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Data Handling: Validation

We use validation to control the data that can be entered into the database. For example, if you were setting up a database for a club that only allowed children aged 16 and under, we could make sure that only children of this age can be entered into the database.

For this example we will create a very simple database.

- Create a new database called 'Childrens Club'.
- Create a new table in 'Design' mode.
- Add the following fields: •
 - Child ID set as primary key Data Type: AutoNumber
 - Child Forename
 - Child Surname
 - Child Age
- Set the data types of these fields.
- Set the field sizes of these fields.
- Save the table as 'Childrens Club table'.

Now we are going to add a validation rule to make sure that only children of 16 and under can be added. This will also help to prevent mistakes with data that is entered into the database.

- Make sure that you have the age field • selected
- At the bottom of the table design, you will see a tab that is labelled 'General'
- You will set the validation in the validation rule box
- You need to type '<=16' It is important that you get the \geq and = signs this way round otherwise the rule will not work. If we only wanted children under the Age of 16, you would not need the = sign

Field Name Child ID	Data Type			C
Child ID	AutoNumber			_
	AdtoNumber			
Child Forename	Text			
Child Surname	Text			
Age	Number			
-				
	<u> </u>	Field Properties		
General Lookup				
Field Size	Long Integer			
Format				
Decimal Places	Auto			
Caption				
Default Value	0			
Validation Rule	<=16			e
Validation Text	N			
Required Todexed	No			
Smart Tags	140			
	General Lookup Field Size Format Decimal Places Input Mast Caption Decimal	Child Surname Text Age Number Age Number General Lookup Field Size Long Integer Dermat Decimal Places Input Mast Caption Default Value 0 Validation Rule <=16	Child Surname Text Age Number Age Number Age Number Field Properties General Lookup Field Size Field Size Field Size Field Size Field Size Field Size Field Properties Caption Dechnel Places Auto Input Mast Caption Default Value Caption Default Value Caption Cap	Child Surname Text Age Number Age Number Age Number Field Properties General Lookup Field Size Fiel

The next thing that we can do is to write a message to be displayed if someone tries to enter incorrect data, in this case a value that is greater than 16. It is important to make people aware of what is wrong with the value that they have entered so that they know what to do to fix the problem.

In the box underneath the validation rule, there is a box labelled 'validation text'. This is where you can write a comment that will be displayed if incorrect data is entered.

	General	Lookup		
The error message written here says 'Sorry, the age you have entered is above our age limit'	Field Size Format Decimal Pl Input Mas Caption	laces sk		Long Integer Auto
You can of course write your own version of this message	Validation Validation Validation Required Indexed Smart Tag	alue Rule Text gs	*	0 <=16 Sorry, the age you have entered is above our age No No

Just as the validation rule works for greater than, it will also work with less than (< or <=).

SAVE the table. Now open it in 'Datasheet' view. Enter a forename and surname into the first record. Now enter an age that is greater than 16. When you move away from this field, the error message should be displayed.

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	Child ID	Child Forenance	Child Surname	Age	7	Sex		
.0	1		\backslash		17			
*	(AutoNumber)				0			
			\sim					
Microsoft Office Access								
					Sorry	, the age you have	e entered is above ou	ır age limit
						UK		

Now enter values that are less than 16 to check that these are accepted.

Add a new field to your table called 'Gender'. Make sure that the data type and field size are set appropriately.

We want to add a validation rule here to say that only the values 'Male' or 'Female' can be entered. There is no other possibility and we do not want anything else written in this field.

	Child ID	AutoNumber			
	Child Forename	Text			
	Child Surname	Text			
	Age	Number		•	In the general type, validation rule
►	Sex	Text		/	
				_ /	box type the following:
				_ /	
_				. /	
-				_ /	
-				- /	Male OR Female
-				- /	
-					
-					Access will automatically put
				-/ •	Access will automatically put
					quatation marks around the taxt
					quotation marks around the text
					values "Male" / "Female" as these
					values wate / remate, as these
					taxt values are accontable
					text values are acceptable
-					
-					You now need to enter a message
-					Tou now need to enter a message
-	-				to be displayed if incorrect data is
					to be displayed if medireet data is
					entered
	General Lookup	/			ontorou
	Field Size 1	.0			
	Format				
	Input Mask		/	•	Save the table
	Capuon Default Value	K K			
	Validation Rule "	Male" Or "Female"			
	Validation Text	iorry, you have not er	otered Male or Eemale		
	Required	lo In			 Now test this out by viewing the
	Allow Zero Length	'es			table in Datashaat visuu and tuving
1	Indexed	lo			table in Datasneet view and trying
	Unicode Compression Y	'es			to optor a value other than (Male)
1	IME Mode N	lo Control			to enter a value other than male
1	IME Sentence Mode	lone			or (Fomolo)
	Smart Tags				
					You should also try entering Male /
				-	
					Female to check that these values

• Save the database

are accepted.

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