Intermediate FileMaker Pro: Relational Database Design and Scripting

Duration: 2 Days

OBJECTIVES

This FileMaker Authorised course teaches good practice in the design of efficient relational database systems. The course includes full explanations of how and when to link tables together using primary and secondary keys in FileMaker Pro and introduces FileMaker scripting, to provide automation and efficiency of procedures within a database solution. It also looks at techniques to improve the user experience, such as helpful navigation and the use of multiple windows and introduces the power of FileMaker calculations.

PRE-REQUISITES

Attendance on the Introduction to FileMaker Pro course, or equivalent experience e.g. knowledge of the FileMaker field types, layout parts, designing and formatting layouts and the basics of the FileMaker Calculation engine.

COURSE OUTLINE

Introduction to relational database systems
- The efficiencies achieved using related tables and the problems they solve
- Defining relationships between tables and understanding the Match field
- "One to many" relationships
- "One to one" relationships
- "Many to many" relationships

Managing data using One-to-Many relationships
- Placing fields from a "parent" table on a "child" layout
- Understanding and using portals on a "parent" layout
- Displaying related records in a portal
- Creating new records in a portal
- Navigating related files using the Go to Related Record script step
- Filtering portals

Introduction to Scripting
- Scripts v. button single actions
- Creating, duplicating and editing scripts
- Locating and adding script steps to a script
- Commonly scripted procedures
- Running scripts from buttons
- Building a Button Bar
- Scripting the creation of new windows
- Use the Card style window
- Specifying name, size and position
- Switching between windows
- Organising scripts using the Script Workspace window
- Organising scripts in folders

Scripting the creation of records

- Recap on the concept of primary and secondary keys
- Scripting the creation of related records using Set Variable and Set Field script steps
- Using the Commit Record script step
- Refreshing portals

The power of calculation fields
- Formulae, operators and functions
- Using Text and Number functions
- Using logical functions such as If, IsEmpty and Case
- Using aggregate calculations such as Count, Min and Max
- Using the Let function

Database sharing and security issues
- Defining accounts and passwords
- Understanding privilege sets
- Granting limited access by specifying a formula or rule
- Assigning full access rights to a script

Further scripting techniques
- Using script variables
- Using script parameters
- Running scripts using event triggers
- Script trigger categories
- Using script triggers - worked examples
- Using custom dialogs in scripts
- Using conditional script steps; If/EndIf and Else
- Using globally stored fields as part of a scripted search
- Scripting the export of data e.g as an Excel file or as a PDF and using variables to name the output file