

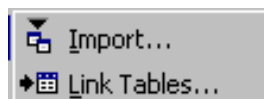
Access 2000 Intermediate

ACCC Seminars

<http://www.acc.uic.edu/seminars/access2000-intermed>

Importing or Linking Tables

- You can import external data from sources such as Excel spreadsheets, dBase files, and even plain text files
- Importing the file brings a copy of the file into the database
- Linking the table from the outside source only puts a link in. The linked table IS NOT in the database
- Both are under the File|Get External Data menu.



Primary Keys for Tables

- Primary Key field CANNOT have duplicate records in that field
- More than one field can be used as the primary key field
- Select fields that you want and click on the Primary Key button while in Design View



Table Relationships

- Several tables in a database may have relations between one another
- You can join the tables together to increase database integrity
- A table can either be a primary (parent) table or a child (related) table
- Click on the Relationships button to establish these



One-to-One vs. One-to-Many

- A One-to-One relationship means there is a single corresponding record in the related table for each record in the primary table
- A One-to-Many relationship means each single record in the primary table can have more than one related record in the related table

Enforcing Referential Integrity

- When tables are linked in a one-to-one or one-to-many relationship, referential integrity can be enforced
- This means a record cannot be entered into the related table unless the data can be traced back to a related record in the primary table
- Cannot be enforced on linked tables

The screenshot shows the 'Edit Relationships' dialog box. It has a title bar with a question mark and a close button. The main area is divided into two columns: 'Table/Query:' and 'Related Table/Query:'. Under 'Table/Query:', there is a dropdown menu showing 'CUSTOMERS' and a text field containing 'Customer ID'. Under 'Related Table/Query:', there is a dropdown menu showing 'TRANSACTIONS' and a text field containing 'Customer #'. Below these fields is a table with two columns and two rows. The first row contains 'Customer ID' and 'Customer #'. The second row is empty. Below the table are three checkboxes: 'Enforce Referential Integrity' (checked), 'Cascade Update Related Fields' (unchecked), and 'Cascade Delete Related Records' (unchecked). At the bottom, there is a 'Relationship Type:' label and a dropdown menu showing 'Indeterminate'. On the right side, there are four buttons: 'Create', 'Cancel', 'Join Type...', and 'Create New...'.

Data Entry Rules

- You can make data entry into a table more foolproof by using Data Entry Rules
- These are placed in the Field Properties section in table Design View
- These will prevent mistakes when typing data

General	Lookup
Field Size	Long Integer
Format	
Decimal Places	Auto
Input Mask	
Caption	
Default Value	0
Validation Rule	
Validation Text	
Required	No
Indexed	Yes (No Duplicates)

Some Examples:

- Required Field: record cannot be saved if no data entered
- Default Value: enters a set value automatically into the field
- Validation Rule: a formula or expression restricting the type of data that can be entered
- Validation Text: an error message the database designer can make on erroneous entry

Input Mask

- Will allow designer to shape the type of data that can be entered
- Example: set a maximum of two digits for a state field and force capital letters
- Example: use the Input Mask Wizard to create a phone number mask, filling in (____)____-____

Calculated Fields in Queries

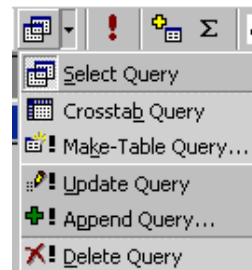
- In a query, you can create your own field that calculates values of other fields
- Example: New Price: [price]*1.1
- This will create a new field called price and increase amounts in the Price field by 10%

Parameter Queries

- Used as a placeholder in lieu of criteria in a query
- By placing a question in brackets for the criteria, access will request criteria when the query is run
- Example: [Enter a Description] will ask for a description for the field in which it's placed
- "*" & [Enter a Description] & "*" will make it a wildcard character search

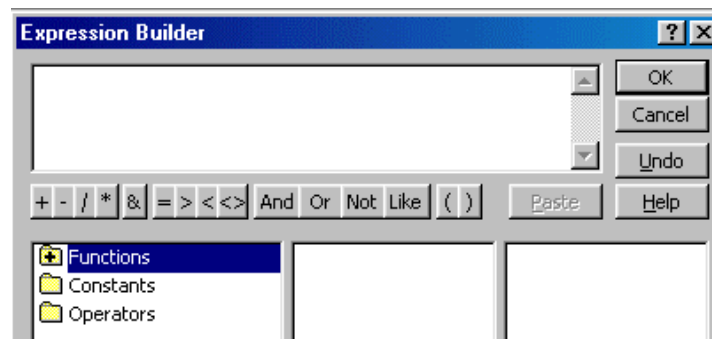
Different Types of Queries

- The Query Type button gives a list of the different types of available queries:
 - Select: selects records based on criteria
 - Crosstab: organize fields into rows and columns
 - Make-Table: creates a new table from results
 - Update: modifies records in original table
 - Append: copies selected records to another table
 - Delete: deletes records from table



Expression Builder

- Can be used to create complicated expressions
- Can be used in tables, queries, forms, and reports



Summary Query

- The Totals button is available in creating queries to group and total specific fields
- ONLY HAVE FIELDS SHOWING THAT YOU NEED
- Choose to group by a field, sum, average, minimum, or maximum

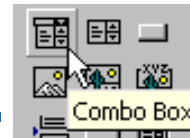
Field:	Customer #	Product #
Table:	TRANSACTIONS	TRANSACTIONS
Total:	Group By	Avg
Sort:		
Show:	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Criteria:		
or:		

Forms

- Use the Form Wizard to set up your form
- Choose fields to include on form
- Style of form (columnar, tabular, etc)
- Click on the Design View button to make changes



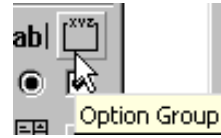
Combo Box



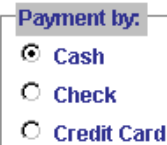
- Allows data entry by typing or clicking an option on a drop-down menu
- Combo Box Wizard will step you through the process
 - Choose table or query containing values
 - Choose fields and column widths
 - Choose which value will be stored and in which field

Customer		
Product #	3	Chris Bonner
Employee ID	4	Jake McCann
Entity	5	Gerri Garcia
	6	Trini Poole
	7	June Michaels

Option Group



- Lets you choose a value by clicking on option buttons or check boxes
- Option Group Wizard
 - Type in the different choices (add a default value if desired)
 - Assign values to each and which field should store values
 - Choose style of option group



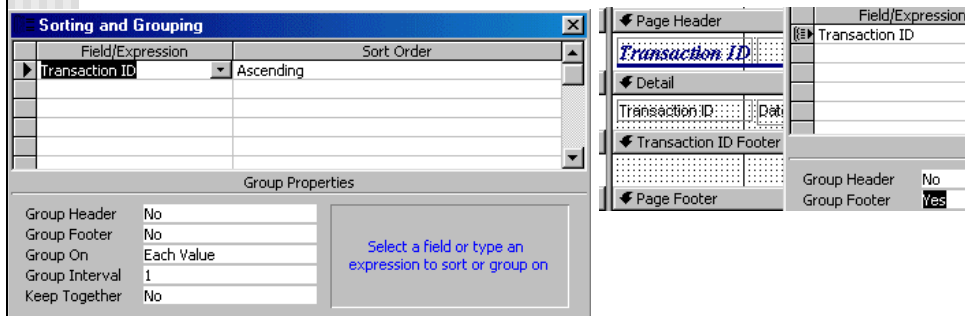
Reports

- Use the Report Wizard to generate reports
- Click on fields and use resize handles to adjust width
- Expression Builder can be used for creating page numbers and dates
- Use the Properties Box to make adjustments

Reports



- Sorting and Grouping box lets you sort the records and create grouping levels
- Also allows you to keep records together



Duplicate Boxes

- Use the Duplicate command under the Edit menu to duplicate boxes in the report design
- VERY useful if the items you need already exist in another report band

