

## Microsoft Access – For developers

These topics cover the basics that you need if you are setting up a database in Access. If you are thinking of setting up a database you may want to use your database as the training material. To set up a working database you will also need to be familiar with querying and reporting and the topics associated with these are listed under 'Access Database User Basics' and 'Queries and Reports'.

- Planning an Access database.
- Determine whether you need a flat file or relational database.
- Understand the different types of relationship in an Access database.
- Understand the reasons for documentation and testing – overview the Database Documenter feature.
- Define a table to store data and make use of field properties to set validation, default values and data formats to improve the quality of data entry.
- Understand the role of primary keys in Access databases – set a single field primary key – create a primary key based on a combination of fields.
- Create a form for data-entry based on a single table.
- Understand and use the options available for customising the layout and functionality of a form.
- Add command buttons to forms that carry out specified actions when clicked.
- Design and build tables to store related data – for example set up a table to store details of customers and another to store details of their orders.
- Establish one-to-one and one-to-many relationships.
- Recognise and handle many-to-many relationships.
- Understand the role of referential integrity in ensuring that data in related tables retain their links – use the associated 'cascade' options to manage outcomes when the primary key data is edited and/or related records are deleted.
- Design forms that show data from multiple, related, tables – set up forms with subforms, linked forms and forms using a tabbed window layout.
- Use form properties to enhance the functionality and/or user friendliness of a form.
- Use combo boxes (drop-down lists) to improve the speed and quality of data-entry in tables and on forms – determine whether the user is limited to selecting from the list or can add other values – consider the most efficient method for populating the combo box.
- Set up user friendly screens to allow a user to make selections easily before running reports.
- Create a menu structure for a user either using the Access Switchboard facility or using custom forms.
- Set startup options so that the database opens to show a window other than the Database Window.
- Set up simple macros to automate a database's functionality.
- Compare validations options set up at field level, at table level or using macros.

## Microsoft Access – Developer Stage 2

<b>Duration</b>	1 day	
<b>Pre-requisites</b>	You should have attended both the 'Developer Stage 1' course and the 'Queries and Reports' course or already have the skills covered on these courses.	
<b>Who it is for</b>	Anyone is setting up an Access database and would like to use some more advanced techniques for managing the data and customising the system.	
<b>Cost</b>	1-to-1: £150	Group (2-6): £215

### Course Outline

#### Session 1 – Advanced querying

- Crosstab queries
- Action Queries
- Using a form to set the criteria for a query/report

#### Session 2 – Advanced forms/reports

- Using Form and Report properties to refine their functionality

#### Session 3 – Linking with Excel

- Importing from or linking to Excel
- Exporting data to Excel

#### Session 4 – Macros

- Define basic macros
- Macro groups
- Conditional macros
- Running macros

#### Session 5 – Linking it all together

- Automating processes in an Access database

#### Session 6 – User Interface

- Setting up a user interface through custom forms or the Switchboard feature
- Database splitter