University of Bristol IT Services

Access 2010: Intermediate to advanced queries

Practical workbook

Aims and Learning Objectives

This document takes you you slightly 'beyond the norm' when it comes to queries. It is not supposed to be exhaustive – no Access query resource ever could be – and though including some (possibly) familiar ground you quickly find yourlsef on some less-trodden paths. The intention is to give you some hints and tips as to what can be done with queries so that you can experiment further on your own.

At the end of this document you will be able to:

- o explain what you can do with Access queries beyond viewing subsets of data;
- o create queries using a range of operators, functions and expressions;
- o create a query to calculate totals;
- o customise a crosstab query in the Query Design window
- o use different table joins to alter query results;
- o create queries to sort data into ranges (e.g. age: 1 – 10, age: 11 – 20 and so on);
- o join two sets of query results together using SQL.

Document information

Course files

This document and associated practice file are available on the web. To find these, go to
http://www.bristol.ac.uk/it-services/learning/resources and in the **Keyword** box, type the document
code given in brackets at the top of this page.

Related documentation

Other related documents are available from the web at:

http://www.bristol.ac.uk/it-services/learning/resources

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Document information

Introduction

This document takes you through some intermediate to advanced queries. The assumption is that you are able to build simple one and multi-table queries using wildcards, and simple operators, such as equals, greater than and so on.

The further assumption is made that you understand how to create both AND and OR queries – for example creating a query that must match multiple criteria at the same time or match one of two (or more) sets of criteria.

The yet further assumption is that you know how to create basic expressions, parameter and concatenation queries.

If you haven't got a clue what all this means, then work through the documents listed below in the Prerequisites section before attempting to work through this document.

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Prerequisites

You will get more out of this document if you have done one of the following:

- Attended "Access 2010: An introduction" (ITS-ACC10-1) and "Access 2010: Building Access databases" (ITS-ACC10-2).
- Worked through course documents for the above two courses.

Task 1 Opening the practice database

Objectives   To open the database and look at tables, relationships and data types.

Comments   It is a good idea to become familiar with both the database relationships and data/data types before trying to do complex things with the data.

1.1   To open the practice database:

➤ Navigate to wherever you saved the **AccessQueries.accdb** practice file.

➤ Double-click on the file name to open the database.

Figure 1 – select Enable Content

➤ On the **Security Warning** message box, select **Enable Content**.

➤ (If a further **Security Warning** opens asking if you want to make the file a "Trusted Document", select **No**.)

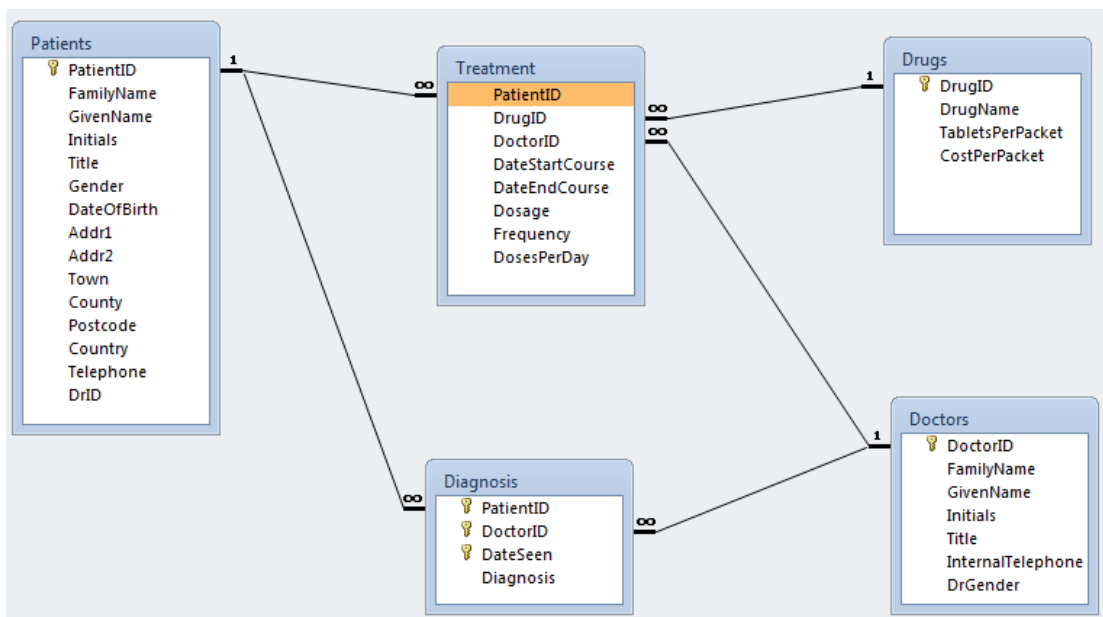**1.2**   To get to know the database:

Figure 2 – tables and relationships in the practice database

➤ Open up each table in turn and look at the data each contains.

➤ Work out the different data types, text (aligns left), numeric (aligns left), yes/no (tickbox), date and time and so on

➤ Look at Figure 2 above to identify primary keys (1), foreign keys (∞) and the relationships between tables.

➤ Close all tables when finished.