GoLang Group Project

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Framework we are going to use.

BubbleTea is a TUI framework for golang.



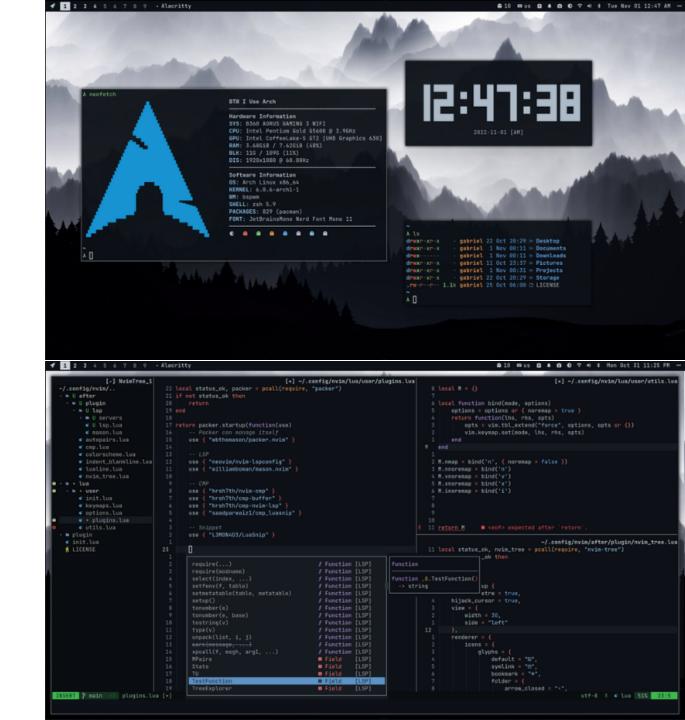
Overview

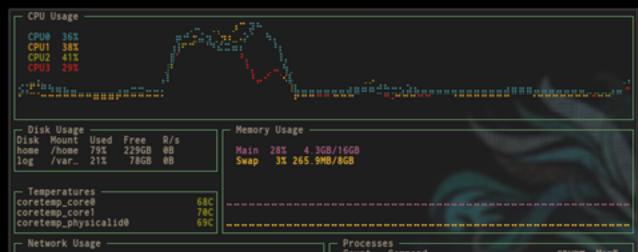
We are going to building a simple TUI for git.

Why

CLI tools are sexy.

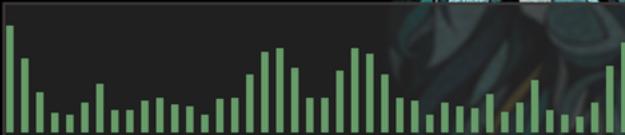
Embrace the terminal.







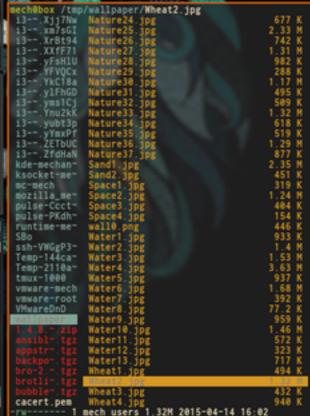
Count	Command	CPUXV	HemX
4	bro	15.5	3.8
9	splunkd	8.0	2.9
1	vmware-vmx	4.0	14.6
35	chromium	2.3	28.8
1	lt-cava	0.8	
1	xfce4-terminal	0.5	
1	Xorg	0.5	0.8
1	compton	0.4	0.1

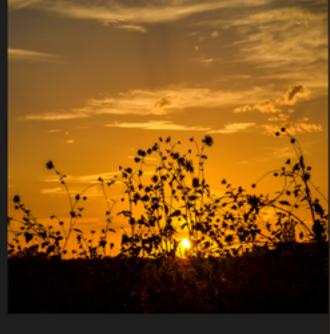


```
Artist / Album
Ava Max
                                                                                                            1:04:27
                                        Sex, Love & Reggae
Big Sean
                                        1. G Spot (Intro)
                                                                                                          2013 00:46
                                         2. A Reggae Morning
Blueface
                                                                                                         2013 03:49
Brantley Gilbert & Lindsay Ell
                                            Be Alright
                                                                                                         2013 03:15
Chance the Rapper
                                          4. I'm So
                                                                                                          2013 03:40
Cole Swindell
                                                                                                          2013 03:08
                                             Overtime
Dan + Shay
                                             Vixen (feat. Angela Hunte)
                                                                                                          2013 03:29
                                             Sex, Love & Reggae (feat. Bunji Garlin & Angela Hunte)
Dierks Bentley
                                                                                                          2013 03:21
Drake
                                          8. Non Stop
                                                                                                          2013 02:57
Ed Sheeran
                                            Wet Fete (feat, KES the Band)
                                                                                                          2013 03:58
Ella Fitzgerald
                                         10. Turn Me On
                                                                                                          2013 03:34
                                            Wine Slow
Gyptian
Katy Perry
Keith Urban
                                                                                                          2013 02:33
                                        12. One More Time (feat. Melanie Fiona)
13. Majestic Love (feat. Estelle)
                                                                                                          2013 03:14
                                                                                                         2013 03:45
                                        14. Good Girls
                                                                                                         2013 03:39
Gyptian - Sex, Love & Reggae -  7. Sex, Love & Reggae (feat. Bunji Garlin & Angela Hunte)
> 02:07 / 03:21 - 14:58:08 vol: 100
                                                                                         artist from library | C
```

```
mech@box(idea): $ neofetch
                                                          mech@box.fakelabs.org
                                                          OS: Slackware 14.2 x86_64
                                                         Host: 4286CTO ThinkPad X220
Kernel: 4.4.172
                 :cllcccccllllllll:
     1c
                                 dc:
                                                         Uptime: 4 days, 17 hours, 2 mins
Packages: 1441 (pkgtool), 4 (flatpak)
Shell: bash 4.3.48
            cl clllccllll oc
                 1c::::::co oc:
                  cccclc ::: clcc::
                                                          Resolution: 1366x768
                          cclccclc
                                                         DE: Xfce
                lcclcc
                                                         WM: 13
            cclcc::::lccclc oc:
                                                         Theme: Arc [GTK2], Adwaita [GTK3]
Icons: Pop [GTK2], Adwaita [GTK3]
Terminal: konsole
CPU: Intel i5-2450M (4) 0 3.100GHz
GPU: Intel 2nd Generation Core Processor Family
           o 1 1c
       cll:o clcllcccll o:::
                                   clc:
       ocl:ccslclccclclccclclc::::
       oclccccccccccclllllllllllllllllllll
                                                          Memory: 8650MiB / 15909MiB
       lecilecceccecceccecceccccc:
```

mech@box(idea):\$ []







Requirements

They should be able to do the following from the TUI

- git add
- git commit
- git fetch (tells us if there are changes upstream.)
- git pull (brings the changes from upstream to local repo)
- git push
- change origin url (upstream url)

Extra details

- Should be able to detect if current directory is a git directory, and if not it should ask if it should initialize a git repository
- We will not be handling any merge conflicts, that is out of scope. Can you think of way to handle this error?

Helpful links

- Youtube tutorial beginner
- Groundup tutorial intermediate

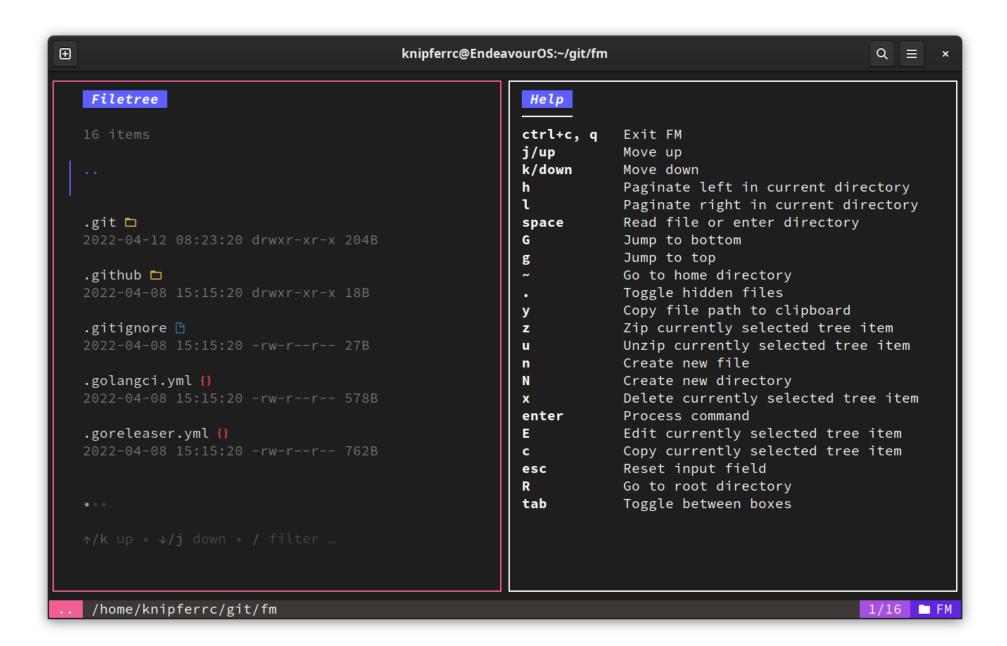
Example of some TUI apps

```
thunderclap:~ christian $
```

Soft serve - git server

```
Soft Serve
A tasty, self-hostable Git server for the command line
                                                                                             git clone ssh://git.charm.sh/soft-serve
Readme Files Commits Branches Tags
commit 45409848ea39cc5a65335475c6e5ab67be312470
Author: Christian Rocha <christian@rocha.is>
Date: Tue Aug 2 18:24:40 UTC 2022
  chore: further adjust colors in selector and repo header
ui/styles/styles.go | 8 +++++---
1 file changed, 5 insertions(+), 3 deletions(-)
  diff --git a/ui/styles/styles.go b/ui/styles/styles.go
  index 91b8368d7ea5e645d2b1b8bd5188cb40054cdfe5..aee5f436ee9802404a5c96042b0c6f79bcee7d68 100644
  --- a/ui/styles/styles.go
  +++ b/ui/styles/styles.go
  @@ -184,7 +184,8 @@ func DefaultStyles() *Styles {
       s.RepoSelector.Normal.Command = lipgloss.NewStyle().
          Foreground(lipgloss.Color("132"))
      s.RepoSelector.Normal.Updated = lipgloss.NewStyle()
      s.RepoSelector.Normal.Updated = lipgloss.NewStyle().
          Foreground(lipgloss.Color("243"))
soft-serve 45409848ea39cc5a65335475c6e5ab67be312470 by Christian Rocha <christian@rocha.is>
                                                                                                               ≡ 0% * main ? Help
```

fm - a TUI file manager



Libraries to use

- Cobra: parse cmd arguments passed if required
- BubbleTea: TUI framework
- Lip Gloss: TUI style definitions







Bonus

If we have extra time, try to implement the git revert feature.