Lab 8: Maintaining the Museum Gift Shop Database

Problem: The manager of the Science Museum gift shop needs to change the database structure, add validation rules, and update records. Also, a volunteer at the gift shop was asked to add some items to the database. By mistake, the volunteer created a new database in which to store the items. These items need to be added to the Museum Gift Shop database.
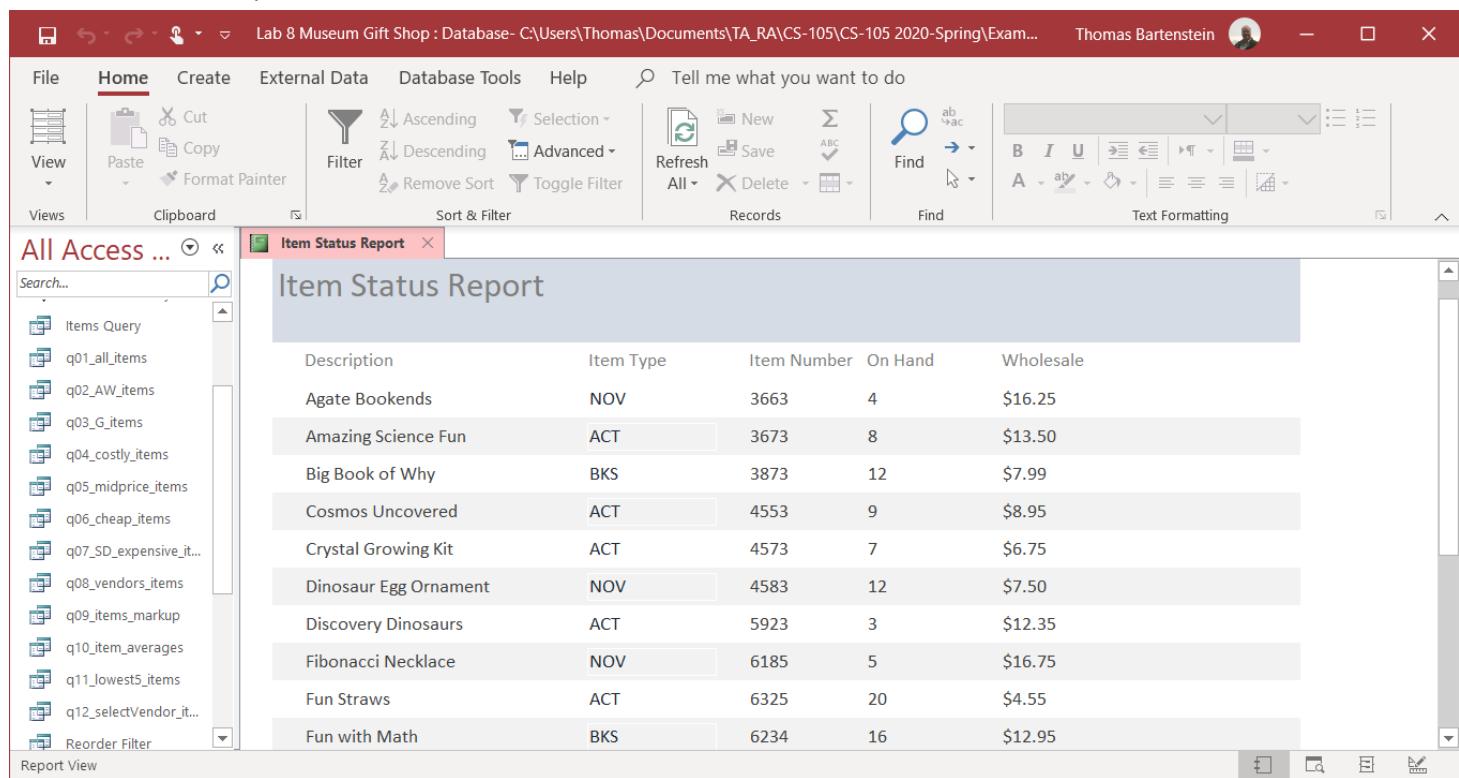
Instructions:

1. Open the "Lab 7 Museum Gift Shop.accdb" database and File / Save As "Lab 8 Museum Gift Shop.accdb". (Note, if you get a message that says, "Security Warning – Some active content has been disabled", click on the "Enable Content" button.)

2. Open the *Items* table in Design view

3. Add a new short text field, "Item Type", to the *Items* table. The field MUST appear AFTER the Description field. This field will contain data on the type of item for sale. The valid item types are ACT (activity, game), BKS (book), and NOV (novelty, gift).

   a. In the properties General tab, make the field size 3
   b. Make the default value property "ACT"
   c. Click on the "…" button at the right of the "Validation Rules" property to bring up the Expression Builder dialog.
   d. In the Expression Builder dialog, create an expression that checks to make sure that the value is one of the three values specified above. Then hit OK.
   e. In the "Validation Text" field, enter a message that the user will see if the validation rule fails.
   f. Change the "Required" property to "Yes".
   g. Go to the "Lookup" tab in the properties for this field, and change "Display Control" to "Combo Box".
   h. Make the Row Source Type a "Value List".
   i. Click on the "…" button at the right of the Row Source property to bring up the "Edit List Items" dialog.
   j. Fill in the "Edit List Items" dialog with the values above, and make "ACT" the default value, then click on "OK"

4. Add a validation rule to the "On Hand" field to check to make sure that the On Hand value is between 0 and 50, inclusive. Add validation text as well. (Note… you can add a validation rule either by using the Field Properties for the On Hand field or add a validation rule in the Table Properties property sheet.)

5. Save the items table. (Note… A pop-up will appear that says "Data integrity rules have changed…" respond "Yes". Another pop-up will appear that informs you that "Existing data violates the setting for the "Required" property…" Again, respond "Yes". Another pop-up may appear which also gets a "Yes" response.)

6. Create a new query for the Items table. Make this an Update query to update the Item Type to "ACT". Save this query as "Update Type Query" and run the query. (You will get a pop-up that asks for confirmation… say "Yes".) Open the Items table to see these updates.

7. Make a new form using the "More Forms" icon to select a "Split Form", and save it as "Item Split Form".

8. View the Item Split Form in the Forms View, and use it to:

   a. Change the Item Type for items 6234, 6345, and 7123 to BKS.
   b. Change the item type for items 3663 , 4583 , 6185, 8196, and 8344 to NOV

9. Save the changes, then open the Items table and make sure your updates are complete.

10. Save and close all changes to your database, and exit Access.

11. Download the Lab 8 Gift Shop New Items.accdb file and open this database.

12. Create and run a query to append the data from the *Additional Items* table to the *Items* table in the Lab 8 Museum Gift Shop database. Save the query as "Update Query" and close the *Lab 8 Gift Shop New Items* database.

13. Re-open the Lab 8 Museum Gift shop database and Open the *Items* table. You should now see the additional items.

14. Create a new Query by using the "Advanced" filter icon and "Advanced Filter/Sort" for the *Items* table. Filter the table to find all items with fewer than 10 items on hand. Sort the filter by Item Type and Description. Apply the filter using the "Toggle Filter" icon. Save the query as *"Reorder Filter"*. Clear the filter from the *Items* table using the Toggle Filter icon again.

15. Create a query to delete all records in the *Items* table where the description starts with the letter M. Run the query and save it as *"Delete 'M' Query"*.

16. Right-click the *Items* table in the Object List pane. Click Table Properties, and add a description for the *Items* table that includes your first and last name. Save the changes to the table.

17. On the Database Tools tab, click on the "Relationships" icon, to open up the "Relationship Tools" ribbon. In the Design Tab of the Relationship Tools Ribbon. If asked to open tables, open both the Vendor and the Items table. If there is already a line between Vendor/Vendor Code and Items/Vendor code, click on that line, and then click on the "Edit Relationships" icon. If there is no line between Vendors and Items, then click on the "Vendor Code" field in the Vendor table, and drag it onto the Vendor Code field in the Items table. When you do this, the Edit Relationships dialog should pop-up.

    a. The top of the dialog should already be filled in with Vendor table and Vendor Code selected on the left and Items table and Vendor Code selected on the right.

    b. Click on the "Enforce Referential Integrity" check box.

    c. Click on the "Cascade Update Related Fields" check box

    d. Leave the "Cascade Delete Related Records" box unchecked.

    e. Click on the "Create" button.

    You should now see the relationship (a line) between Vendor/Vendor code (1) and Items/Vendor Code (∞ indicating that many lines in this table can have a single vendor code.) Close the "Relationship Tools" tab by clicking on the X box inside the ribbon.

18. Specify referential integrity between the *Vendors* table (the "one" table) and the *Items* table (the "many" table). Cascade the update but not the delete. Print the Relationship Report.

19. Add the Item Type field to the Item Status Report. The new field should follow the Description field. Save the result and switch to the Report View. The result should look like: