

Business Programming Logic

CDT100

This course makes use of flowcharting, pseudocode, and decision trees to provide a strong foundation in programming logic for business applications. Such logic is applicable regardless of the language the student will be programming in. Emphasis is on proper structures and common business applications.

(We use flowcharting, not because it is used in the real world (it rarely is), but because our experience shows that this graphic tool facilitates student understanding of logic better than any other.)

Audience

- Programmer trainees
- "Non-programmers" and "power users" who find themselves programming!

Prerequisites

- None required

Course Length

- Two days

Teaching Methods

- Lecture with examples
 - Supplemental written exercises
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Course Outline QC1

Introduction to flowcharting

- Flowcharting symbols
- Legal structures: sequence, selection, iteration
- Identifying illegal structures

Mainline structure

- SETUP
- INPUT
- PROCESS
- OUTPUT
- WRAPUP

Looping Techniques

- Counter controlled loops
- Sentinel controlled loops

File processing

- Read a record, write a record
- "Priming read" and "read next"
- Processing all records
- Processing selected records only

Reporting

- Summing vs. counting
- Determining minimums and maximums
- Determining averages
- Complex calculations
- Determining the necessary working fields for intermediate results

More with IFs

- Simple IFs, nested IFs
- From flowcharts to pseudocode
- From pseudocode to flowcharts

Common Applications

- Page break logic
- Control break logic
- Data validation