

Lab 23 – Microsoft Access H

Topics covered in this lab

- Update a table design
- Specify validation rules, default values, and formats
- Create and use single-valued lookup fields
- Create and use multivalued lookup fields

Start

- From Blackboard, download the file named **lab23_student_file**



3-Microsoft Access

- Save the file on your Q drive, inside the ITE100 folder, inside
- Double click on the file to open it

Create and use single-valued lookup fields

- In the Item table, and before Vendor Code field, insert a new field **Vendor Name**, and for Data type, choose Lookup Wizard. Type the following **single** valued list: Alum Logo Inc., GG Gifts, Trinkets More.
- In the new Vendor Name column, using the menu, do the following:

Item	Selling Price	Vendor Name	Vendor Code
\$12.50	\$15.00	Alum Logo Inc.	AL
\$14.25	\$17.00	Trinkets More	TM
\$2.75	\$4.00	GG Gifts	GG
\$13.50	\$15.00	Trinkets More	TM
\$2.50	\$3.00	Alum Logo Inc.	AL
\$5.65	\$7.00	Trinkets More	TM
\$16.00	\$20.00	GG Gifts	GG
\$8.40	\$13.00	Alum Logo Inc.	AL
\$8.90	\$12.00	Alum Logo Inc.	AL

Create and use multivalued lookup fields

- Go to View > Design View
- Right click on Vendor Code, and choose  Insert Rows
- In the new row, type Color, and for Data type, choose Lookup Wizard

Color Lookup Wizard...

- The Lookup Wizard dialog box appears, select the second option

☒ I will type in the values that I want.

- Click Next
- Type the following:

Col1
Red
Green
Blue
Yellow

- Click Next

- Click the check box to allow multiple values

Lookup Wizard

What label would you like for your lookup field?

Color

Do you want to limit entries to the choices?

☒ Limit To List

Do you want to store multiple values for this lookup?

☒ Allow Multiple Values

Those are all the answers the wizard needs to create your lookup field.

- Click Finish
- Go to View > Datasheet View. Click Yes to save the changes
- In the new Color column, using the menu, do the following:

Price	Vendor Name	Color	Vendor Code
\$15.00	Alum Logo Inc.	Blue, Red	AL
\$17.00	Trinkets More	Yellow	TM
\$4.00	GG Gifts	Green, Red	GG
\$15.00	Trinkets More	Blue, Green	TM
\$3.00	Alum Logo Inc.	Blue, Green, Red, Yellow	AL
\$7.00	Trinkets More	Blue, Yellow	TM
\$20.00	GG Gifts	Red	GG
\$13.00	Alum Logo Inc.	Red, Yellow	AL
\$12.00	Alum Logo Inc.	Blue, Green, Red	AL

Query1 – Multivalued field showing multiple values on a single row

- From the Create tab, click on Query Design
- Select Item, click Add once
- Click Close
- From the field list, double click on Description, Cost, and Color to add to the query
- Go to View > Datasheet View

Save As

Q1-Single Row

Query2 – Multivalued field showing multiple values on multiple rows

- Go to View > Design View
- In the color field, type .value after Color, like this
- Go to View > Datasheet View

Color.value

Item

Save As

Q2-Multiple Rows

To include Totals in a Datasheet

- From the home tab, click on 
- Under OnHand choose Sum

Item					
Item ID	Description	OnHand	Cost	Selling Price	
BA02	Baseball Cap	15	\$12.50	\$15.00	
DM05	Doormat	5	\$14.25	\$17.00	
OR01	Ornament	25	\$2.75	\$4.00	
PL05	Pillow	8	\$13.50	\$15.00	
PLT13	Plate	15	\$2.50	\$3.00	
PN21	Pennant	22	\$5.65	\$7.00	
PP22	Pen and Pencil	12	\$16.00	\$20.00	
SC11	Scarf	17	\$8.40	\$13.00	
TT12	Tie	10	\$8.90	\$12.00	
Total		129	\$9.38	\$11.78	

- Under Cost and Selling Price choose Average

Specify validation rules, default values, and formats

To change a field size:

- Go to View > Design View
- Click on Item ID

Item	
Field Name	Data Type
Item ID	Text
Description	Text

- From Field Properties, type 5 for Field Size

General	Lookup
Field Size	5
Format	
Input Mask	

- This means, that Item ID cannot be more than 5 characters, let's try this
- Go to View > Datasheet View
- Click Yes for the messages
- In the fifth record, double click on PLT13, and try to write a 6th letter, you won't be able to, because we set the field size to 5 letters only.

Item	
Item ID	Description
BA02	Baseball Ca
DM05	Doormat
OR01	Ornament
PL05	Pillow
PLT13	Plate
PN21	Pennant

To specify a required field:

- Make the OnHand field required.

To specify a range:

- In the same Field Properties for the OhHand field, type the following rule: The OnHand value must be between 0 and 50. Write the following Validation text "Must be between 0 and 50", displayed in case of a wrong value.
- Test your rule for the following value: In the first value for the OnHand column, change the current value from 15 to 55, press enter

Item		
Item ID	Description	OnHand
BA02	Baseball Cap	55
DM05	Doormat	5

- You will get the message  Must be between 0 and 50
- Type back the original value, 15. It should be Okay now

To specify a Default Value

- For Vendor Code field, set the default value to AL

To specify a Collection of Legal Values

- In the same Field Properties for the Vendor Code field, type the following Validation Rule: Vendor Code should be either AL, GG or TM. Type the following Validation Text "Vendor Code must be either AL, GG, or TM"
- Let us test it. In the Vendor Code column, first row, change the current value from AL to TEST

Selling Price	Vendor Name	Color	Vendor Code
\$15.00	Alum Logo Inc.	Blue, Red	TEST
\$17.00	Trinkets More	Yellow	TM
\$4.00	GG Gifts	Green, Red	GG
\$15.00	Trinkets More	Blue, Green	TM
\$3.00	Alum Logo Inc.	Blue, Green, Red, Yellow	AL
\$7.00	Trinkets More	Blue, Yellow	TM
\$20.00	GG Gifts	Red	GG
\$13.00	Alum Logo Inc.	Red, Yellow	AL
\$12.00	Alum Logo Inc.	Blue, Green, Red	AL
			AL
\$11.78			

- You will get the message  Vendor code must be AL, GG, or TM
- Type back the original value, AL. It should be Okay now
- Also, notice the default value AL in the new blank field, this is because we set the default value for Vendor Code to AL

To Specify a format

- Make the Vendor Name in uppercase even if typed in lowercase.
- Make the Description field in lowercase even if typed in uppercase.