TUI Challenge
Experience Report

1 Day 1 (20 May)

First things first, getting a terminal environment to try to work in.

1.1 The bad

I made things harder on myself than necessary, by trying to use the default Linux console. After a bit of searching around man pages, I remembered how to use setfont. I got Terminus installed, and used that. I'd forgotten just how rough the console environment can be. After installing gdm, I had basic copy/paste support, but honestly it's still worse than the terminal emulator I used under DOS, or any physical terminal I've ever used.

I failed to get fbterm running, because Fedora doesn't have a framebuffer anymore.

At this point, I decided to cut my losses, and use a minimal X11 environment, running nothing but a full-screen Konsole, in which I've unset DISPLAY. Don't want to cheat on accident!

1.2 Writing a document

I'm writing this in Emacs, which is my usual editor. To make things a bit more exciting, I'm using OpTEX, a macro package for plain TEX, which I've never used before[1]. I build this document with a simple `optex tui-challenge.tex`.

Verifying that this document is properly formatted is however little more old-school: `pdf2ps tui-challenge.pdf - | lpr`

I may need to find a way to do this with sixel, if I don't want to run out of paper!

1.3 Publishing

In order to use an advanced feature of Emacs, and to share this document, I wrote a small html landing page on https://tui.chef-li.eu/ to point to this PDF. And I did it from within Emacs over SSH using the built-in TRAMP[2].

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[1] Fedora has it packaged as `texlive-optex`, so it was very easy to install!
http://petr.olsak.net/optex

[2] https://www.gnu.org/software/tramp/
If you already use Emacs, try it! Just `C-x C-f /ssh:user@host:/path/to/file`

1.4 Scoring

- Text editing (Emacs): 10
- Advanced feature (TRAMP): 5
- Scripting (OpTEX): 5
- **Total: 20**

2 Day 2 (21 May)

Email! I'm old enough to enjoy email, and I've been using Pine and then Alpine[3] for my email needs since the 1990's. Normally I supplement it with Evolution or KMail, but it's been my primary MUA for a very long time. I read my email today, sent a few replies, and even set up a new filter for a low-volume mailing list that had been going directly to my inbox.

I looked around a bit and couldn't find anything that would let me sync my IMAP addresses with CardDAV, so I continue to use Alpine as my primary address book, with the data on IMAP. And I have a second disjoint CardDAV address book that my mobile phone syncs with. I hope someone else doing the challenge finds a way to do this, or at least make abook work, since I know it can output Pine address books, too.

2.1 Extras

I'm now previewing this document with `timg`[4]. I hadn't realized it could convert PDF to sixel, which is incredibly convenient for use with TEX! Unfortunately, I've also discovered that tmux doesn't support sixel, so I'll either need to compromise and use something more modern like the Kitty protocol, or learn to use Zellij. For now, I'm just using one terminal without a multiplexer.

2.2 Scoring

- Email (Alpine): 10
- Filters (Alpine): 5
- Address book (Alpine): 10
- **Total: 25**

[3] The modern, Apache2 licensed rewrite of Pine, with all sorts of modern goodies, but still the full power and ease of use of classic Pine.
http://www.alpineapp.email/

[4] A nice tool for displaying graphics using sixel https://en.wikipedia.org/wiki/Sixel, or its more modern descendants. Sixel is an old DEC protocol for sending graphics to dot-matrix printers, later picked up in their VT200 and VT300 series terminals.
http://github.com/hzeller/timg

3 Day 3 (22 May)

Web browsing. This has been tough. I've been using lynx[5] and links[6], but there sure is a lot of the web that requires JavaScript. At the time of this writing, I was able to log in to my account at the daily newspaper I read (*l'Humanité* [7]), thanks to `keepassxc-cli`[8] and links (lynx got an error when trying to do so). I could also get the menu for my kids' school lunches!

I had trouble for a while getting access to my Firefox bookmarks, but eventually found `buku`[9]. It's a bit rough (I'd prefer a curses-style TUI), but it's workable. I'm giving myself half points here, because I'm only half using it.

The biggest trouble I had trying to figure things out was not being able to access any StackOverflow sites because of a JavaScript wall. Even reddit isn't always easy: links works great, but I can't copy text from it either at the Linux console, or using Konsole. If I run links under tmux, it's at least possible to copy text.

I tried to use browsh to access some sites that require JavaScript, but got immediately blocked by cloudflare. I don't know if browsh counts for the challenge, but I didn't find it particularly helpful. Tech sites especially seem pretty unusable from TUI tools.

3.1 Scoring

- Browse newspaper and local school site: 20
- Complete a login: 5
- Manage bookmarks (buku): 5
- **Total: 30**

4 Day 4 (23 May)

Music! Like the Email task, this is so familiar it almost feels like cheating. But I played some music with cmus, made a new playlist, and tried to play the JB live feed, but something didn't work right with cmus. So, good old VLC to the rescue! I'm claiming the bonus points, and not subtracting 10 points, because I used the VLC CLI. Much like KeePassXC, one of the reasons I like VLC is that it has a workable CLI. A simple `enqueue http://jblive.com/` and a `play` later, and I was listening to the live stream. Maybe not as nice a UI as cmus, but it works.

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[5] https://lynx.invisible-island.net/

[6] http://links.twibright.com/

[7] http://humanite.fr/

[8] The combination of the nice GUI, but also the ability to easily access my password database from the command-line is one of the big reasons I've stuck with KeePassXC

[9] Installed with `dnf install buku`
You can import existing bookmarks with `buku --ai`

4.1 Scoring

- Play music (cmus): 10
- Create playlist: 5
- Streaming (jblive over vlc cli): 10
- **Total: 25**

4.2 Extras

I got `gomuks`[10] going as a Matrix client, and it's pretty workable. It supports multiple rooms, replies, emoji reactions, even images in a blocky ANSI-art fashion.

5 Day 5 (24 May)

I was out taking pictures today, so when I came home I had some file management tasks. How convenient! I did some basic selection and editing in-camera, so my out-of-camera JPGs were actually ready to share. I'll pull everything into Digikam and Darktable another day. For today, I can sort things into a few albums to share with friends and family. I used `timg` again, without which this wouldn't have gone very far.

I used tmux with Emacs in `dired`[11] mode on one side, and a shell where I could use timg, on the other. It worked pretty well, and I copied, moved, and batch renamed my files into three different "Albums" (directories with sensibly named files inside). For fun, I used the command-line `rename`[12] tool for one of the albums. Honestly, I'm more at home in Emacs for this sort of thing, but it was fine.

5.1 Scoring

- Move, copy, rename files (dired): 10
- Batch operations (dired, rename): 5
- Scripting (dired and the `*scratch*` buffer): 10
- **Total: 25**

6 Pause (25 May)

It's Mother's Day in France today, so no TUI challenge today.

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[10] https://docs.mau.fi/gomuks/

[11] https://www.gnu.org/software/emacs/manual/html_node/emacs/Dired.html

[12] https://man7.org/linux/man-pages/man1/rename.1.html