

nvim

...

The Rise and Fall of the Modal Editor and the Spiders from Mars

why neovim

- Universal
- Productivity

vi



vim



neovim

let's jump into it

- `sudo apt install neovim`
- https://raw.githubusercontent.com/biosustain/lost_semester/48ac9fc0e1766af2f0621f4a624d88f3a22d2702/nvim/init.lua
- Grab the config and put it in:
 - `~/.config/nvim/init.lua`
 - `~/AppData/Local/nvim/init.vim`
 - Wherever `$XDG_CONFIG_HOME/nvim/init.lua`
- `nvim -c Tutor`

Tutor time (25 min)

...

```
nvim -c Tutor
```

configuring nvim

- `init.lua`
- `init.nvim`
- `.vimrc`
- Let's go back to check out our config.

plugins with Packer

- Grab EVERYTHING from https://github.com/biosustain/lost_semester/tree/56d71da1fe6379df61467e5626c45b122f865835/nvim
- `:PackerInstall, :PackerUpdate, :PackerClean`

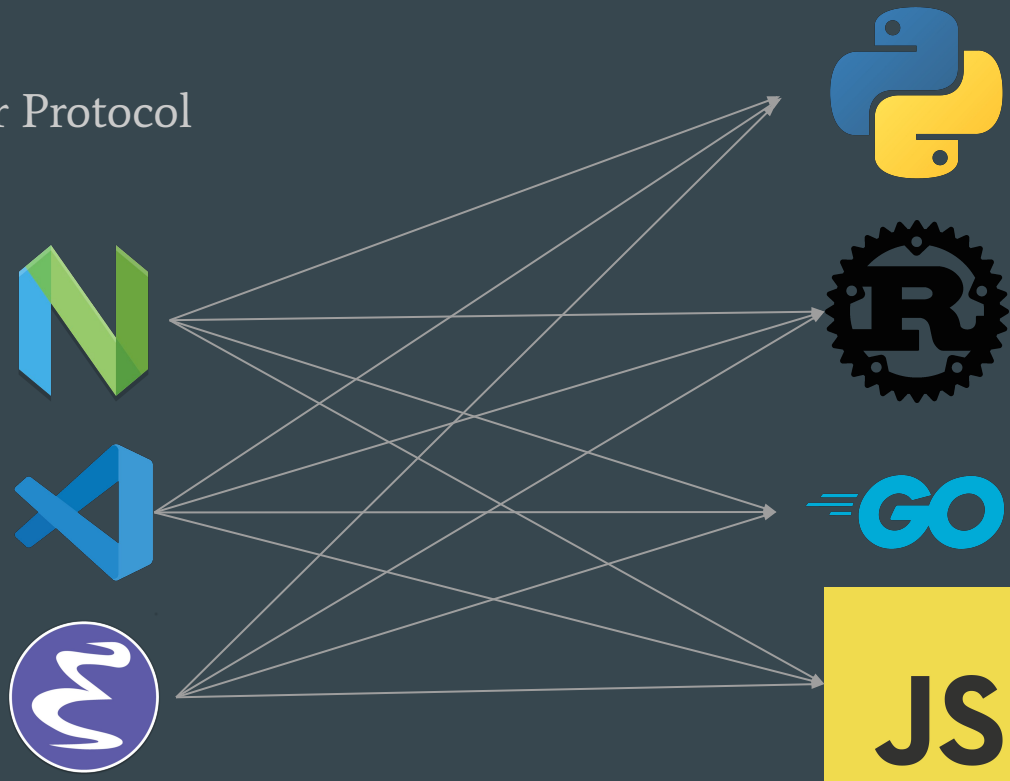
Install a colorscheme (5 min)

...

use “author/plugin”

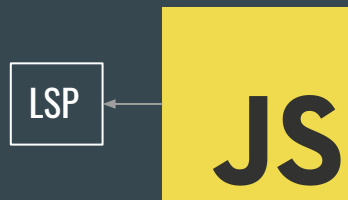
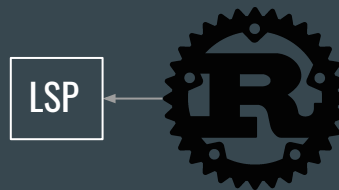
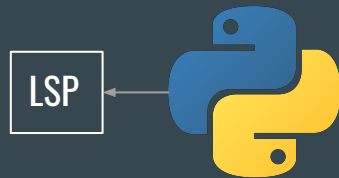
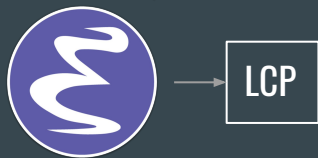
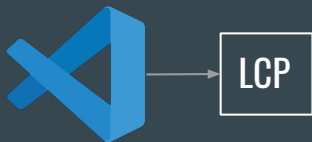
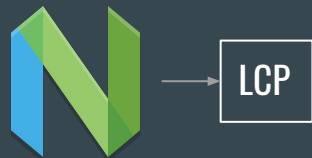
LSP

- a.k.a. Language Server Protocol
- Solves a n:n problem.

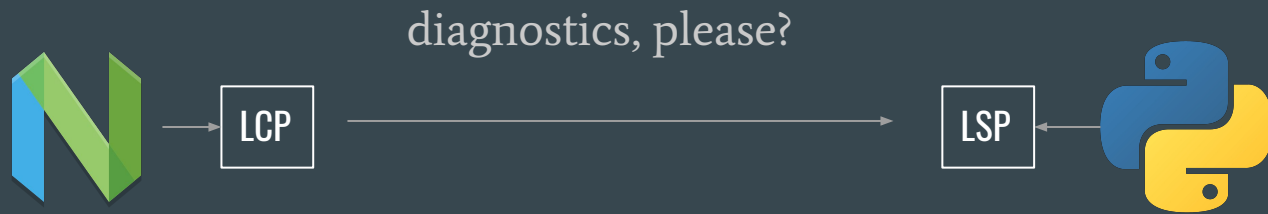


LSP

- a.k.a. Language Server Protocol
- Solves a n:n problem
- To 1:n problem



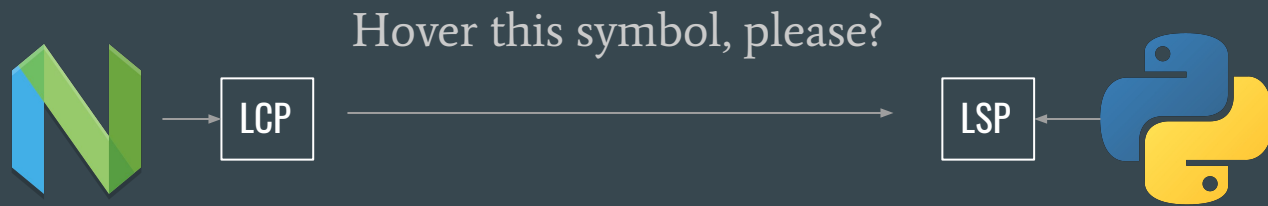
LSP



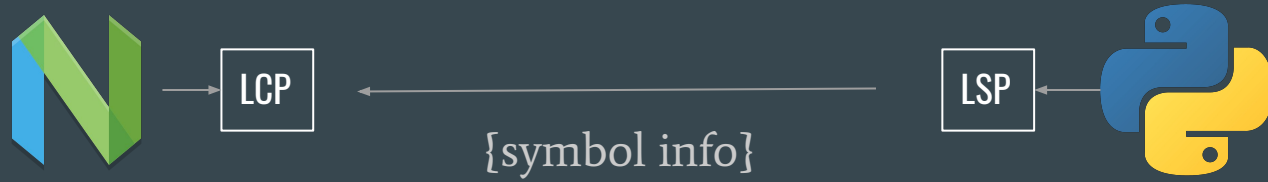
LSP



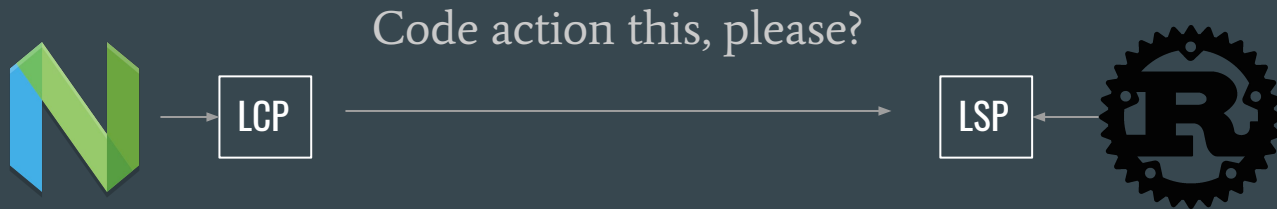
LSP



LSP



LSP



LSP



`pip install`
`'python-language-server[all]'`

...

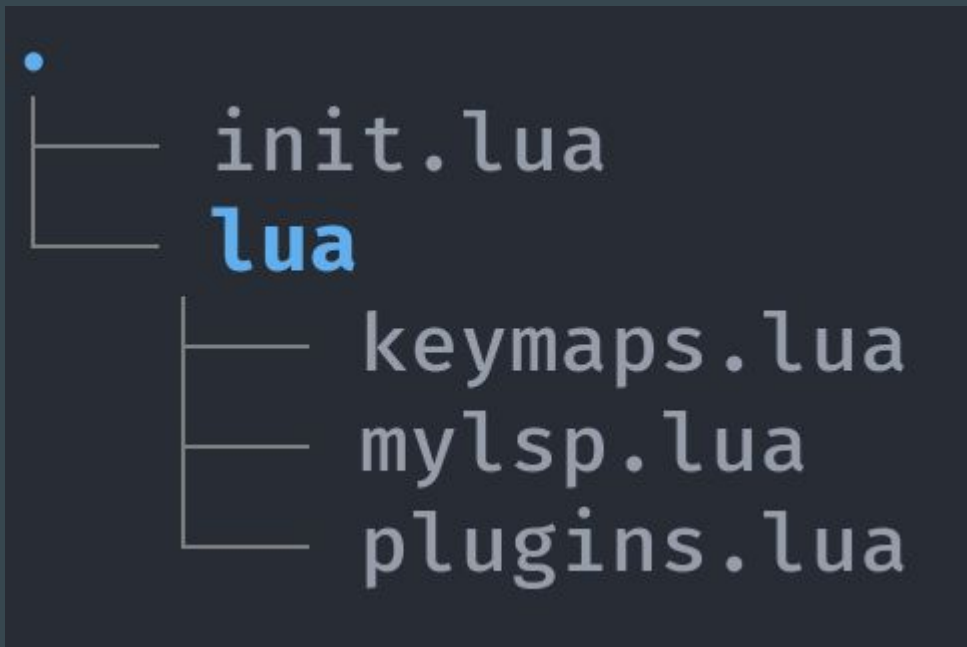
`pylsp`

(if lost, maybe check

https://github.com/biosustain/lost_semester/tree/4a353528984ec00e8ff1b0ebf49e3a50e6daf8ae/nvim)

refactor: things are getting messy!

- Split the config into files
- `require("keymaps")`



Latex

- texlab: <https://github.com/latex-lsp/texlab/releases/tag/v4.3.0>
- Latex distribution: <https://tectonic-typesetting.github.io/en-US/install.html>
- texlab LSP commit:
https://github.com/biosustain/lost_semester/blob/master/nvim/lua/mylsp.lua
- With completion commit:
https://github.com/biosustain/lost_semester/commit/94fcc41220df67b357c5cle62339e0da64a36196

tree-sitter

- Incremental
- AST
- Like LSP but for syntax trees

```
f function_definition [0, 0] - [3, 12]
  name: identifier [0, 4] - [0, 9]
  parameters: parameters [0, 9] - [0, 11]
  return_type: type [0, 15] - [0, 18]
    identifier [0, 15] - [0, 18]
  body: block [1, 4] - [3, 12]
    expression_statement [1, 4] - [1, 9]
      assignment [1, 4] - [1, 9]
        left: identifier [1, 4] - [1, 5]
        right: integer [1, 8] - [1, 9]
    expression_statement [2, 4] - [2, 18]
      call [2, 4] - [2, 18]
        function: identifier [2, 4] - [2, 9]
        arguments: argument_list [2, 9] - [2, 18]
          string [2, 10] - [2, 17]
            interpolation [2, 12] - [2, 16]
              identifier [2, 13] - [2, 14]
    return_statement [3, 4] - [3, 12]
      integer [3, 11] - [3, 12]
```

fuzzy-finding...

- ...with telescope!

- Get the config:

<https://github.com/biosustain/lost-semester/commit/79e9a262776102ae57202f64c7c0ff4ad9dcf5f8>

- Press <C-f> or <C-g>

```
lua/mytrees.lua
lua/plugins.lua
lua/keymaps.lua
lua/mycmp.lua
lua/mylsp.lua
lua/latex-scope.lua
> init.lua
```

```
require "plugins"
require "keymaps"
require "mylsp"
require "mycmp"
require "mytrees"
require "latex-scope"
```

```
-- Settings
vim.cmd[[colorscheme tokyonight]]
vim.wo.number = true -- which line in the gutter
vim.wo.relativenumber = true -- show relative numbers
vim.o.mouse = "a" -- Enable your mouse
vim.g.noswapfile = true -- swap file is annoying
vim.wo.signcolumn = "yes" -- Always show the signcolumn, otherwise it would shift
vim.bo.smartindent = true -- Makes indenting smart
vim.cmd[[lua require('telescope').load_config {
  lua = vim.fn.getcwd() .. 'lua',
  path = vim.fn.getcwd() .. 'path'
}]
vim.cmd([[
  set undodir =~/.vim/vimdid
  set undofile
]])
```

Let's make a plugin!

Find bib file \longrightarrow Parse file into entries \longrightarrow Telescope

```
entry := {
    finder
    name: str,
    previewer
    content: str,
    sorter
}
```

Mappings: $\text{Fn}(\text{entry}) \rightarrow \text{command}$

More like: $\text{Fn}(\text{buffer number}) \rightarrow \text{None}$