

COBOL Programming

Introductory Course with CICS

FA-0136 · 2-day

Software Development · Mainframe & Enterprise Systems

Introduction

This 2-day training module is a hands-on programming course that is designed to get an absolutely novice programmer familiarized and trained in coding in CoBOL. This is a beginner to intermediate level course and assumes no prior CoBOL experience.

Learning outcomes

- Concepts of programming using the COBOL language
- OpenCobolIDE interface and the entire framework
- Identification Division
- Environment Division
- Data Division
- Procedure Division
- Analysis of the code and its logic

Prerequisites

In order to be able to participate in this course, the learner needs to comply with the following conditions:

- Programing experience (in any language)
- Access to PC [either one of these OS: MS Windows / Mac / Linux (ubuntu)]
- Full admin / root access to the above mentioned PC
- Experience and understanding of filing system
- Internet connection
- Webcam

- Microphone
- Dual screens
- Very basic understanding of server architecture
- Ability to comprehend the English language
- Minimum 99% attendance
- Basic education in mathematics (understanding of linear and non-linear mathematics at high-school level)

Training outline

1. Module 1

1. Review on programming fundamentals
2. Setting up the environment
3. IDE exploration
4. Hello World

2. Module 2

1. Variables In A COBOL Program
2. The Basics Of How A COBOL Program Is Set Up
3. COBOL Variables
4. Organizing the Data Division
5. Comments - letter to your future self
6. COBOL Copylibs
7. Debugging A COBOL Program
8. The DISPLAY Statement
9. The ACCEPT Statement
10. Data validation

3. Module 3

1. Conditions structure in CoBOL
2. Nested Conditions
3. The EVALUATE statement
4. Loop structure in CoBOL
5. Indefinite loops

6. Definite loops
7. For-loop equivalent
8. Combining loops with conditions

4. Module 4

1. COBOL Tables
2. COBOL Linear Search
3. COBOL Binary Search
4. Paragraphs and Sections
5. Identification Division
6. Environment Division
7. Data Division
8. Procedure Division

5. Module 5

1. Creating An Output Report File From An Input File
2. COBOL Subprograms And Linkage
3. A COBOL Program Example Of LINKAGE And Subprograms
4. COBOL Programs And JCL

6. Module 6

1. Understand the basics of CICS.
2. Use the different components of CICS to develop and run CICS applications.
3. Create and use CICS transactions.
4. Use the different CICS commands to control the execution of CICS transactions.
5. Develop CICS applications using the different programming languages that are available with CICS.
6. Use the different performance features that are available in CICS to improve the performance of CICS applications.
7. Troubleshoot common CICS problems.

7. Module 7

1. Hands-on practice
2. Assessment

