

# GoLang Group Project

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# Framework we are going to use.

[BubbleTea](#) is a TUI framework for golang.

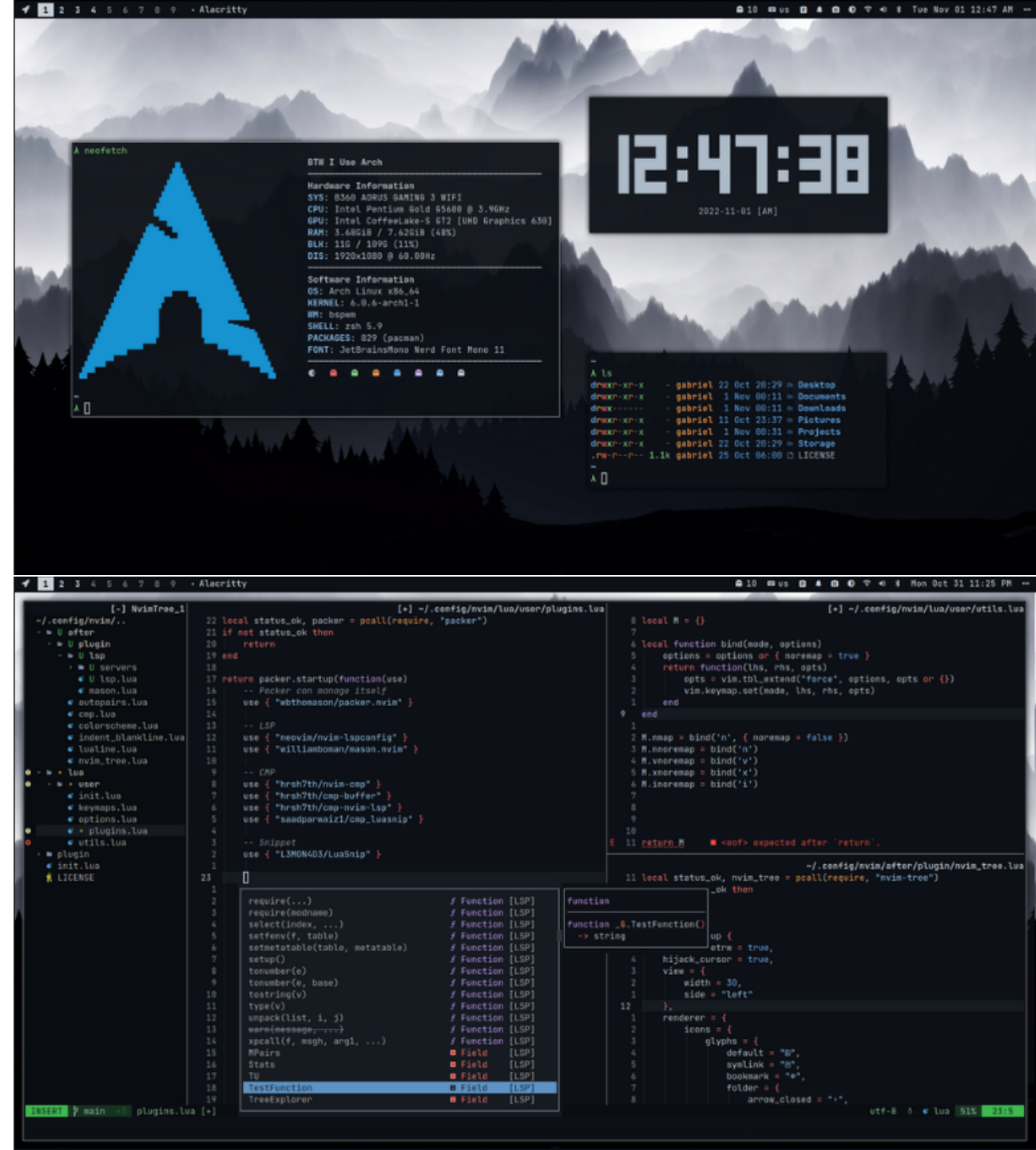


# Overview

We are going to building a simple TUI for git.

## Why

CLI tools are sexy.  
Embrace the terminal.

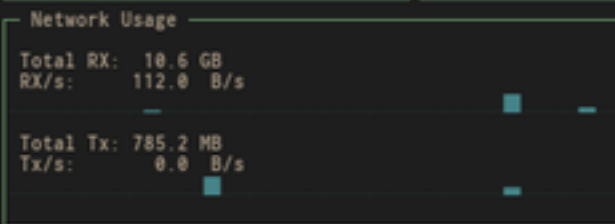




Disk	Mount	Used	Free	R/s
home	/home	79%	229GB	0B
log	/var_	21%	78GB	0B

Memory Usage
Main 28% 4.3GB/16GB
Swap 3% 265.9MB/8GB

Temperatures
coretemp_core0 68C
coretemp_core1 70C
coretemp_physicalid0 69C




Processes			
Count	Command	CPU%	Mem%
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	0.0
1	xfce4-terminal	0.5	0.1
1	Xorg	0.5	0.8
1	compton	0.4	0.1



Artist / Album	Track	Library
Ava Max	Sex, Love & Reggae	1:04:27
Big Sean	1. G Spot (intro)	2013 00:45
Blueface	2. A Reggae Morning	2013 03:49
Brantley Gilbert & Lindsay Ell	3. Be Alright	2013 03:15
Chance the Rapper	4. I'm So	2013 03:40
Cole Swindell	5. Overtime	2013 03:08
Dan + Shay	6. Vixen (feat. Angela Hunte)	2013 03:29
Dierks Bentley	7. Sex, Love & Reggae (feat. Bunji Garlin & Angela Hunte)	2013 03:21
Drake	8. Non Stop	2013 02:57
Ed Sheeran	9. Wet Fete (feat. KES the Band)	2013 03:58
Ella Fitzgerald	10. Turn Me On	2013 03:34
Gyptian	11. Wine Slow	2013 02:33
Katy Perry	12. One More Time (feat. Melanie Fiona)	2013 03:14
Keith Urban	13. Majestic Love (feat. Estelle)	2013 03:45
Khalid	14. Good Girls	2013 03:39
Gyptian - Sex, Love & Reggae - 7. Sex, Love & Reggae (feat. Bunji Garlin & Angela Hunte)		2013
> 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
Uptime: 4 days, 17 hours, 2 mins
Packages: 1441 (pkgtool), 4 (flatpak)
Shell: bash 4.3.48
Resolution: 1366x768
DE: Xfce
WM: i3
Theme: Arc [GTK2], Adwaita [GTK3]
Icons: Pop [GTK2], Adwaita [GTK3]
Terminal: konsole
CPU: Intel i5-2450M (4) @ 3.100GHz
GPU: Intel 2nd Generation Core Processor Family
Memory: 8650MiB / 15909MiB
```

```
mech@box(idea):$ 
mech@box /tmp/wallpaper/Wheat2.jpg
13-- Xj17Nw Nature24.jpg 677 K
13-- xm7sGI Nature25.jpg 2.33 M
13-- Xr8t94 Nature26.jpg 742 K
13-- XX1F71 Nature27.jpg 1.31 M
13-- yFsH1U Nature28.jpg 982 K
13-- YFVQCx Nature29.jpg 288 K
13-- YkC18a Nature30.jpg 1.17 M
13-- y1FhGD Nature31.jpg 495 K
13-- yms1Cj Nature32.jpg 509 K
13-- Ynu2kK Nature33.jpg 1.32 M
13-- yubt3p Nature34.jpg 618 K
13-- yYmxPf Nature35.jpg 519 K
13-- ZETbUC Nature36.jpg 1.29 M
13-- ZfdHaN Nature37.jpg 877 K
kde-mechan- Sand1.jpg 2.35 M
ksocket-me- Sand2.jpg 451 K
mc-mech Space1.jpg 319 K
mozilla_me- Space2.jpg 1.24 M
pulse-Ccct- Space3.jpg 404 K
pulse-PKdh- Space4.jpg 154 K
runtime-me- wall0.png 446 K
SBo Water1.jpg 933 K
ssh-VWGp3- Water2.jpg 1.4 M
Temp-144ca- Water3.jpg 1.53 M
Temp-2110a- Water4.jpg 3.63 M
tmux-1000 Water5.jpg 937 K
vmware-mech Water6.jpg 1.68 M
vmware-root Water7.jpg 392 K
VMwareDnD Water8.jpg 77.2 K
Water9.jpg 959 K
1.4.8-.zip Water10.jpg 1.46 M
ansible-.tgz Water11.jpg 572 K
appstr-.tgz Water12.jpg 323 K
backpor-.tgz Water13.jpg 717 K
bro-2-.tgz Wheat1.jpg 494 K
brotli-.tgz Wheat2.jpg 1.32 M
bubble-.tgz Wheat3.jpg 432 K
cacert.pem Wheat4.jpg 940 K
-rw----- 1 mech users 1.32M 2015-04-14 16:02
```



136M sum, 16.5G free 135/137 Bot

[illegible]

# 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(-)

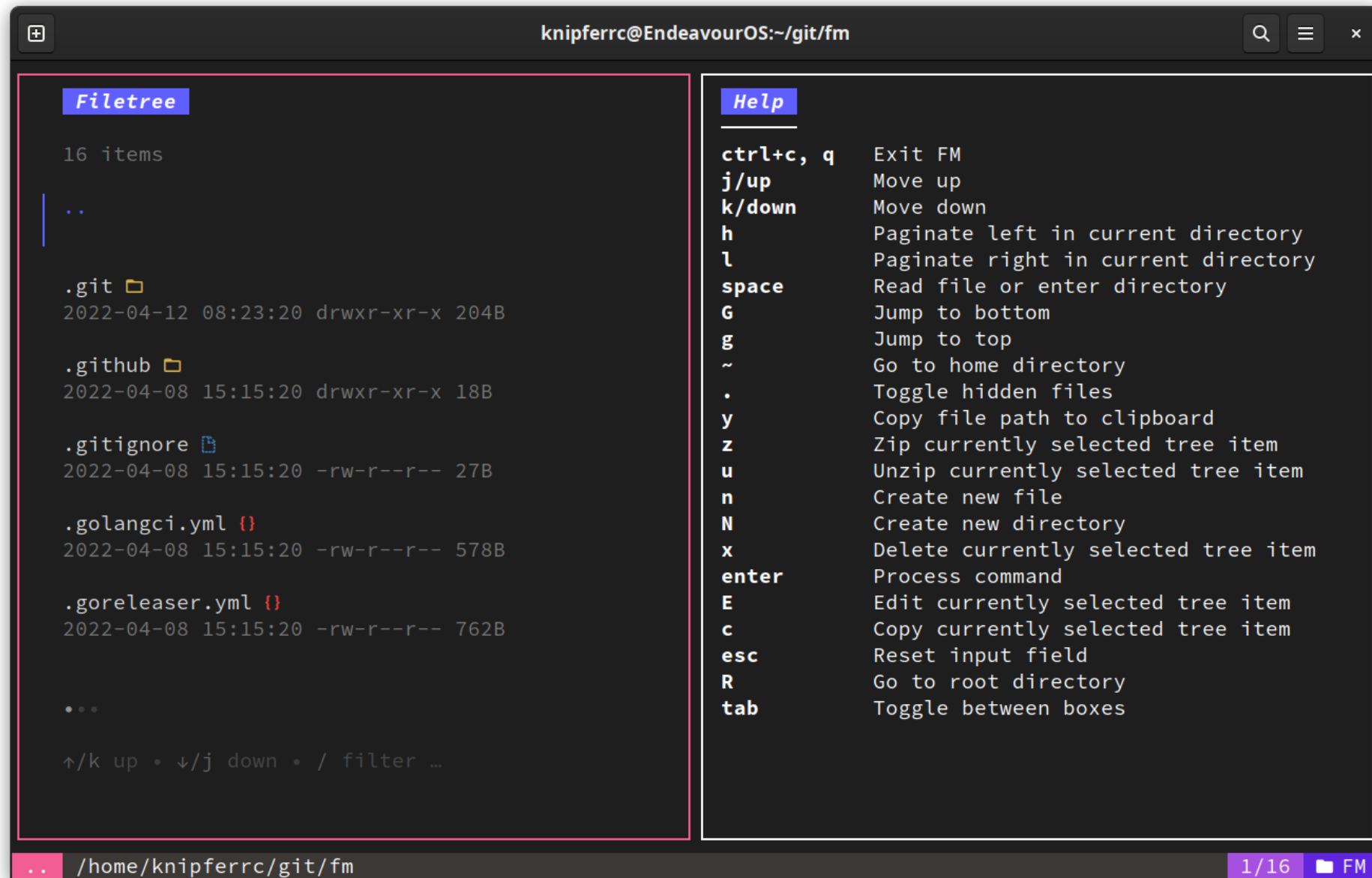
```
diff --git a/ui/styles/styles.go b/ui/styles/styles.go
index 91b8368d7ea5e645d2b1b8bd5188cb40054cdf5..aee5f436ee9802404a5c96042b0c6f79bcee7d68 100644
--- a/ui/styles/styles.go
+++ b/ui/styles/styles.go
@@ -184,7 +184,8 @@ func DefaultStyles() *Styles {
     s.RepoSelector.Normal.Command = lipgloss.NewStyle().
        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






The screenshot shows the 'fm' TUI file manager interface. The window title is 'knipferrc@EndeavourOS:~/git/fm'. The interface is split into two main panels. The left panel, titled 'Filetree', displays a list of 16 items in the current directory. The right panel, titled 'Help', lists various keyboard shortcuts and their functions. At the bottom, a status bar shows the current directory path and the number of items displayed.

```
knipferrc@EndeavourOS:~/git/fm
```

**Filetree**

16 items

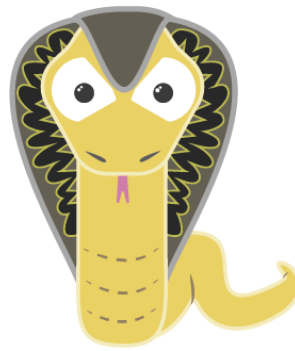
- ..
- .git   
2022-04-12 08:23:20 drwxr-xr-x 204B
- .github   
2022-04-08 15:15:20 drwxr-xr-x 18B
- .gitignore   
2022-04-08 15:15:20 -rw-r--r-- 27B
- .golangci.yml {}  
2022-04-08 15:15:20 -rw-r--r-- 578B
- .goreleaser.yml {}  
2022-04-08 15:15:20 -rw-r--r-- 762B
- ...

↑/k up • ↓/j down • / filter ...

**Help**

ctrl+c, q	Exit FM
j/up	Move up
k/down	Move down
h	Paginate left in current directory
l	Paginate right in current directory
space	Read file or enter directory
G	Jump to bottom
g	Jump to top
~	Go to home directory
.	Toggle hidden files
y	Copy file path to clipboard
z	Zip currently selected tree item
u	Unzip currently selected tree item
n	Create new file
N	Create new directory
x	Delete currently selected tree item
enter	Process command
E	Edit currently selected tree item
c	Copy currently selected tree item
esc	Reset input field
R	Go to root directory
tab	Toggle between boxes

.. /home/knipferrc/git/fm 1/16 FM



# cobra

## Libraries to use

- [Cobra](#): parse cmd arguments passed if required
- [BubbleTea](#): TUI framework
- [Bubbles](#): TUI components for Bubbletea
- [Lip Gloss](#): TUI style definitions



## Bubble Tea



## Bubbles



charm\_  
**Lip Gloss**

## Bonus

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