

Annotation of Java How To Program Fourth Edition

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August 16, 2002

Deitel, Harvey M. and Paul J. Deitel. Java How To Program, Fourth Edition. Prentice-Hall Canada, Inc., Toronto. 2001. ISBN: 0-13-034151-7. (Available in Canada from Pearson Education Canada, 1-800-567-3800.) 1500+ pages. Soft cover.

Annotation

The Deitel (pronounced “Die-Tell”) Java How To Program text is the world’s best-selling Java text book. This textbook comes as close to “doing it all” really well as any programming text on the market. It assumes no prior programming experience. Now in its fourth edition, it’s 1500+ pages are logically sequenced, clearly written, and uses 22 chapters to cover virtually all computer programming language topics found in high school and freshman college Java programming courses, including those of Alberta Learning, Advanced Placement and the International Baccalaureate curricula.

This fourth edition text lacks the plethora of errors so common in first edition texts shows. The text depicts presentations in full-colour so that they look as they would on the screen, including syntax colouring of all Java source code just as development environments show. The 25,000 lines of code has been converted to an open layout with enhanced comments. Almost uniquely among introductory texts, most chapters contain a significant section on Unified Modelling Language (UML), the industry standard for documenting object oriented code.

Pedagogically, this may be the most polished programming textbook ever written. The text uses a “live-code” approach where each where each concept is presented in the context of a complete working program. Experienced programming teachers know well the frustrations experienced with most programming textbooks that give snippets of code out of context of a program in which it works!

Throughout the text is liberally sprinkled with different bumble bee icons signalling a good programming practices, common programming errors, testing and debugging tips, performance tips, portability tips, software engineering observations and “look and feel” observations that highlight graphical user interface conventions.

Every chapter has a thorough, bullet-style list summary at the end of the chapter, self-review exercises and answers, an alphabetized terminology list of terms defined in the chapter, a set of exercises on everything from simple recall questions to complete Java programs. There is an extensive index as well as extensive bibliography at the back of the book.

Pedagogically, it’s greatest strength is the articulation of the textbook with so many other modes of presenting the same material. There is something for every learning style. See [Articulation with Related Supporting Resources](#) below for detailed discussion of how these resources relate to each other.

Articulation with related supporting resources.

This is the world's best-selling Java text for good reason. The Deitel (pronounced "Die-tell") father and son authoring team have produced a 1500+ page text book that is logically sequenced, clearly written, and covers all Java computer programming topics in the curricula/syllabi of Alberta Learning <http://www.learning.gov.ab.ca/k_12/curriculum/bySubject/cts/infopro/>, Advanced Placement Computer Science AB <<http://www.cs.duke.edu/csed/ap/subset/doc/>> and International Baccalaureate Computer Science HL <<http://www.ib-computing.com/topics.htm>>. (These syllabi include non-programming topics not addressed by this textbook.)

It is better supported by related resources than any other Java textbook on the market.

A CD is packaged with the textbook. This CD contains the source code of all the examples in the textbook and web links of sites related to topics covered in the textbook, organized by chapter. It contains a pdf version of an additional chapter and seven appendices not found in the hard copy version of the text book. This CD also contains a public domain, community version of Sun's Microsystem's free but powerful Java IDE, Forte. While the version of Forte on the CD may be installed, it is preferable to install the most recent (and still free) version (now renamed Sun ONE Studio) from Sun at <<http://www.sun.com/software/sundev/jde/index.html>>. Note that even the community version of Forte/Sun ONE Studio can overwhelm beginning students whereas a light version of JCreator may be freely downloaded at <<http://www.jcreator.com/>> and is much easier to learn and use. This CD contains different material than do the Cyber Classroom CDs: see next paragraph.

There is a 2 CD electronic version of the textbook that must be purchased separately: Java 2 Multimedia Cyber Classroom Fourth Edition (ISBN: 0-13-064935-X). This is not just another digital version of the print version. It is an interactive course. The digital text is sprinkled with links to advice and source code. The source code may be executed without an IDE at the click of a mouse button ... what the authors call "live code". One of the authors **orally explains** (not just recites) every one of the source code examples from the textbook. Another click of the mouse allows the student to save the source code of the example program to disk. This course uses "live code": exemplar programs execute at the click of a mouse without launching an IDE! Potential users of this course should be careful to specify that they want the currently available course. In the summer of 2002, this corresponded to the fourth edition of the textbook.

Note that the electronic course (Cyber Classroom) contains solutions to selected exercises found at the back of the chapters which may thus be given to students for **ungraded practice**. This public availability of those particular exercises make them unsuitable for grading. Note that these exercise solutions are only available with the Cyber Classroom CDs and are *not* available with the hard copy of the text book or the CD that accompanies it. This still leaves many exercises at the end of each chapter with solutions that are only available on the Instructor's Resource CD. These latter exercises, the solutions of which are *not* available to students or otherwise in the public domain, are thus suitable for **graded homework exercises**.

There is also a Web Based Training Course that is essentially the same course as found on the Cyber Classroom CD at <<http://ptgtraining.com/console/catalog/index.html#java>>. Access to

it via the web must be purchased separately. Potential users of this course should be careful to specify that they want the currently available course. In the summer of 2002, this corresponded to the fourth edition of the textbook.

In the fall of 2002, a **corresponding lab manual** will be published: **Java In The Lab, Lab Manual To Accompany Java How To Program 4/e** (ISBN: 0130497738). More information on the lab manual will be found at http://www.deitel.com/books/downloads.html#jHTP4_lm.

The Instructor's Resource CD (ISBN 0-13-062301-6) must be purchased separately and is available only to teachers of institutions who purchase the text and will only be mailed to institutional addresses. It contains electronic solutions to most exercises in the textbook and multiple choice test questions for every concept in the book, organized by chapter, in both Word and text formats. It also contains a 929 page Instructor's Manual in pdf (Adobe Reader) format so that a hard copy of any or all of the exercises provided on the CD may be printed.

There is a comprehensive PowerPoint Slide Show for every chapter that may be freely downloaded by anyone at http://www.deitel.com/books/jHTP4/jHTP4_ppt.html. The slide shows are great for either introducing a chapter and/or later reviewing it. The teacher may take the class through each slide show together or students may view them independently.

There are two companion web sites. There is a Prentice-Hall Companion Web Site at http://cwx.prenhall.com/sms_files/deitel-java_htp-4e/login_deitel.html. It contains links, PowerPoint slide shows, source code downloads, a table of contents, and a syllabus manager. The **Syllabus Manager** is a course building tool freely available to instructors and accessible to their students. There is also the **Deitel Companion Web Site** with downloads and resources at <http://www.deitel.com/books/downloads.html#jHTP4>.

Adopting educators should beware of the softcover binding on the Deitel textbook. Covers will start falling off in the first year. This problem should prompt measures that will save the backbones of both school budgets and book-lugging students. For a modest fee per volume, this 1500+ page textbook may be rebound into three or four separate volumes. The best price that a search from Calgary found in May, 2002 was Universal Binary (Sask) Ltd. in Saskatoon, SK (306) 652-8313. At that time they quoted a charge of \$7.22 per volume and pay shipping one way. Rebinding the text into several volumes provides hard covers, reduces the price per student to a fraction of the original cost, and greatly reduces the weight that students must carry to class.