

Query Development

Query Design Considerations

1. What type of report am I trying to create?
2. What window should I start in?
3. What object contains the primary data I need?
4. What data do I want to see appear on the report?
5. Do I need to get any data from other objects in this window?
6. How do I want to limit data? (I don't want to get back all data for the entire University, after all.)
7. What order should the rows of data be sorted in?
8. What order should the columns of data appear in? (Usually the column order should follow the sort order.)
9. Are there any other features that we want to use, like SUM, or DISTINCT? (In general, any time you are working with summarized data for \$, you want to choose SUM from the Function column for each attribute that represents \$\$\$. Distinct doesn't usually apply when working with \$ amounts.)

Once you think your query is ready to go, run the query and get a results set back with raw data. Then review the results set to see if the data looks like what you expect to see. If not, go back and tweak the query until you are satisfied.

Query Creation Notes and Tips

Terminology:

Open an object – Double-click on a box in a model window to see the available data elements (attributes)

Select an attribute – Single-click on attribute name to see a column of that data in the results

Qualify an attribute – Use that attribute to filter out unwanted records

Sort on an attribute – Change the order of the rows of data based on the contents of that attribute

Reorder attributes – Change the order of the columns of data

Query > New

Query > Run

Query > Save (clicking on the save button on the toolbar won't save your query; neither will File > Save)

Query > Open

Functions:

None

Average

Maximum

Minimum

Sum

Count

Average Distinct

Sum Distinct

Count Distinct

Attribute Qualifiers:

Qualifiers where you don't enter any values:

Is Null – Absolutely nothing is in that attribute on that record

Is Not Null – Some values is in that attribute on that record

Qualifiers where you must enter exactly one value

<

<=

>

>=

Qualifiers where you must enter exactly 2 values:

Between – Inclusive of the endpoints, for example between 01-DEC-2005 and 31-DEC-2005 gives you everything for December

Not Between – Exclusive of the endpoints, for example not between 01-DEC-2005 and 31-DEC-2005 gives you everything for the entire year except December

Qualifiers where you can enter one or many values:

- =
- !=
- In
- Not In

Qualifiers where you can enter one or many values and need to choose "Match Any" or "Match All" if you enter multiple values:

- Begins with
- Contains
- Ends with
- Does not begin with
- Does not contain
- Does not end with

Query modifiers:

- Distinct – Every row of the results will be unique
- Count all – Lets you know how many rows are behind each unique row of the results
- Trim relationships – Eliminates objects that aren't being used in the query

Query qualification:

- Combine – Evaluate multiple qualifications together before evaluating the rest of the qualifications
- Negate Clause – Evaluate the qualifications, and then eliminate the records identified by them
- Group – Apply a qualification after performing a function on the data