Título:

Autor: **Precio:** $1697.00

Editorial: **Año:** 2009

Tema: **Edición:** 9ª

Sinopsis   **ISBN:** 9780136073475

Concepts of Programming Languages by Robert W. Sebesta, Sixth edition is truly a well-written book. Perhaps one of the best books written on this topic. Sebesta has done an exceptional job conveying the topic to the reader, making a complex topic both easy to read and understand. This textbook is good for any college student or professional trying to get a feel of how the most popular programming languages have evolved in the past 4 decades, and what sets these languages apart. Topics in this book range from Zuse's Plankalkul (the first programming language) to how Exception Handling is done in Java and Logic Programming and everything in between. Interviews with some of the pioneers of our time such as James Gosling (the creator of Java) and Bjarne Stroustrup (the designer of C++), and side "History Notes" represent some of the "fun" readings the author has added to this book. Each chapter ends with a brief but concise summary followed by problem sets that assess the important topics covered in the chapter. Even though this book is targeted for a junior-level programming course, some of the topics are well worth the reading for an advanced programmer or a graduate student. The author starts by giving the reasons behind why such topic needs to be studied: Â· To increase capacity to express ideas - the depth at which we can program, just like the way we think, is highly influenced by the expressive power of the language in which we communicate our thoughts. Â· Improved background for choosing appropriate language - if you know more about programming languages, you have a better idea what to choose when development time comes. Â· Increased Ability to learn new languages - continuous learning in the field of software engineering is very much essential. If one knows the concepts of one programming language, applying those concepts to other language to learn or understand become much simpler and easier. Â· Better understanding of the significance of implementation - Someone who knows the implementation details of that language can only fix some programming bugs. Â· Overall advancement of computing - For better decisions to be made going forward with computing and software development, one needs to learn from some of the mistakes that gotten us where we are. Things to do or not to do in this relatively new science. The author starts by giving a very descriptive background on programming languages, starting from Zuse's Plankalkul, the first programming language. Zuse's defined the Plankalkul and wrote many algorithms in the language for a variety

of problems. Even thought it was never implemented, Plankalkul paved the way for other programming languages that would follow it. Fortran, LISP, ALGOL 60, COBOL, BASIC and other high-level programming languages would follow over the years and evolve. The author gives the history behind each language, and goes in to a detail description of how each language evolved over the years. Even though chapter 2 gives the background behind most programming languages, the book only covers the most popular and widely used programming languages thereafter, mainly Fortran, C/C++, Ada and Java. If your goal is not to teach or learn the details of compilers and/or compiler design, chapter 3 and 4 are defiantly for you. Lexical analysis talks about small-scale language constructs, such as names and numeric literals. Syntax analysis deals with the large-scale constructs, such as expressions, statements, and program units. In less than a hundred pages of text, the author explains the background, theory and implementation of syntax and lexical representation and analysis. It wets the reader's appetite enough that if --Concept of Programming

The fifth edition of Concepts of Programming Languages by Robert Sebesta describes fundamental concepts of programming languages by presenting design issues of the various language constructs, examining the design choices for these constructs in a few common languages, and critically comparing the design alternatives. The fifth edition of Concepts of Programming Languages by Robert Sebesta continues the approach that has made it the undisputed market leader. It describes fundamental concepts of programming languages by presenting design issues of the various language constructs, examining the design choices for these constructs in a few common languages, and critically comparing the design alternatives. This is an ideal text for students taking a comparative programming languages course: it allows those with the ability to program to learn how to choose appropriate languages for certain tasks, increase their abilities to learn new languages, and understand the significance of implementation. This new edition is updated to include a new chapter covering parsing, new material on JavaScript, and updated material on Java1.3. *NEW! Expands the treatment of parsing from one section to one chapter (Ch. 3). *NEW! Includes additional treatment of scripting languages. *NEW! Offers updated coverage of Java 1.3 throughout. *NEW!Added information on scripting languages.;*Illustrates various language constructs and design alternatives through Java, JavaScript, C++, C, Ada, Fortran, Perl and others. 1. Preliminaries. 2. Evolution of the Major Programming Languages. 3. Describing Syntax and Semantics. 4. Lexical and Syntax Analysis. 5. Names, Bindings, Type Checking, and Scopes. 6. Data Types. 7. Expressions and Assignment Statements. 8. Statement-Level Control Structures. 9. Subprograms. 10. Implementing Subprograms. 11. Abstract Data Types. 12. Support for Object-Oriented Programming. 13. Concurrency. 14. Exception Handling. 15. Functional Programming Languages. 16. Logic Programming Languages. --Concept of Programming