<<C++面向对象程序设计双语教程>>

图书基本信息

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内容概要

《普通高等院校"十二五"规划教材:C++面向对象程序设计双语教程》作者结合多年的教学和实践经验 , 精心设计并编写了书中内容。

书中从面向对象程序设计的特点出发,分章节循序渐进地介绍了面向对象的相关概念及运用C++实现的过程。

书中在各个章节起始处提出学习的目标,重要知识点和易混淆知识点处均有重点注解和思考题,例题配有完整的程序代码和运行结果,每章末尾有重要的词汇注解和相应的练习题,有助于读者理解书中内容,帮助读者掌握面向对象编程方法。

《普通高等院校"十二五"规划教材:C++面向对象程序设计双语教程》共分8章,围绕面向对象程序设计中对象的作用,介绍了C++进行面向对象程序设计的类定义和封装、继承、重载及多态等的实现过程和C++中泛型程序设计的模板基础知识。

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章节摘录

插图: Chapter 6 Inheritance Do not multiply objects without necessity. --W.Occam Objectives To create classes by inheriting from existing classes The use of constructors and destructors in inheritance hierarchies Access control in the class and the differences between public, protected and private inheritance To understand multiple inheritance To avoid ambiguities with multiple inheritance To avoid ambiguities with virtual inheritance 6.1 Class Hierarchies In the previous chapters, we discuss how to build a single class that is a representation of real objects. The class is represented by a collection of abstracted concepts with common characteristics. However, a concept does not exist in isolation always. It coexists with related concepts and derives much of its power from relationships with related concepts. It is a fundamental aspect of human intelligence to seek out, recognize, and create relationships among concepts. For example, the concepts of a circle, a triangle and a rectangle are related in that they are both shapes; that is, they have the concept of a shape in common, that is, they have the operations of move, draw and calculation. However, we find their difference points of the circle, triangle and rectangle. Thus, we must explicitly define classes Circle, Triangle and Rectangle to have class Shape in common. Representing a circle, a triangle and a rectangle in a program without involving the notion of a shape would be to lose something essential. Each kind of shape is more specialized than its parent Shape? We can classify different kind of shape according to hierarchy shown in Figure 6-1. This could be represented in the world of classes with a class Shape from which we would derive the three other ones: Circle, Triangle and Rectangle.

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《普通高等院校"十二五"规划教材:C++面向对象程序设计双语教程》以英语撰写,用通俗易懂的英语描述其内容,符合中国人的思维、语言习惯,既让初学者了解面向对象程序设计的原文表达,也便于对知识点的掌握。

《普通高等院校"十二五"规划教材:C++面向对象程序设计双语教程》面向具有程序设计入门基础的读者,可作为高等院校计算机及相关专业的面向对象程序设计课程的双语教材,也可作为程序员和编程 爱好者的参考书。

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