones with the one side), otherwise you might run into referential integrity issues.

The video below can help to achieve this:

<http://www.youtube.com/watch?v=frsmRm7z7F0&feature=youtu.be>

1. Create 8 queries in Microsoft access that a manager could answer using this database. Your queries must each use of at least two tables.

You can watch the two tutorials below that show how to create two queries in MSAccess 2010.

Query example 1: <http://youtu.be/1rdjkLxteGg>

Query example 2: <http://www.youtube.com/watch?v=iRTTujmQkYw>

2. Create 8 reports by using the queries designed in step 1.
You can watch the tutorial below that shows how to create two reports based on the queries of the previous tutorials MSAccess 2010. Please also refer to “Application Extension 5b” in the text book.

<http://youtu.be/gx2yJoTsagU>

You must hand in:

The Microsoft Access Database (version 2010) with the tables, relationships, queries and reports. As before compress all files using WinRar, WinZip or another program and do not forget to include an MS Word file with your names and student ID with the page for the grading criteria below.

Please note:

- Your electronic submission must clearly identify team members’ name (rename the student file template).

Your will be graded based on the rubrics below:

- Part 1 create table, insert data for Orders + first set of queries and Reports
- Part 2 Insert data using the forms for customer and inventory (data is in the Excel sheets, create relationships 1:N
- Part 3 second set of queries
- Part 4 second set of reports
- Part 5 using the database

Yuki Bakery Database

Preview You are the manager of the Yuki Bakery and you need to keep track of the daily delivery orders by customers. At the end of the day you need to run a report on how many bakery items the chefs need to bake for the next morning delivery. You also need to create a daily report of the billing amount for each of the delivery orders.

Skill Set

Queries

Insert Criteria (new rows)

Sorting

queries based on more than one table

One-to-many table relationship

Parameter query

Grouping query

Make-Table query

Delete-Table query

Query 1 You want to find out which inventory items are least popular so that you can possibly create a marketing campaign for those items or consider discontinuing the item.

Query 2 Find out which items are yielding the most revenue per day. These items are the most popular in the bakery, and you are considering a coupon offer to attract new customers

Query 3 You are monitoring your outside supplier inventory. The bakery loses money on inventory that doesn't sell; therefore, you want to create a query to show which items from your supplier are selling least

Query 4 You want to know which items are baked in the store and are selling least. You need to make a decision to either discontinue or enter a promotion for increasing awareness for your customers

Query 5. Find out which of your customers are other restaurant owners. You need to send promotional packages for special rates on particular bakery items

Report 1. Based on query 1, title of the report "Least popular Items" change the font and center the title

Report 2. Based on query 2, group it by item type and sort them in ascending order by RevenuePerItem. If possible use currency format for the sum categories

Report 3. Based on query 3 group by supplier name, use summary option and select RevenuePerItem Ascending and title of the report should be Daily Supplier Revenue

Report 4. Based on query 4, add a grouping level by ItemType, sort it ascending by revenuePerItem, title "baked in Store", create a label below title and place your name within the header

Report5. Based on query 5, using the wizard, title of the report "Restaurant Delivery Customers", create a label(s) with your name(s), in footer change date to short date

Open the database, create the order table and enter the following data

Field Name	Data Type
OrderId	Text
CustomerID	Text
ItemId	Text
Quantity	Number
DeliveryDate	Date/Time

And the data is in the Excel sheet

Use the relationship tool to create relationships with referential integrity between inventory and order table(s) and between customer and order table(s)

Query 6: Parameter Query Which customers are requesting a certain bakery item?

1. On the Create tab, in the Query group, click on Query Design.
2. In Design view, select the Customer table, Order table, and Inventory table as the input.
3. Include the following fields in the output from the Customer table: CustomerType, NameOfEstablishment, FirstName, PhoneNumber.
4. From the Order table insert the Quantity field.
5. From the Inventory table insert the ItemId field.
6. Sort CustomerFirstName alphabetically.
7. Enter text Item Id for a prompt (enclosed in brackets) in the Criteria row of the ItemId column.
8. To verify the query runs correctly, Insert Bakery ItemId B421.
9. Save the query as Query6 Parameter Query.

Query 7: Group By Query How **many of** each bakery item do the chefs need to bake tonight?

1. On the Create tab, in the Query group, click on Query Design.
2. In Design view, select the Inventory and Order tables as the input.
3. Include the following fields in the output: ItemName, Quantity.
4. Use the Totals icon button on the toolbar.
Within the Totals category, Group by ItemName. Select Sum category for the Quantity' field.
5. Sort Quantity descending.
6. Run and Save the query as Query 7 Chefs Daily Delivery.

Query 8: Calculated Field Query What is the billing amount of today's delivery orders for each of our customers?

1. On the Create tab, in the Query group, click on Query Design.
2. In Design view, select the Customer, Inventory, and Order tables as the input.
3. Select the field NameOfEstablishment.
4. Insert a calculated field titled BillingAmount, and multiply [PricePerItem] * [Quantity].
5. Use the Totals icon button on the toolbar, and within the Totals category Group by NameOfEstablishment.
6. Select Sum under Totals category for the BillingAmount field. Sort Billing Amount descending.
7. Run and Save the query as Query 8 Daily Billing Amount.

Query 9: Make-Table Query To save time and gasoline, the delivery drivers want to split up the deliveries for restaurants only. You need to create a table just for restaurants.

1. On the Create tab, in the Query group, click on Query Design.
2. In Design view, select the Customer table as the input and include all the fields in the output.
3. Enter Restaurant as the criterion in the CustomerType field.
4. Select Make-Table Query from the Query menu on the toolbar.
5. Save the query as Make-Table Restaurant.
6. Run the Make-Table Restaurant query to create the new table.

Query 10: Delete Query One of your suppliers, CupCake Express, called and informed you that they are no longer making strawberry cream cupcakes. You need to delete the orders that have the ItemId B421, which is the strawberry cream cupcake.

1. On the Create tab, in the Query group, click on Query Design.
2. In Design view, select the Order table as the input and include all the fields in the output.
3. Under ItemId within the criteria row, type in ItemId B421.
4. View the datasheet to see if you did this correctly; go back to Design view.
5. Select the Delete Query from the Query menu on the toolbar.
6. Run the Query to activate the Delete Query.
7. Save the query as Delete Query Strawberry Cream Cupcake.
8. Check your Order table to see that **it** in fact was deleted.

Reports

Design Principle

A report is especially useful to show the output of a total query, grouping the summary information by category.

Implementation

Report 6 Create a report from Query 6 that is based on which customers are requesting a certain bakery item.

1. Create a report in Report Wizard based on Query 6 Parameter.
2. Select all available fields.
3. View the data by inventory table.
4. Use landscape orientation.
5. Use the default layout.
6. Title the report 'Parameter Report.'
7. Create a label (the "Aa" icon) with your name below the title within the header.
8. Insert Bakery ItemId B571.
9. Switch to Layout view and insert value-added features such as text formatting, text alignment, and color shading to increase the readability of the information.
10. Change the date properties to short date within the footer.
11. Save the report as Report 6 Parameter Report.

Report 7 Create a report based on Query 7. This report will show the bakery items chefs need to bake today.

1. Create a report in Report Wizard based on the Query 7 Chefs Daily Delivery.
2. Select all available fields.
3. Use the default layout.
4. Title the report "Chefs Daily Delivery Report".
5. Modify the field text labels appropriately.
6. Create a label (the "Aa" icon) with your name below the title within the header.

7. Switch to Layout view and insert value-added features such as text formatting, text alignment, and color shading to increase the readability of the information.
8. Change the date properties to short date within the footer.
9. Save the report as Report 7 Chefs Daily Delivery.

Report 8 Create a report based on Query 8 to show the billing amount of today's delivery orders for each of our customers.

1. Create a report in Report Wizard based on the Query 8 Daily Billing Amount.
2. Select all available fields.
3. Use the default layout.
4. Within the Grouping and Totals menu under the Design menu, insert a totals option to sum the Daily Billing Amount.
5. Title the report "Daily Billing Amount."
6. Create a label (the "Aa" icon) with your name below the title within the header.
7. Switch to Layout view and insert value-added features such as text formatting, text alignment, and color shading to increase the readability of the information.
8. Change the date properties to short date within the footer.
9. Save the report as Report 8 Daily Billing Amount Report.

USING THE DATABASE APPLICATION

1. As the bakery's manager, you want to quickly revise some of the queries.
 - a. Using the Parameter Query, which customers ordered the wheat grass?
 - b. Modify the Query 8 Daily Billing Amount to show the billing amount for the restaurant customers only. Save query as Restaurant Daily Billing Amount.
 - c. Describe how you would revise Query 7 to show the daily delivery for a particular customer.
2. Often, new information requirements arise for the bakery.
 - a. Create a query and report for the drivers to deliver the baked goods. Include the necessary information for the drivers to deliver the correct inventory to the correct address. Save the query and the report as Delivery Location.
 - b. Describe the steps you need to go through to add a new customer to the database and a new order with several inventory items for that new customer.
 - c. Why is referential integrity important in the design of the Yuki Bakery database application?