



CD includes  
Microsoft® Visual C++®  
Express Edition

# C++

—Sixth Edition—

# HOW TO PROGRAM

Introducing  
**Game Programming**  
and the **Boost Libraries**



## EARLY CLASSES/OBJECTS/OOP

- CLASSES, OBJECTS, ENCAPSULATION
- INHERITANCE, POLYMORPHISM
- INTEGRATED OOP CASE STUDIES:  
TIME, GRADEBOOK, EMPLOYEE

## FUNDAMENTALS

- HISTORY, HARDWARE, SOFTWARE
- STREAM I/O, TYPES, OPERATORS
- CONTROL STATEMENTS, FUNCTIONS
- ARRAYS, VECTORS
- POINTERS, REFERENCES
- STRING CLASS, C-STYLE STRINGS
- OPERATOR OVERLOADING
- EXCEPTIONS, FILES
- BIT AND CHARACTER MANIPULATION
- GNU™ & VISUAL C++® DEBUGGERS

## DATA STRUCTURES

- RECURSION, SEARCHING, SORTING
- LISTS, QUEUES, STACKS, TREES
- TEMPLATES
- STANDARD TEMPLATE LIBRARY:  
CONTAINERS, ITERATORS,  
AND ALGORITHMS

## OOD/UML™ 2 ATM CASE STUDY (OPTIONAL)

- DETERMINING CLASSES,  
ATTRIBUTES, STATES, ACTIVITIES,  
OPERATIONS, COLLABORATIONS
- DIAGRAMS: USE CASE,  
CLASS, STATE, ACTIVITY,  
COMMUNICATION, SEQUENCE

## OPEN SOURCE C++ LIBRARIES

- GAME PROGRAMMING WITH OGRE
- BOOST AND THE FUTURE OF C++

# DEITEL®

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