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Schaum's Outline Programming with C++

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NOTE: This PDF preview of Schaum's Outline Programming with C++ includes only the preface and/or introduction. To purchase the full text, please click here.

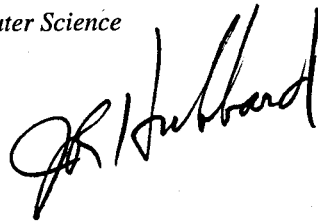# THEORY AND PROBLEMS

of

PROGRAMMING

WITH C++

Second Edition

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SCHAUM'S OUTLINE SERIES

McGRAW-HILL

Preface

Like all Schaum's Outline Series books, this volume is intended to be used primarily for self study, preferably in conjunction with a regular course in C++ programming language or computer science. However, it is also well-suited for use in independent study or as a reference.

The book includes over 200 examples and solved problems. The author firmly believes that the principles of data structures can be learned from a well-constructed collection of examples with complete explanations. This book is designed to provide that support.

C++ was created by Bjarne Stroustrup in the early 1980s. Based upon C and Simula, it is now one of the most popular languages for object-oriented programming. The language was standardized in 1998 by the American National Standards Institute (ANSI) and the International Standards Organization (ISO). This new ANSI/ISO Standard includes the powerful Standard Template Library (STL). This book conforms to these standards.

Although most people who undertake to learn C++ have already had some previous programming experience, this book assumes none. It approaches C++ as one's first programming language. Therefore, those who have had previous experience may need only skim the first few chapters.

C++ is a difficult language for at least two reasons. It inherits from the C language an economy of expression that novices often find cryptic. And as an object-oriented language, its widespread use of classes and templates presents a formidable challenge to those who have not thought in those terms before. It is the intent of this book to provide the assistance necessary for first-time programmers to overcome these obstacles.

Source code for all the examples and problems in this book, including the Supplementary Problems, may be downloaded from these websites `http://projectEuclid.net/schaums` , `http://www.richmond.edu/~hubbard/schaums`, `http://hubbards.org/schaums`, or `http://jhubbard.net/schaums`. Any corrections or addenda for the book will also be available at these sites.

I wish to thank all my friends, colleagues, students, and the McGraw-Hill staff who have helped me with the critical review of this manuscript, including John Aliano, Arthur Biderman, Francis Minhthang Bui, Al Dawson, Pete Dailey, Mohammed El-Beltagy, Gary Galvez, Libbie Geiger, Chris Hanes, John B. Hubbard, Raana Jeelani, Dick F. Palas, Blake Puhak, Arni Sigurjonsson, Andrew Somers, Joe Troncale, Maureen Walker, and Nat Withers. Their debugging skills are gratefully appreciated.

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