Object-Oriented Design Using JAVA

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This chapter expands on the material in the preceding chapter to discuss more thoroughly the role of inheritance in object-oriented software design, including its advantages and disadvantages, and to discuss alternatives to inheritance.

CHAPTER 4
Elegance and Methods 82

This chapter looks at issues concerning low-level code, such as readability, modifiability, and reusability. In this chapter, we assume that the classes and their desired behaviors have already been mapped out, and only the implementation of those behaviors remains to be done.

CHAPTER 5
Elegance and Classes 128

This chapter looks at object-oriented software development at a higher level. We discuss how to design classes to solve particular problems. That is, we discuss general principles to follow when deciding what classes to create, what their behavior will be, and with what other objects they will communicate.

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Simple Case Study of a Money Class 173

This chapter is a small case study. It introduces several implementations of money, each a refinement of the preceding one.

This chapter introduces the reader to the topic of design patterns. We present four simple patterns as samples. The discussion of each pattern includes examples from earlier chapters of the book where the pattern was used but not explicitly stated. The succeeding chapters in the text introduce more design patterns in the contexts of their case studies.

This chapter gives a case study of a drawing application. We start with a very simple application, and in each section we add enhancements to it, which provides us with a context in which to introduce more design patterns and to use the design principles discussed earlier in the text. The sections include the discussion of several alternative designs and implementations of the application and their advantages and disadvantages.

This chapter gives a case study of code manipulators for a subset of the Java language, which provides us with a context in which to introduce more design patterns.