# Modern techniques for implementing insert mode plugins

VimConf 2023 Tiny @kuuote

#### About me

- kuuote (kuu + quote)
- •icon is lambda
- Formerly Lisper(Schemer)
- •Obsessed to Vim through making parantheses highlight plugin for Lisp
  - •I want to rebuild it one of these days



#### :startinsert

- Typically text editor is always insert mode
- But Vim has normal mode
- •In Vim, insert mode is a temporary mode which is somewhat special
  - Like inhaling & diving underwater (by ujihisa san)
- Unfit to complicated works

## skkeleton

#### skkeleton

- One of SKK implementation
- SKK = Simple Kana to Kanji conversion program
  - Original from Emacs package called Daredevil SKK
- Some Vim implementation: skk.vim skkim.vim eskk.vim

#### skkeleton

- https://github.com/vim-skk/skkeleton
- Input method that not depends to system
  - Using Vim and Deno with denops.vim only

#### call function is hard

- Usual case for call function
- Normal mode
- →Type : to Commandline mode
- →Execute Ex command (call, execute etc...)

#### <Cmd> - execute command from everywhere

- Directly command execution at mapping evaluation
- •nnoremap <<u>Space></u>e <<u>Cmd></u>echo 42<<u>CR></u>
  - $\cdot$ :<<u>C-u></u> (in normal) → <u><Cmd></u> (in any)
- •since Vim 8.2.1978
- •since Neovim v0.3.0

### <Cmd> - execute command from everywhere

- Before
  - inoremap <expr> a 'hoge'
- After
  - inoremap a <<u>Cmd></u>call feedkeys(<u>'hoge'</u>, <u>'ni'</u>)<<u>CR></u>

## mapset()

- Can restore mapping
  - •dumped by maparg()
- •since Vim 8.2.0807
- since Neovim v0.8.0

## mapset()

- •let s:map = maparg('hoge', 'n', v:false, v:true)
- call mapset('n', v:false, s:map)

## mapset()

- lua vim.keymap.set('n', 'hoge', function() end)
- •echo maparg('hoge', 'n')
  - $\rightarrow$  <Lua nn>

- Display popup like completion menu
- popupwin since Vim v8.1.2384
- •floatwin since Neovim v0.4.0
- Both API are similar and different

Before: echo

```
[No Name] 0,0-1 Alla: 4 2 s: 四十二 d: 四二 f: # j: 42 k: XLII l: 肆拾弐
```

After: popup

```
a: 42
s: 四十二
d: 四二
f: #
j: 42
k: XLII
l: 肆拾弐
```

- See also: ddskk-posframe
- https://emacs-jp.github.io/packages/ddskk-posframe



# Why using IME from Vim?

- OS and GUI are very complexity
  - Not many people can develop it
  - With Linux, especially
- •Terminal and input methods don't work quite well together

# Why using IME from Vim?

- Vim is portable platform
  - Can focus just on Vim users
  - Very easy to stabilize

# How about trying it?

- In Vim, it's very comfortable
- Can control Vim mode naturally
- Customizable is happy

# How about trying it?

- Out of Vim, too lazy
- It's a pain to copy and paste

# Thanks for watching