



Genero Language Basics

In this course, you learn how to write, compile, and run a graphical application that creates, modifies, and reports on data stored in a database using the Genero® Business Development Language (BDL).

Audience

- Genero application developers

Prerequisites

- Prior programming experience (helpful but not required)
- Familiarity with Structured Query Language (SQL) (helpful but not required)

Duration

- Lecture is provided over five sessions (approximately 15 hours total)
- Labs (and lab assistance) to be completed outside of lecture sessions

Course Outline

Module 1 – Course and Genero Overview

- Define key Genero terms and concepts
- Describe the Genero product suite
- Describe the Genero architecture
- Identify use of XML and DOM within Genero

Module 2 – Using BDL

- Write, compile, and execute a simple BDL program
- Connect to and retrieve data from a database
- Define and use variables

Module 3 – Displaying Data (Windows/Forms)

- Interact with the user with windows and forms, messages, and menus
- Define and display records
- Define and compile forms

Module 4 – Searching the Database (Query-by-Example)

- Implement Query-by-Example
- Handle query cancellations and errors
- Retrieve multiple rows of data from the database
- Compile and link a multiple-module program

Module 5 – Enhancing the Form

This is a brief introduction, these topics are covered in detail in the Genero Interface Programming course.

- Add a toolBar
- Add a topMenu
- Change an edit field to a comboBox

- Change the window appearance
- Work with actions

Module 6 – Modifying Data

- Handle data entered on a form
- Update database tables
- Insert a row
- Update a row
- Delete a row

Module 7 – Displaying an Array of Data

- Define a form to handle an array
- Load and display an array
- Compile and use a library
- Dynamically fill an array

Module 8 – Modifying an Array

- Use INPUT ARRAY
- Use ARR_CURR()
- Use predefined actions
- Use dynamic array methods
- Follow control block execution order

Module 9 – Creating Reports

- Write the report driver and report function
- Handle report interruption

Module 10 – Using Localization

- Recognize the localization features in Genero
- Customize your application with the localized strings
- Generate, compile, and deploy source string files

Module 11 – Managing Master/Detail Forms

- Implement a form with data from multiple tables
- Show both master and detail data on one form

Module 12 – Changing the UI Dynamically

This is a brief introduction, these topics are covered in detail in the Genero Interface Programming course.

- Recognize Genero built-in classes and methods
- Distinguish between calling a class method vs. an object method
- Use Genero methods

Module 13 – Master/Detail using Multiple Dialogs

- Describe the multiple dialogs feature
- Use the DIALOG instruction to implement multiple dialogs
- Review the implementation of multiple dialogs in the master/detail example