FastCourse Series

Access Chapter 3: Querying a Database

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Learning Objectives

- After studying this chapter, you will be able to:
  - Create, save, and run select queries
  - Create select queries using multiple tables
  - Use simple query criteria
  - Use AND and OR criteria in queries
  - Use wildcard characters in query criteria
  - Sort query results
  - Create and format a calculated field

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Select Queries

- Queries ask a question.
- The answer is a set of records.
- You set the criteria.
- They produce results from one or more tables.
- You can create forms and reports from multiple tables.
- If you edit data in query results, the data stored in the source is also edited.

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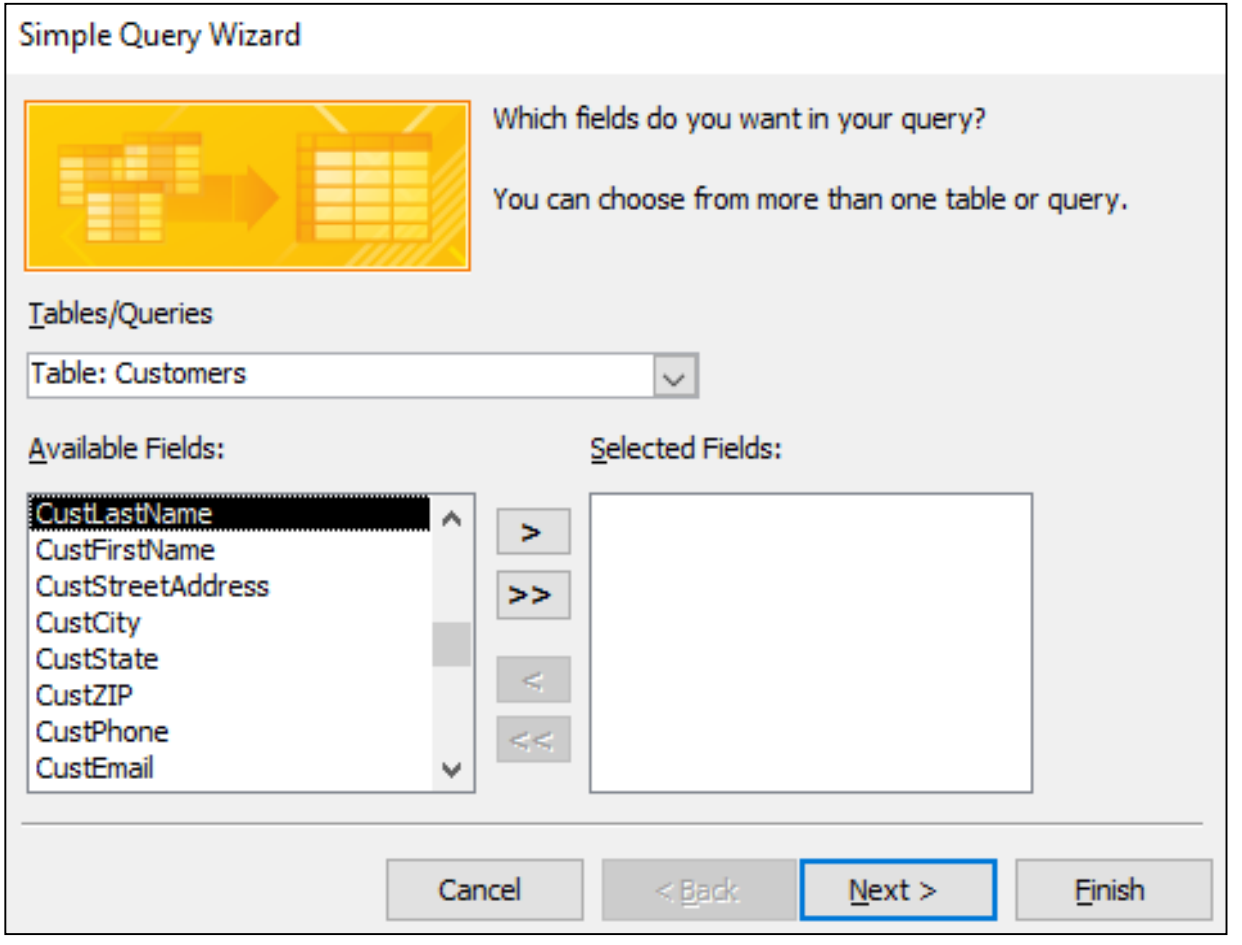
Query Wizard

- Create→Queries→Query Wizard



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Query Design View

- Query Design View allows you to set precise criteria. You can:
  - Select files from multiple tables.
  - Locate records from one or more fields.
  - Perform calculations.
  - Sort your query results or show/hide fields in them.

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Designing a Query

- You can draw data from multiple tables.
- Use Query Design view when starting to build a multi-table select query.
- Select only the fields you want to display in the results.
- Use related tables.
- Although sometimes the Field ID is primary in one table and secondary in another table, always use the table using it as a primary key in your query.

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Using Criteria in Queries

- Criteria are conditions the field values must meet.
- They are commonly used with text, numeric, currency, and dates.

TYPES OF CRITERIA

Field Type	Criteria	Examples of How Records Are Returned
Text	Smith	Last name is Smith
	> =Smith	Last names are from Smith through the end of the alphabet
	Not Smith	Last name is not Smith
Numeric & Currency	> 123	Numeric value is greater than 123
	> =123	Numeric value is greater than or equal to 123
Date	Date( )	Date is today's date
	< Date( ) – 30	The Date field is 30 days or more prior to today's date

- Wildcard characters help you locate records that match a pattern (*, ?, and [ ]).

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Using Criteria in Queries (cont.)

- AND and OR enable you to locate records that meet multiple conditions.
- Date criteria help you determine query results related to age, hire date, invoice date, etc. For example, you can find invoices that were submitted between certain dates.

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Sorting, Showing, and Limiting Results

- You can sort the query results from the query grid.
- Uncheck the Show box to hide fields from query results.
- Limit the number of records shown to simplify the query.
- Use the Return feature to set the number of records returned from the query.

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Calculated Fields

- Calculated fields contain formulas that perform calculations.
  - They can perform mathematical calculations.
  - They can be formatted, like other fields.
  - They allow you to combine values of two fields into one field, like LastName and FirstInitial.
  - They are updated and recalculated each time the query is run.
  - Their structure includes a field name and a mathematical expression.

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