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an external tree visitor pattern"

Posted by [wildbill](#) on Thu, 02 Nov 2023 08:47:14 GMT

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Creating Gear: An interpreter written in Free Pascal using an external tree visitor pattern  
Jeroen de Haan

<https://github.com/jdehaan2014/GearLanguage/tree/master/interpreter>

<https://cloud.mail.ru/public/1KND/xbMLrR7a4>

This is a no-nonsense book about creating an interpreted programming language, named "Gear", using an external visitor pattern. Why Gear? No particular reason, I just like the sound of it...

In this book I won't describe a lot of theory, as there are plenty of good books out there. As a matter of fact, I do recommend reading a few of them, such as:

- Writing Compilers and Interpreters, A software engineering approach (Ronald Mak)
- Language Implementation Patterns (Terence Parr)

Then, there are hands-on websites/blogs that describe and create an interpreter on-the-go:

- Let's build a simple interpreter (<https://ruslanspivak.com/lsbasi-part1/>) (Ruslan Spivak)
- Crafting Interpreters (<http://craftinginterpreters.com>) (Bob Nystrom)

These books/blogs use Java or Python as programming language.

The code in this book is based on the programming language Object Pascal, a modern pascal version, and the free downloadable IDE 'Lazarus'. Lazarus/Free Pascal is available for Windows, Linux, OSX, and many other Operating Systems. It's slogan is: 'Write once, compile anywhere'! The website and download links are available at: <http://www.lazarus-ide.org/index.php>. For this book I use version 2.0.4 (or later) of Lazarus and version 3.04 (or later) of Free Pascal.

