

Developing a Vim plugin with Ruby, or when in Ruby do as the Rubyists do

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OKURA Masafumi, 2023-11-18

Me

About me

- Name: OKURA Masafumi
- Company: nil (freelancer)
- Strength: Web development with Rails
- Activities: Rubyist, Kaigi on Rails chief organizer, speaker, OSS maintainer (Alba)
- Vim user history: Vim (2013-2018), Neovim (2018-)

Question

**Your choice of
the language**

**...for the
development of
Vim plugins**

/(Neo)?vim/

Language for the development of vim plugins

1. Vim script
2. Vim9 script
3. Lua
4. Deno

Language for the development of vim plugins

1. Vim script
2. Vim9 script
3. Lua
4. Deno
- 5. Ruby**

**No one
(I believe)**

Why Ruby?

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When in Ruby

**When you want
to manipulate
Ruby code**

**Do as the
Rubyists do**

**What do
Rubyists do?**

AST

Abstract Syntax Tree

RubyVM::AbstractSyntaxTree

RubyVM::AbstractSyntaxTree

- Stdlib
 - No external dependencies
 - No need to install something via package managers
- Takes Ruby source code as a String and returns AST root node
- Not best for modifying code but good enough to get some information from code

RSpec

RSpec

- One of the most famous testing libraries for Ruby
 - In fact, one of the most downloaded library
- Introducing DSLs such as ``describe``, ``context``, ``it`` and ``let``
 - These can be deeply nested
- Tests can be implicit with ``subject`` and ``is_expected``

The problem

**What is the
current
context/subject?**

rspec-current.vim

Demo

Why not LSP?

Why not LSP for this case?

- Too trivial/niche
 - I cannot push this feature into generic LSP servers
- Not enough functionality on extension/add-on/plugin system
 - ruby-lsp provides add-on system, but it's immature now
- Too many things to learn for only one feature
 - LSP is not the easiest thing to learn

**Ruby as a
solution!**

Using Ruby as a development language

- Simple/Easy
 - One file to work, no external dependencies
- Straightforward
 - Just plain Ruby code
- Less things to learn
 - We need to learn how to develop a plugin with Ruby, but it's simpler than learning LSP

How to

gem install neovim

If you use Neovim

rubyeval

Ruby heredoc

Summary

Usecase

**Usecase for using
Ruby as a
development
language for vim**

AST

Language- specific features

**Use your own
language!**

Happy vimming!