

# CIW Database Specialist Series – Course 2 and CIW Web Developer Series:

## Building Database Client Applications Using JDBC 2.0 (October 2002)

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*Building Database Client Applications Using JDBC 2.0* is a 12-hour course that teaches students how to build database client applications using JDBC 2.0. Students will learn how to apply the JDBC API to connect to relational databases; issue SQL statements and queries; and use transactions, prepared statements, stored procedures and metadata to create and manipulate database information. Students will apply the knowledge they learn in class by building a graphical client application.

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### Topics

#### Introduction to JDBC

JDBC - The Basics  
Relational Databases  
Structured Query Language  
System Architecture

#### Using JDBC Drivers

JDBC Drivers  
Establishing a Connection

#### Executing SQL Statements

The Statement Interface  
Transactions Using SQL Statements

#### Prepared Statements and Stored Procedures

Prepared Statements  
Stored Procedures

#### Metadata

Introduction to Metadata  
DatabaseMetaData  
ResultSetMetaData

#### SQLException

Introduction to SQLException  
try and catch Blocks  
SQLException Methods

#### Scrollable and Updatable Result Sets

Scrollable Result Sets  
Updatable Result Sets

#### Batch Updates

Introduction to Batch Updates  
Parameterized Batch Updates  
BatchUpdateException

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### Target Audience

Application developers, programmers, enterprise developers, Web developers, and database developers.

### Job Responsibilities

Design, implement, and maintain database schemas; design and develop database client applications and components; and perform database administration, security and maintenance.

### Prerequisites

Students must have completed *Java Programming Fundamentals* or have an equivalent knowledge of Java programming before taking this course. It is also recommended that students complete the *Database Design Methodology* course or have a basic knowledge of the purpose and function of databases.

### Duration

12 hours