mehdiward
information systems

4D Development - Programming Foundation

About the Course

4D provides a comprehensive Rapid Development environment that is both powerful and flexible. This course gives an introduction to the 4D programming environment and the comprehensive 4D Language. It explains 4D implementations.

Benefits

• Understand the 4D Method Editor.
• Learn the syntax and grammar of the 4D Language.
• Undestand the event driven programming model.
• Understand the structure of the 4D Documentation.
• Learn how to work with Record Selections and the Current Selection.
• Learn how to work with Records and the Current Record.
• Understand how to write a query in 4D.
• Learn how to print using Output Forms.
• Learn how to keep the end users working productively.
• Learn how to use the built-in Dialog commands and how to build custom Dialogs.

Prerequisites

It is recommended that you have attended our Level 1 4D Development - Getting Started course (4D-DEV1) or that you are familiar with the 4D Environment and Development Editors. No programming knowledge is assumed.

What Next ?

4D Development - Programming - Advanced (4D-DEV3)
4D Development - Programming - Multi-User (4D-DEV4)
4D Development - Programming - Web Integration (4D-DEV5)

Course Content

4D Method Editor • **Dialog** • Alert • Request Confirm • Custom Dialogs • Complex Dialogs • Method Editor • Programming Syntax • Parameters • Operators • Commands • Functions • 4D Documentation.
Tests in 4D • The "If" Test • The "Case of" Test.
Loops in 4D • The "For" Loop • The "While" Loop • The "Repeat" Loop.
Working with Selections • The Current Selection • All Records • Record Navigation • Query Commands • Search Criteria • Built Queries • Query Selection • Query by Formula • Sorting • Query Editor • Sort Editor • Deleting Records.
Working with Records • The Current Record • New Record • Create Record • Save Record • The Record Stack • Deleting a Record • Physical or Logical Deletion.
User Interface • Opening Windows • Setting Forms • Display Selection • Modify Selection.
Structure Access • Relations and Field Information • Automatic Relations.
Variables • Creating and Assigning Variables • Types of 4D Variables • Variable Scope • Introduction to Processes.
4D Programming Model • Structured Programming • Which Method Types to use? • Triggers • Form Methods • Object Methods • Project Methods • Execution Sequence.
Events • Form Events • Events for Displaying Records • Events for Printing Records • Trigger Events • Database Events • On Startup Method.
Printing • Print Selection • Advanced Output Form for Printing • Print Settings and Page Set Up • Print Preview.
Dialogs • Alert • Request • Confirm • Custom Dialogs Complex Dialogs.
4D Compiler • Interpreted vs. Compiled • Compiler Settings • What is created • Do's and Don'ts.

To make a course booking or to discuss your training requirements, please call us on **020 8245 4545** or email **training@mehdiward.com**.