



4D Development - Programming Foundation

Level 2 Course
Course Duration : 2 days
Course Code : 4D-DEV2

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.
- Understand 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 the 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 discuss your training needs, call us on **020 8245 4545** or email training@mehdiward.com.

