

Please Standby

My First AppCenter App

Using and developing for
elementaryOS from a low
vision point of view.



@techdev5521



My Experience as a Visually Impaired Developer

Using and developing for
elementary OS from a low
vision point of view.



@techdev5521





Justin Campbell

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Purdue University ECN

I'm a **computer enthusiast**
who **humanizes**
technology through design
and development. I'm also
legally blind.



...and I'll still 360 no scope you in CS:GO
steamcommunity.com/id/jtcmh13

Legally Blind: Vision is 20/200 or less.



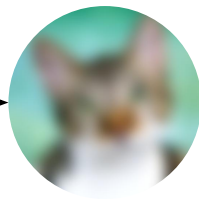
20/20
Vision

200 ft

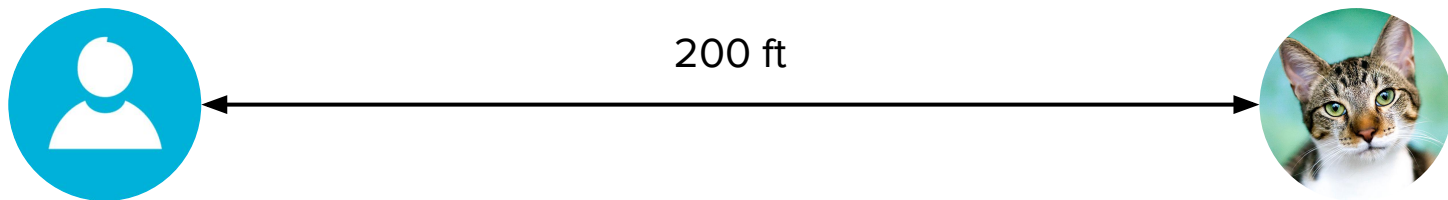


20/200
Vision

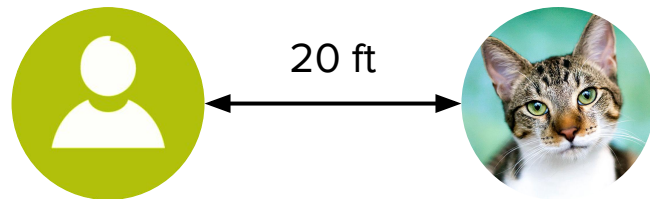
200 ft



 **Legally Blind:** Vision is 20/200 or less.

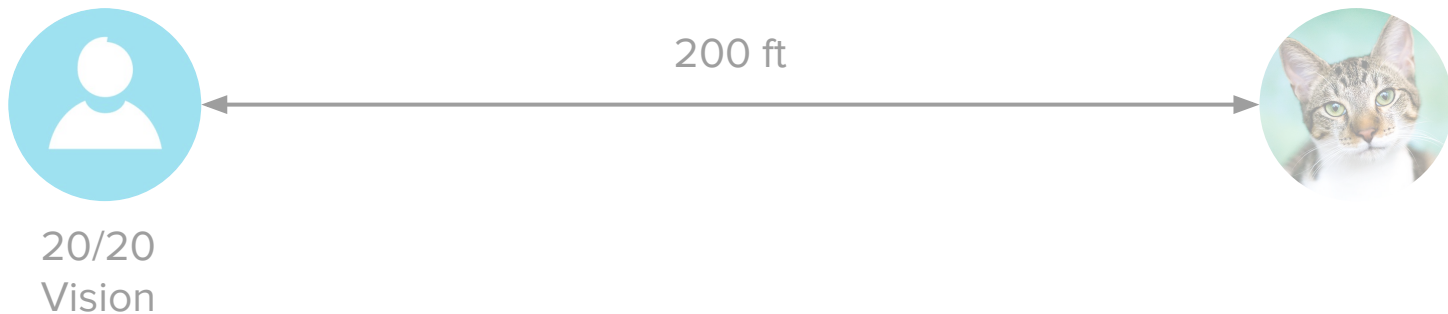


20/20
Vision

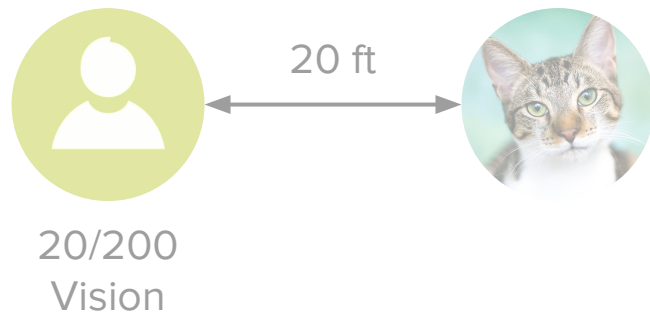


20/200
Vision

 **Legally Blind:** Vision is 20/200 or less.



So...I use
magnifiers a lot.



What This Talk Is Not:

- A tutorial for creating elementary OS applications
- A comparison of native and web technologies (see *GTK for Web Developers* by Darshak Parikh)
- A technical talk



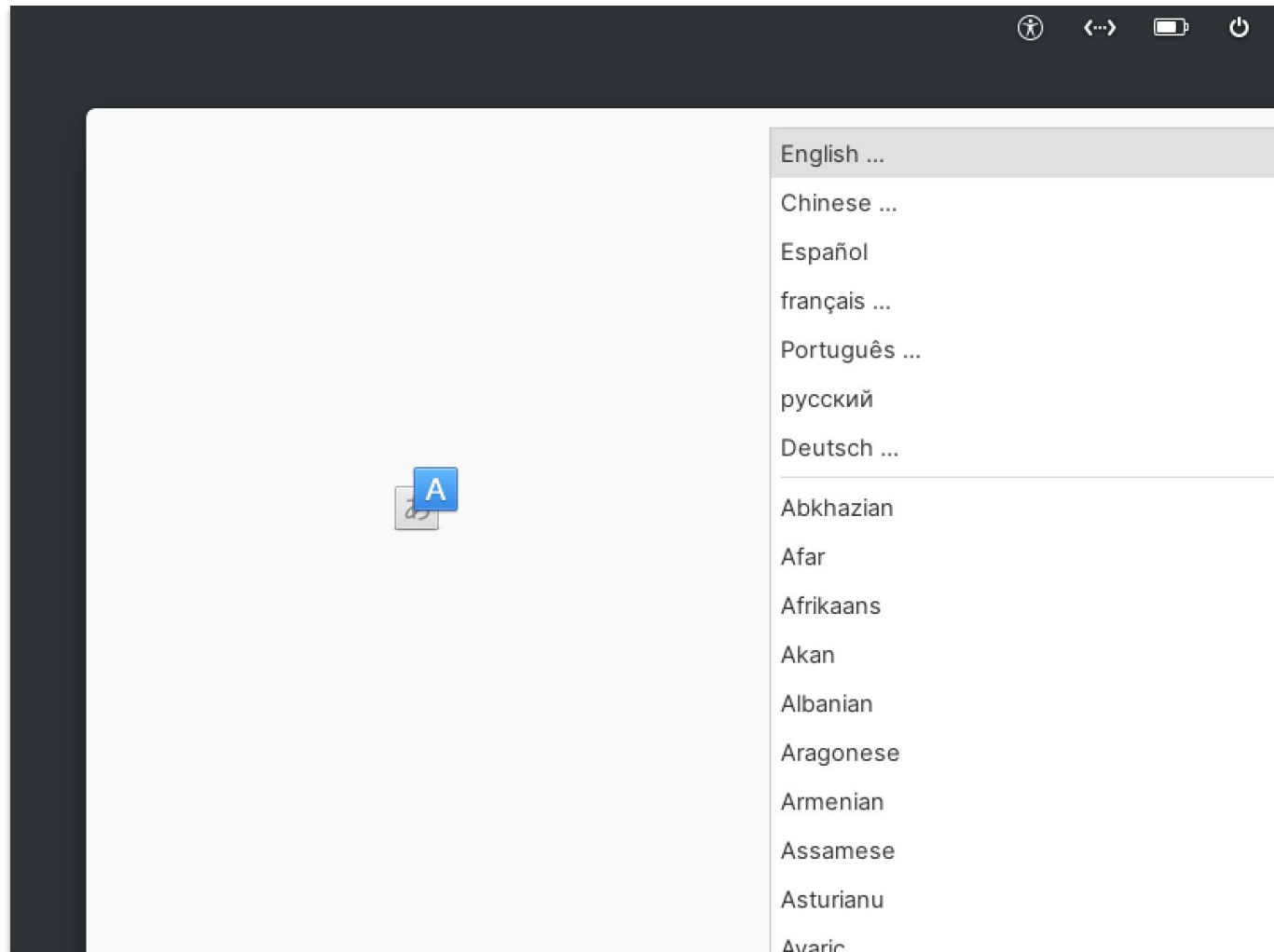
What This Talk Is:

- A critique of elementary OS low vision accessibility tools
- A review of elementary OS developer tools from my point of view
- A call for help: people who needs these tools the most are often unable to make them.

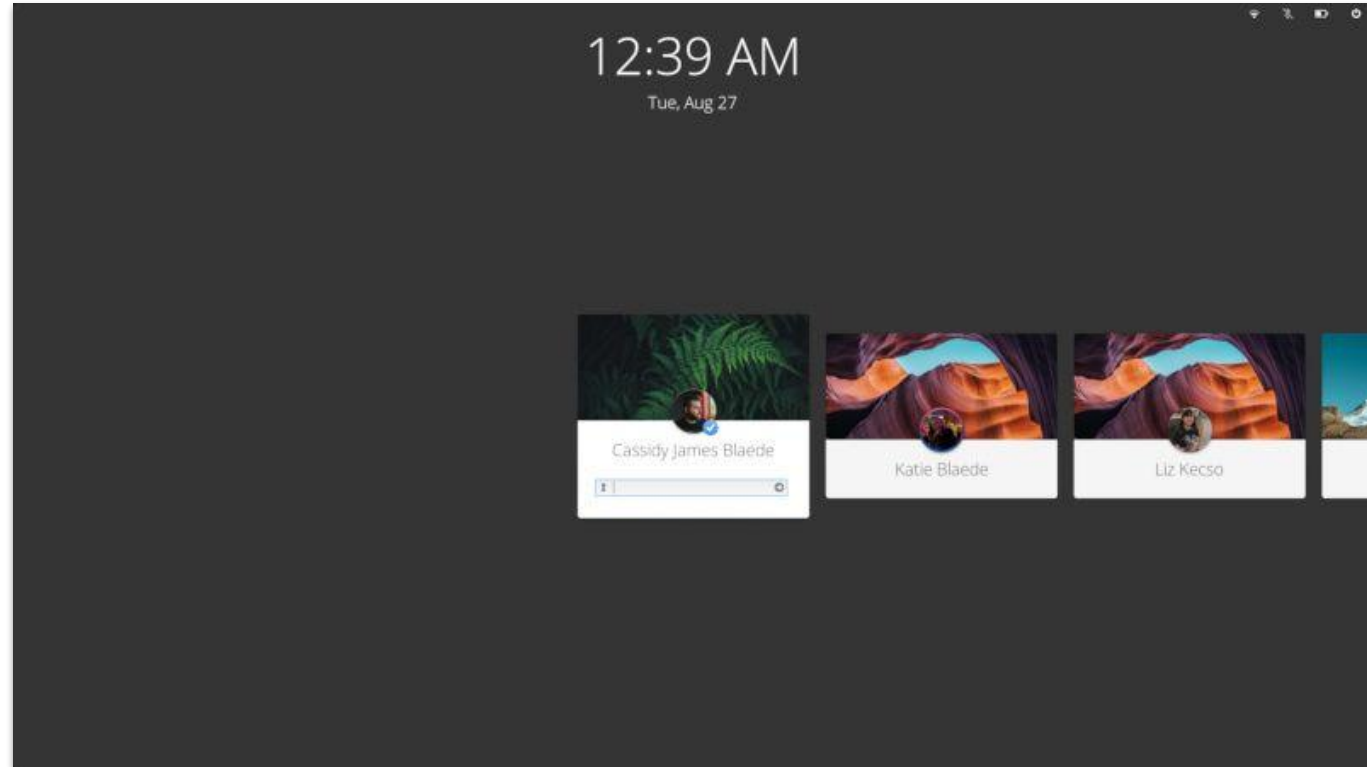


Installation

- Installed to external USB drive via VirtualBox on macOS
- No magnifier in installer. Used macOS' magnifier to see text.
- Used Orca for off-screen elements.



- No magnifier at login screen.
- Single user systems can assume the correct user.
- Multi-user systems are less accessible.



- First login is beautiful. No affordance of accessibility tools.
- Meta + = is default keyboard shortcut.
- Shortcut overlay shows this; also hidden.



- macOS makes magnifier available from first installer screen.
- Ctrl + Scroll

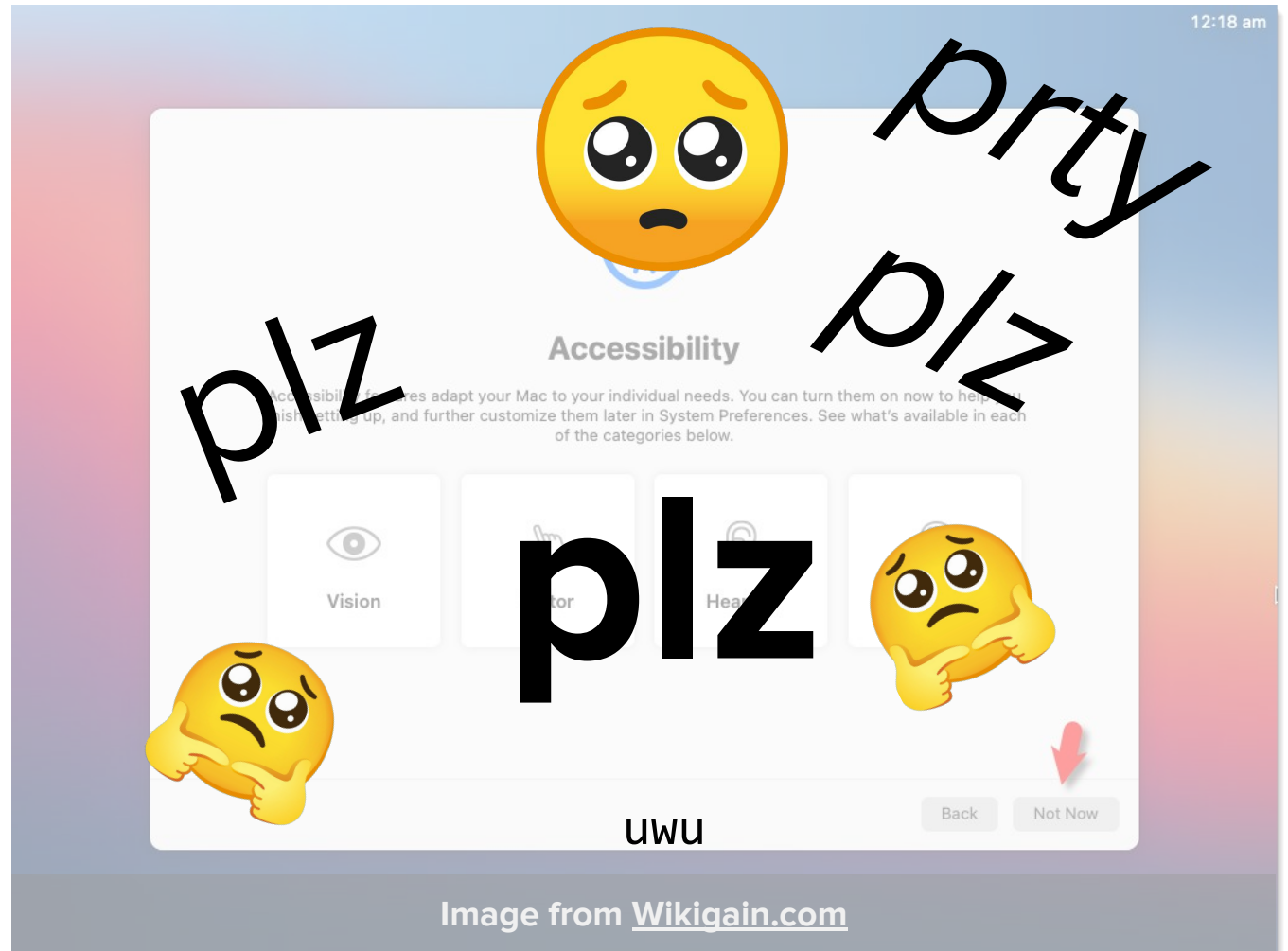
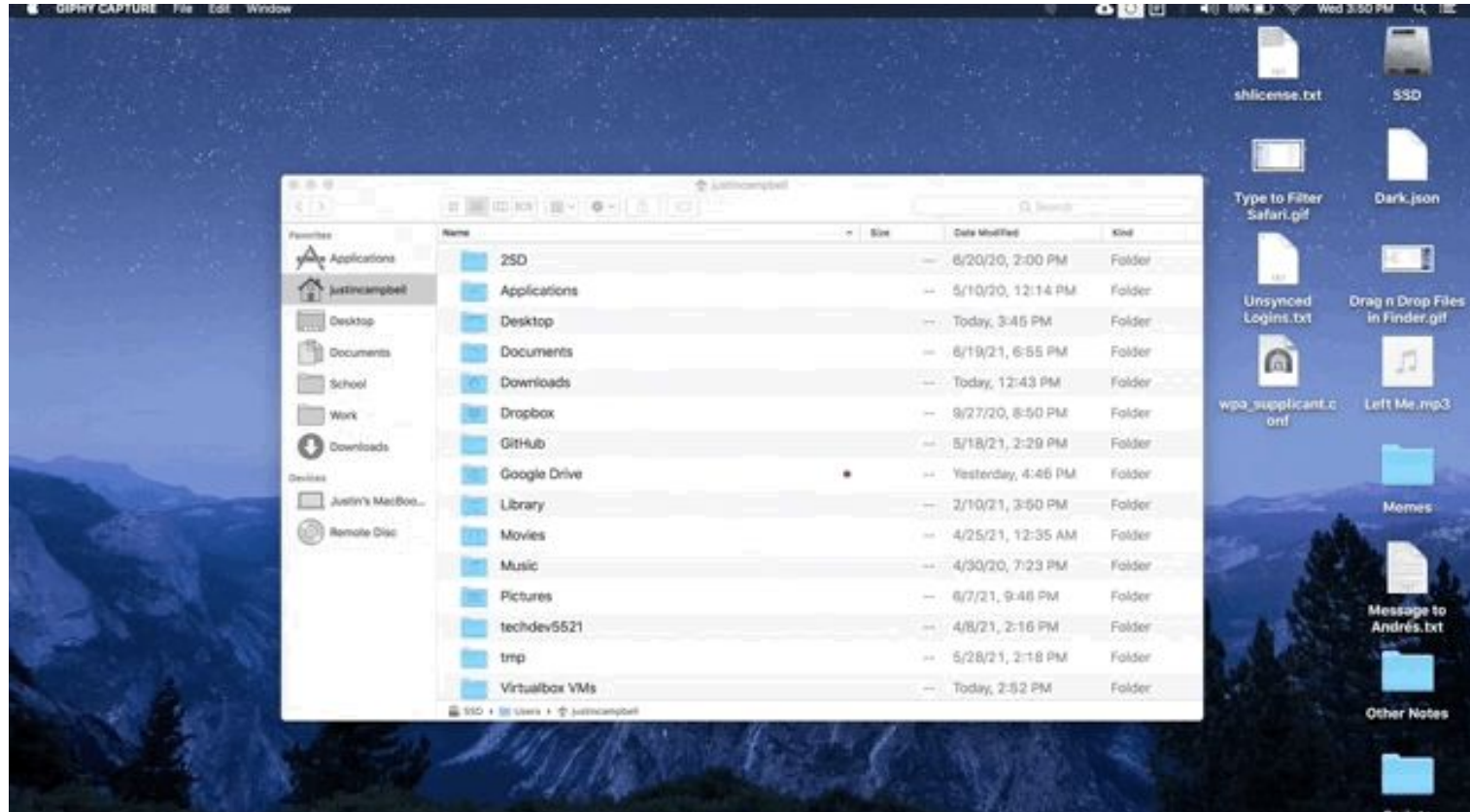


Image from [Wikigain.com](https://www.wikigain.com)

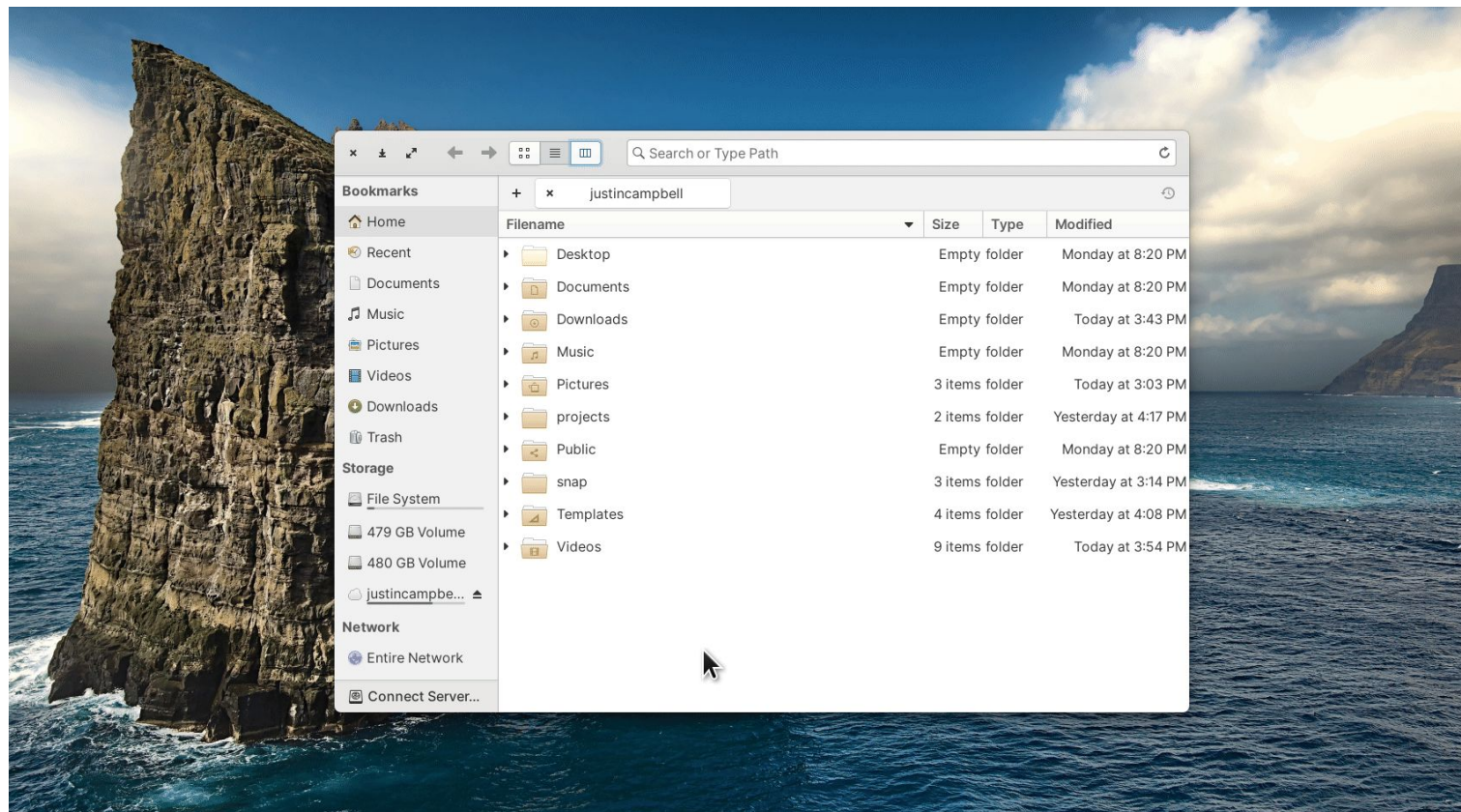


Usage

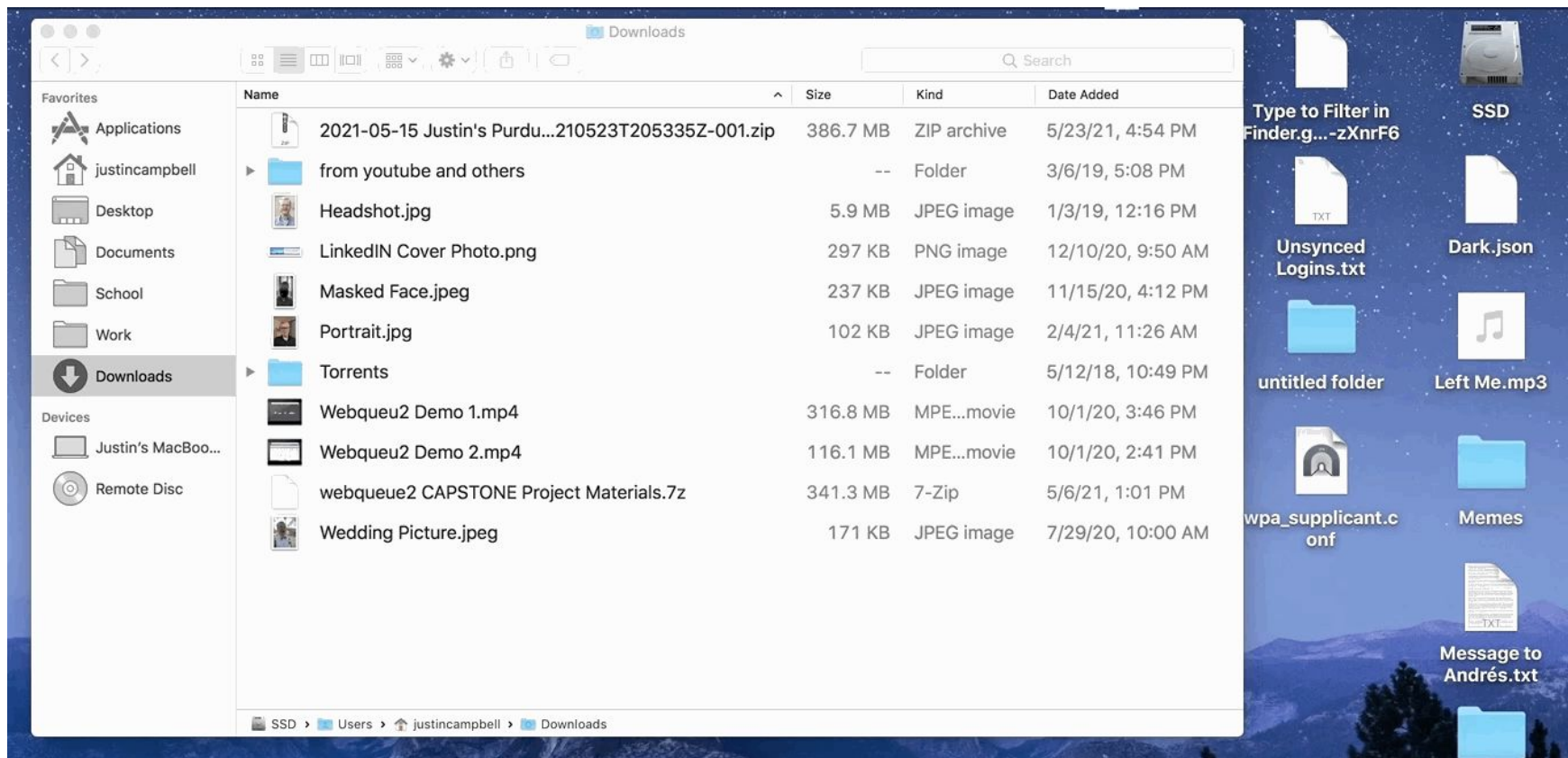
Window Management: macOS + ShiftIt



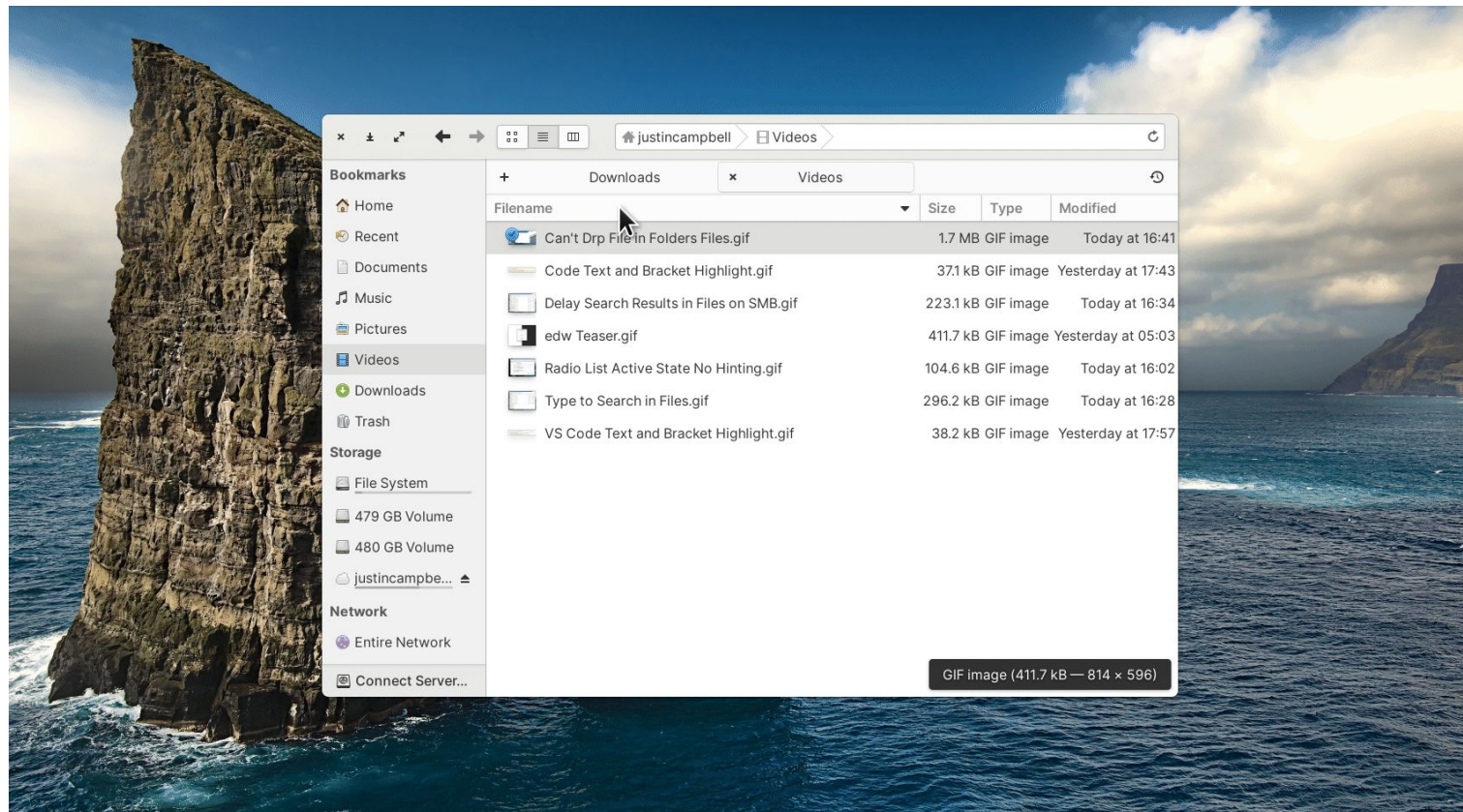
Window Management: elementary OS



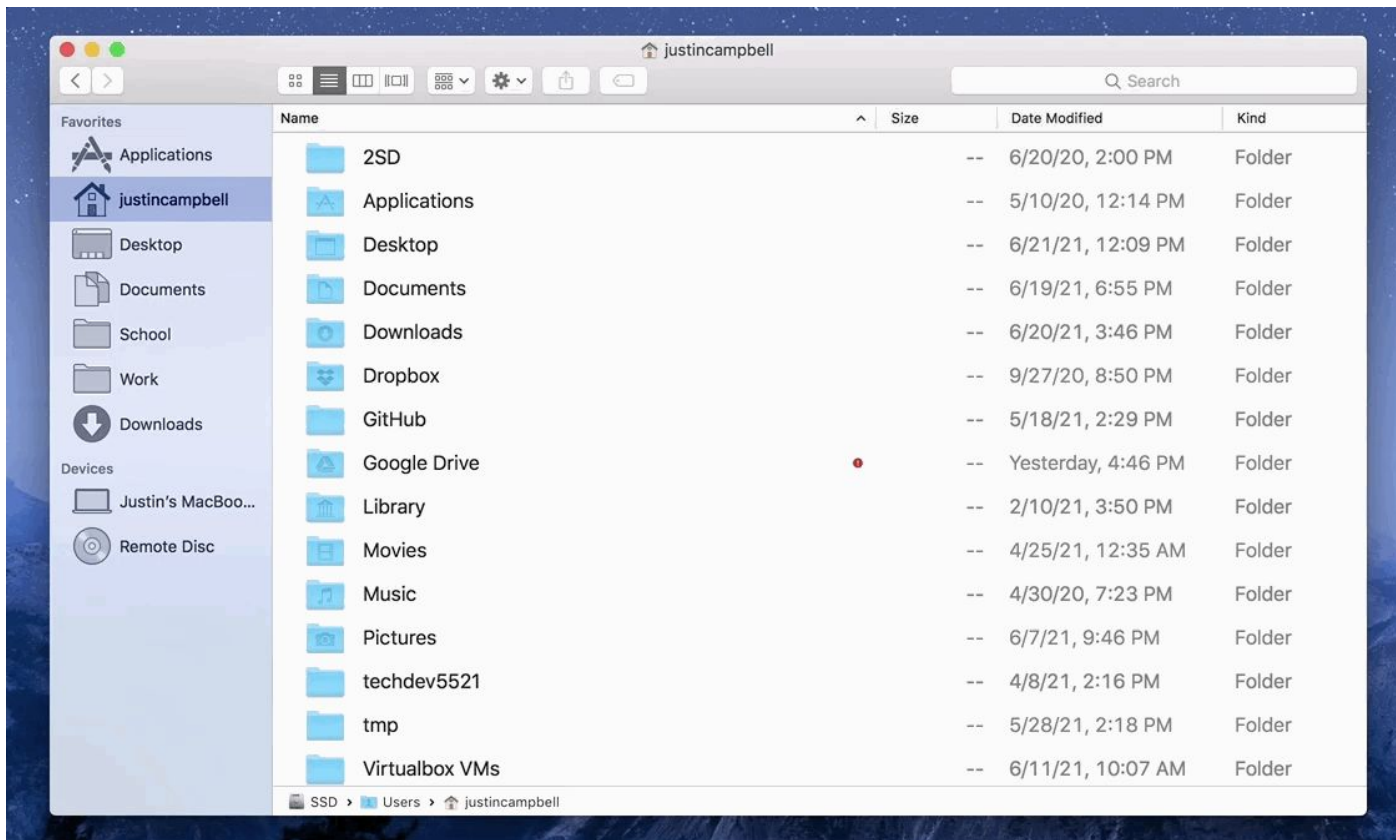
Drag 'n' Drop: macOS



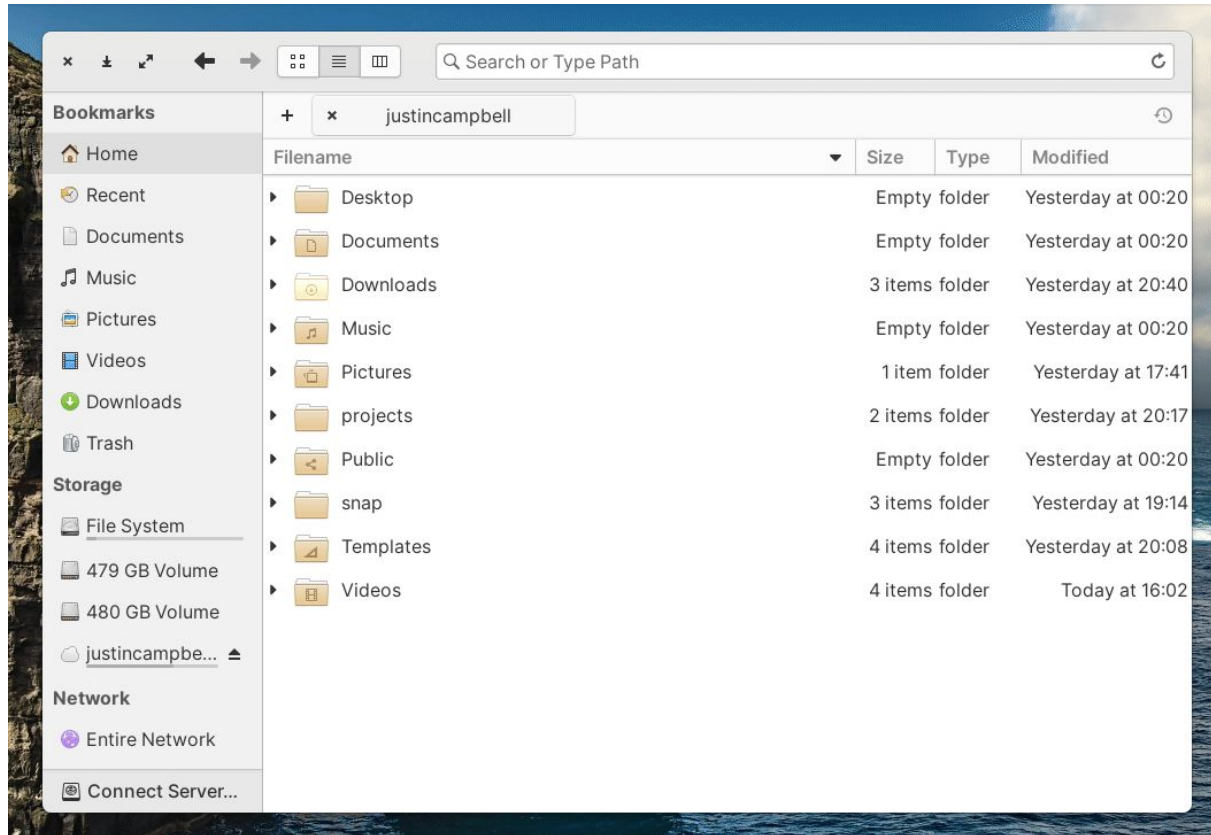
Drag 'n' Drop: elementary OS



Type to Filter: macOS



Type to Filter: elementary OS



Terminal Font Size: macOS

```
Last login: Sun Jun 20 23:51:59 on console
```

```
justincampbell@Justins-MacBook-Pro-2 [~]
```

```
$ █
```

Terminal Font Size: elementary OS



Text Selection: macOS + VS Code

```
<?xml version="1.0" encoding="UTF-8"?>
<!-- Copyright 2021 Justin Campbell <campbell.justin.tyler@gmail.com> -->
<component type="desktop">
  <id>com.github.techdev5521.elementary-hello-again</id>
  <metadata_license>CC0</metadata_license>
```

Text Selection: elementary OS + Code



The screenshot shows the Code editor interface. At the top, there is a tab labeled "x hello-again.appdata.x...". The editor contains the following XML code:

```
1 <?xml version="1.0" encoding="UTF-8"?>
2 <!-- Copyright 2021 Justin Campbell
   <campbell.justin.tyler@gmail.com> -->
```

The text "<campbell.justin.tyler@gmail.com>" on line 2 is selected, indicated by a blue highlight and a vertical selection bar.



**Why am I just
complaining?**

Notice What I Didn't Say:

- I couldn't install elementary OS
- I couldn't connect to the Internet
- My [insert peripheral here] didn't work.
- My display driver wasn't configured properly.
- etc

elementary OS is the **most accessible desktop Linux experience** I've had as a low vision user.

elementary OS had the **best
developer story** I've ever
followed on a Linux desktop.

It's up to **developers** to **design**
their applications with
accessibility in mind.

Thank You