Table of Contents

Introduction ................................................................................................................................. 2
Tutorial Target Audience .............................................................................................................. 2
Tutorial Objectives ....................................................................................................................... 2
Why learn Java with Eclipse? ....................................................................................................... 3
Topics Covered ............................................................................................................................. 3
Tutorial Approach ........................................................................................................................ 3
Getting The Most From This Tutorial ....................................................................................... 3
Sample Java Application – Personal Lending Library ................................................................. 4
Downloading and Installing Eclipse ............................................................................................. 4
Playing the Lessons ................................................................................................................... 5
   Re-Sizing the Video .................................................................................................................. 5
   Closed Captions and Lesson Table of Contents .................................................................... 5
Lesson Outlines .......................................................................................................................... 6
   Lesson 1 – Create Your First Java Class .................................................................................. 6
   Lesson 2 – Add Methods To Class ........................................................................................ 6
   Lesson 3 – Use Eclipse Scrapbook ....................................................................................... 6
   Lesson 4 – JUnit Testing in Eclipse, Part 1 ........................................................................... 6
   Lesson 5 – JUnit Testing Continued ...................................................................................... 7
   Lesson 6 – Using Test-First Development in Eclipse ............................................................. 7
   Lesson 7 – Create Book Class .............................................................................................. 7
   Lesson 8 – Add Person to Book Class .................................................................................. 7
   Lesson 9 – MyLibrary Class and ArrayList ......................................................................... 7
   Lesson 10 – Start on MyLibrary Class .................................................................................. 7
   Lesson 11 – Create first methods in MyLibrary class............................................................ 8
   Lesson 12 – Create checkOut, checkIn Methods ................................................................... 8
   Lesson 13 – Continue checkOut Method ................................................................................ 8
   Lesson 14 – Finish checkOut Method ................................................................................... 8
   Lesson 15 – Finish MyLibrary Methods ................................................................................. 8
   Lesson 16 – Create main Method and JAR File ..................................................................... 9
Alphabetical Index by Lesson ....................................................................................................... 9
Glossary of Terms ....................................................................................................................... 12
Introduction

This document is designed to accompany the “Eclipse And Java For Total Beginners” video tutorial, which is available at [http://eclipsesetutorial.sourceforge.net/](http://eclipsesetutorial.sourceforge.net/).

Tutorial Target Audience

This tutorial is targeted for people who are new to Eclipse and to Java. It is designed to work either for those with prior programming experience in other languages or for those without prior experience.

Tutorial Objectives

The objectives of this tutorial are as follows:

- Demonstrate the basics of using Eclipse for writing Java programs
- Demonstrate how to use Eclipse for agile software development
- Demonstrate how to use existing Java learning resources (tutorials, examples, books) within Eclipse
- Create a foundation for continuing to learn Java and Eclipse

Note that Java and Eclipse are both large subject areas that cannot possibly be mastered in a short period of time. This tutorial will help get you started and give you some of the skills needed to learn on your own.
Why learn Java with Eclipse?

There are many ways to learn how to program in Java. The author believes that there are advantages to learning Java using the Eclipse integrated development environment (IDE). Some of these are listed below:

- Eclipse provides a number of aids that make writing Java code much quicker and easier than using a text editor. This means that you can spend more time learning Java, and less time typing and looking up documentation.
- The Eclipse debugger and scrapbook allow you to look inside the execution of the Java code. This allows you to “see” objects and to understand how Java is working behind the scenes.
- Eclipse provides full support for agile software development practices such as test-driven development and refactoring. This allows you to learn these practices as you learn Java.
- If you plan to do software development in Java, you’ll need to learn Eclipse or some other IDE. So learning Eclipse from the start will save you time and effort.

The chief concern with learning Java with an IDE is that learning the IDE itself will be difficult and will distract you from learning Java. It is hoped that this tutorial will make learning the basics of Eclipse relatively painless so you can focus on learning Java.

Topics Covered

This tutorial will cover the following topics:

- Basics of Eclipse for Java development
- Basics of Java and object-oriented programming (OOP)
- Test-driven development (TDD) and unit testing in Eclipse

Tutorial Approach

The tutorial is organized around the following activities.

- Write a small sample Java application to track your personal lending library.
- Use the “test-first” approach to develop most methods.
- Write a “test drive” program and create an executable JAR file, and run the JAR file from the system console.

Concepts are introduced as needed during the development of the sample applications.

Getting The Most From This Tutorial

This tutorial can be used as an in-depth demonstration of Java development in Eclipse. However, if you want to actually learn how to write Java programs in Eclipse, the following approach is recommended:

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End of ebook preview
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