

Java Programming Lab Manual

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JAVA PROGRAMMING LAB MANUAL

Editors

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Chapter 34

Abstract Class

Dini Oktarina Dwi, Zeeshan Bhatti, Asadullah Shah

Abstract

There are situations in which you will want to define a superclass that declares the structure of a given abstraction in generalized form without providing a complete implementation of every method, leaving the details to each subclass to fill in. Such a class determines the nature of the methods that the subclasses must implement and is known as *abstract class*. In this chapter the students will learn ways to declare and use an abstract class.

34.1 Abstract Classes and Methods

- An *abstract class* is a class that is partially implemented and whose purpose is solely as a design convenience.
- Abstract classes are made up of one or more *abstract* methods, which are methods that are declared but left bodiless (unimplemented) or which are not defined.
- Since the methods in an *abstract class* are not defined, they are called **abstract methods**.
- To define an *abstract* class or abstract method you use the keyword *abstract* in front of the class name or method signature.
- An *abstract* method may and can only be defined and created inside an abstract class.

NOTE:

- You must inherit the abstract class in order to use it.