

## DB2 UDB for UNIX/Windows Application Development Course Summary

### Description

This course is designed to review concepts of using DB2 UDB (Universal Database). UDB object components will be presented along with communication and security aspects. Basic and advanced SQL techniques will be used. Program design issues will be considered which effect concurrency and integrity (i.e. locking) and performance. Basic UDB administration functions will be reviewed and some DB2 utilities will be used.

### Objectives

At the completion of this course, the student will be able to:

- Understand the basic concepts and facilities of DB2
- Use CLP and SQL to create relational objects for application development
- Use basic and advanced SQL queries to access and manipulate data on DB2 tables
- Use embedded STATIC and DYNAMIC SQL in either COBOL or 'C' programs to access data using single and multiple row (cursor) techniques
- Use different bind options for creating DB2 packages
- Design an application program to manipulate data for a Distributed Unit of Work (DUW)
- Understand the DB2 locking strategy for improving concurrency and maintaining data integrity
- Create stored procedures and also code client applications to use them
- Use import, export and load utilities to manipulate data
- Understand the basic security features of DB2
- Know performance enhancing techniques and how to use the EXPLAIN facilities.

### Topics

- The DB2 family
- Getting started
- Logical Design
- Creating tables and indexes
- Workshop 1 - getting started
- SQL basics to advanced
- Multiple workshops
- Programming with DB2
- Static SQL in programs
- Error handling
- Workshop - COBOL or 'C' programming
- DB2 PREP/BIND
- Embedded dynamic SQL programming techniques
- Workshop - dynamic SQL programming
- DB2 locking
- Commits and Batch applications
- DB2 stored procedures
- Workshop - stored procedures
- DB2 security
- DB2 support with utilities
- Import/Export/Load for data
- Workshop - utilities and data
- Performance and EXPLAIN
- Workshop - EXPLAIN

### Audience

This course is designed for Application Programmers and Designers.

### Prerequisites

The student must have relevant operating systems experience (AIX, OS/2 or Windows) and COBOL or 'C' programming experience.

### Duration

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Five days