

## Preface to Third Edition

It is now 7 years since I wrote the second edition of *An Introduction to Network Programming with Java* and so, when approached to produce a third edition, I felt that it was an appropriate time to agree to do so (possibly rather later than it should have been). One of the very first things that I did after being approached was examined the literature to find out what texts had been produced in the Java/network programming area in the interim period, and so what the current state of the competition was. (Though I had had a strong interest in this area for a considerable number of years, I had also been involved in other areas of software development, of course, and hadn't had cause to examine the literature in this area for some time.) To my great surprise, I found that virtually nothing of any consequence had been produced in this area during those years! Of course, this was a very welcome surprise and provided further impetus to go ahead with the project.

The changes in this third edition are not as profound as those in the second edition, largely because Java 5 brought in major language changes (both network and non-network) that needed to be reflected in the second edition, whereas neither Java 6 nor Java 7 has had such an impact, particularly in the area of network programming. One major change that did occur during this time, and is worth mentioning, was Sun's takeover by Oracle in April of 2009, but this has had no significant effect on the way in which Java has been developed.

Since the changes that have been necessary since the second edition are somewhat more small-scale than those that were desirable after the first edition, I think that it would be useful to give a chapter-by-chapter indication of what has been changed, what has been introduced that wasn't there before and, in some cases, what has been removed completely (the last of these hopefully resulting in a more 'streamlined' product). Consequently, the great bulk of the remainder of this preface will comprise a chapter-by-chapter breakdown of those changes.

## Chapter 1

- Updating of browsers and browser versions used (along with associated updating of screenshots).
- Updating of the comparison between TCP and UDP.

## Chapter 2

- Removal of Sect. 2.4 ('Downloading Web Pages'), felt by me to be of little use to most people.
- Some very minor changes to lines of code.

## Chapter 3

- Extra text devoted to the differing strategies for determining which thread from a group of competing threads is to be given use of the processor at any given time.

## Chapter 4

- Addition of *ArrayLists* and associated relegation of *Vectors* (with consequent modification of example program).
- Comparison of *Vectors* and *ArrayLists*.

## Chapter 5

- Removal of step 2 in 5.3 (compiling with *rmic*), which has actually been unnecessary since Java 5.
- *Vector* references replaced with *ArrayList* ones in bank example of 5.4.

## Chapter 6

- Some very minor URL changes.

## Chapter 7

- Statement of redundancy of the loading of the database driver (for all JDBC4-compatible drivers), with consequent removal from examples. (JDBC4 was part of Java 6, which was introduced in December of 2006.)
- Addition of material on Apache Derby/Java DB, which came in with Java 6. This material introduced in a new Sect. 7.6, with consequent re-numbering of the old 7.6 and all later sections in this chapter.
- Information about Jakarta's retirement on 21/12/11 (and consequent direct control of Jakarta's sub-projects by Apache).
- Changes to the steps required in the new Sect. 7.12 (previously 7.11) for using the *DataSource* interface and creating a DAO (this method having changed somewhat since 2006), with consequent changes to the code of the example.
- Modification of the steps required for downloading and extracting DBCP files.

## Chapter 8

- Updating of the Servlet API installation instructions.
- Removal of references to Tomcat's ROOT folder (now no longer in existence).
- Introduction of servlet annotation lines (introduced in Java 6).

## Chapter 9

- Replacement of some HTML code with HTML-5 compatible CSS.
- Some very minor changes to lines of code.

## Chapter 10

- Removal of Sect. 10.1, due to the Bean Builder now being defunct and no replacement for this software having appeared.
- Removal of the requirement that beans implement the *Serializable* interface, since this is (now?) unnecessary, with associated removal of the clause *implements Serializable* from the examples.
- Introduction of CSS into examples, to make examples HTML-5 compatible.

## (Old) Chapter 11

- **Removal** of this entire chapter (with consequent re-numbering of later chapters). This has been done partly because EJPs are no longer of such importance since the emergence of frameworks such as Hibernate and Spring and partly because I felt that the complexity of EJBs probably didn't warrant their inclusion in this text.

## New 'Chapter 11' (Previously 'Chapter 12')

- Very minor changes of wording.

## New 'Chapter 12' (Previously 'Chapter 13')

- Updating of browsers used.

In keeping with the society-wide move towards Internet storage, there is now no CD accompanying this text. Model solutions for end-of-chapter exercises are accessible by lecturers and other authorised individuals through access/application form via <http://springer.com/978-1-4471-5253-8>. Also included at this URL is a Word document called *Java Environment Installation* that provides downloading and installation instructions for Java 7 and all associated software required to complete the end-of-chapter exercises. (The instructions will not refer to the latest update of Java 7, so please download whatever is the latest update.)

At a second URL (<http://extras.springer.com>) are the items listed below, which can be found by searching for the book's ISBN (978-1-4471-5253-8).

- Chapter examples
- Supplied code
- GIF files

- JPEG files
- Sound files
- Videos

All that remains now is for me to wish you luck and satisfaction in your programming endeavours. Good luck!

Sheffield, South Yorkshire, UK  
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