

Using Vim as User Interface for Your Applications

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The Challenge of Making Good User Interfaces

- User interfaces are sophisticated
- Often too much so
- And yet usually strangely limited
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- Only few succeeded: Vim, Emacs, ...

A File Manager Inside Vim: netrw

```
% vim /
```

```
" =====  
" Netrw Directory Listing                               (netrw v145)  
" /  
"   Sorted by      name  
"   Sort sequence: [\/]$, \<core%\(\.\d\+\)\=\>, \.h$, \.c$  
"   Quick Help: <F1>:help  -:go up dir  D:delete  R:rename  
" =====  
../  
./  
afs/  
bin/  
boot/  
cdrom/  
dev/  
etc/  
home/  
lib/  
lost+found/  
media/
```

Imagine. . .

- Not having to worry about the user interface – it's already there
- Letting users steer the app the way they want
- Allowing any key binding, any command, any script, . . .

Example: Dancing Club Management App

```
% cdc
```

```
-----  
Name                Signed Up?         Course  
-----  
Marion Albert       Yes               Salsa  
Silas Russell       Yes               Rock  
Mickey Mcdonald     Yes               Tango  
Althea Pope         No                Tango  
Kathie Patrick      Yes               Salsa  
Sterling Anderson  Yes               Salsa  
Dante Davis         Yes               Tango  
Lenora Hutchinson  Yes               Rock  
Harley Cohen        Yes               Salsa  
Fredric Barr        Yes               Tango  
Sophie Jefferson    Yes               Ballroom  
Olivia Norris       No                Ballroom  
Oscar Dalton        Yes               Rock
```

Bot

(Privacy notice: these are fake names – see the `rig` command)

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Fredric Barr       Yes                 Tango
Sophie Jefferson   Yes                 Ballroom
Olivia Norris      No                  Ballroom
Oscar Dalton       Yes                 Rock

:sort / /
```

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How?

```
#!/usr/bin/env python

import subprocess

subprocess.call(['/usr/bin/vim', '-Scdc.vim'])
```

```
autocmd VimEnter <buffer> :python readdb()
autocmd VimLeave <buffer> :python writedb()
map <unique> <Leader>o :python showmember()<CR>

python << EOF
import vim

def readdb():
    for ...:
        vim.current.line = getnextmember()
EOF
```

Reference and Inspiration

- http://vimdoc.sourceforge.net/html/doc/if_pyth.html
- <http://vimdoc.sourceforge.net/html/doc/autocmd.html>
- <http://vimdoc.sourceforge.net/html/doc/map.html>