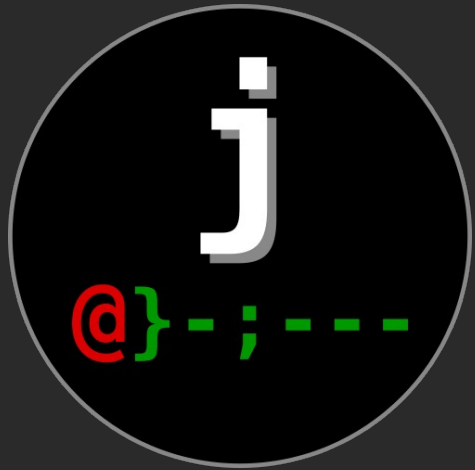


# Baby Steps to Freedom

A long-term strategy to win hearts & minds.



j u n k t e x t

Lorem Ipsum

Presented by:  
William Paul Liggett

Date & Conference:

March 20<sup>th</sup>  
LibrePlanet 2022

# \$ whoami

**Name:** William Paul Liggett

**Speaks:** Java, Python, PHP, & HTML5/CSS3/JavaScript

**DBs:** MySQL, PostgreSQL, Oracle, SQLite, etc.

**now():** NVCC | junktext | BPB Publications

**Past:** Senior Software Engineer, Non-Profit Ed.,  
IT Proj Mgr, SysAdmin, U.S. Marine Corps

**.edu:** M.S. in Info Sys. Tech, Bachelor's in IT

**Certs:** Security+, Network+, A+, and AWS Cloud

**Before I begin...**

**I**



**Free Software!**

# Why do I love Free Software?

- \* Open Education:

I can see and learn from another person's code!

- \* Trust:

I am more confident that it will not spy or steal data or information from me and others.

- \* Human Rights: (User Freedom)

Free Software isn't just about software, it is about respecting people and treating them fairly!

# However...

- \* I will start with a **gloomy assessment**.
- \* Next, I will provide **constructive critiques**.
- \* Finally, I will explain how to use “**baby steps**” to help get more people to love **free software**.
- \* **Warning:** This is a **long-term strategy**. Assume people will still use **proprietary** or **DRM-based** software for the **near-future**.

# The state of Free Software:

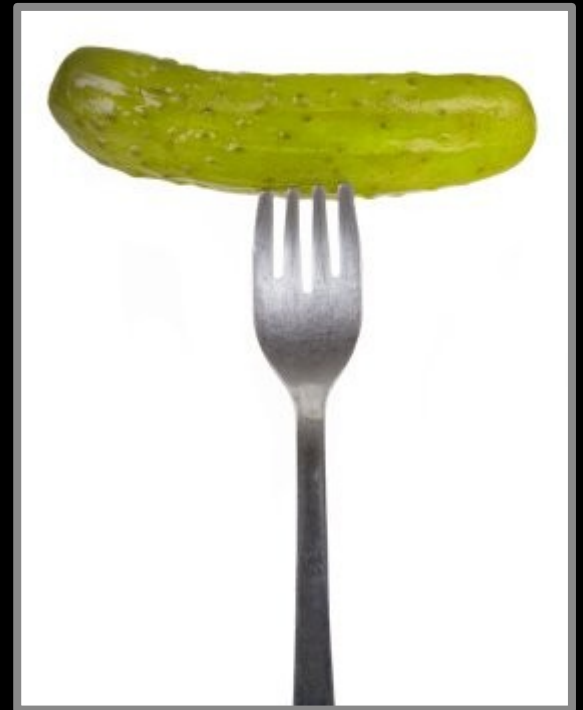
We are “in a pickle.”

**pickle** (pick·le):

*Informal noun.*

3. **an awkward or difficult situation.**

*“To be in a pickle.”*



Definition: Collins English Dictionary, 12<sup>th</sup> Edition. (2014)

Image By: **Maggie Mudd Photography**. (2007). License: Creative Commons Attribution 2.0 (CC BY-2.0).

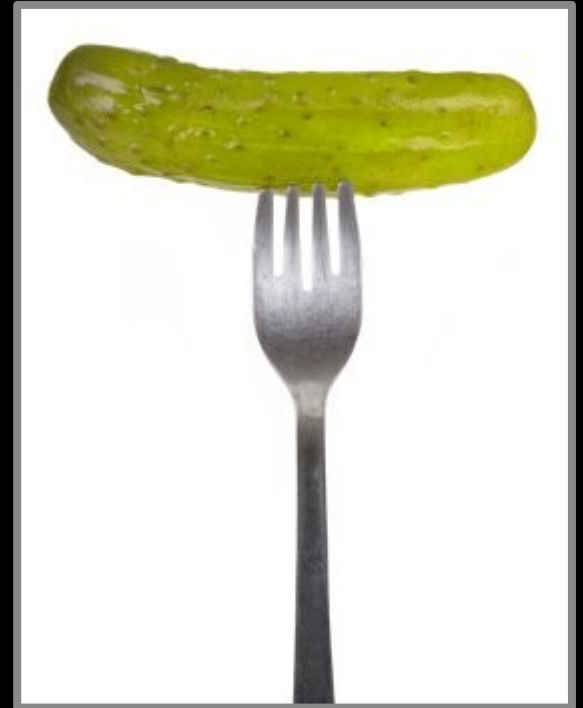
# Why are we in a pickle?

**1.** Most people don't like learning about software licenses.

Once you **mention** the word "**copyright**", you have **lost their attention**.

**2.** Most software is infused with **free software**, but people don't care (**see point #1**).

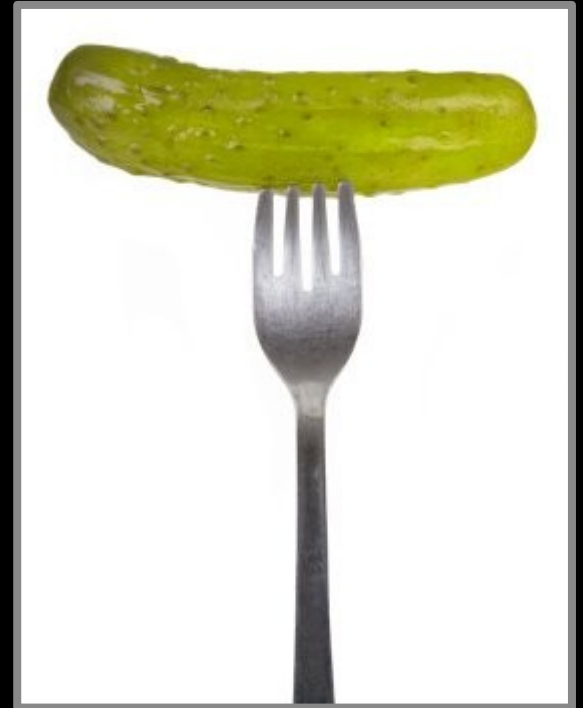
**Amazon, Google, Apple, Microsoft, etc.**  
**all use/rely on it for their software.**



# So, how do we get ourselves out of a pickle?

Explain the following to everyone?

- \* Legal Theories on Copyright
- \* Software Licenses:
  - \* Proprietary
  - \* Free Software
    - \* Copyleft vs. Permissive
- \* GNU/FSF vs. OSI vs. F/LOSS





**This method works best for  
studious computer nerds, not most people.**

**Explain the following to everyone?**

- \* **Legal Theories on Copyright**
- \* **Software Licenses**
  - \* **Proprietary**
  - \* **Free Software**
    - \* **Copyleft vs. Permissive**
- \* **GNU/FSF vs. OSI vs. F/LOSS**



**Side Note: This is what I require  
my college students to know! 🤪**

**Explain the following to everyone?**

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**Side Note:** This is what I require  
my college students to know! 🤓

Want to see my lecture on  
how I teach college students?

See my talk from the previous LibrePlanet 2020:  
(Includes slides!)

[https://media.libreplanet.org/u/libreplanet/m/  
how-to-teach-students-about-free-software/](https://media.libreplanet.org/u/libreplanet/m/how-to-teach-students-about-free-software/)

My concept of **Baby Steps** is similar to the following:

You may notice the theme of **LibrePlanet 2022** is to:

“urge people to continue to make **free software** part of their daily lives, one decision at a time.”

The **FSF** also started the **Freedom Ladder** campaign:

“gradual process to eliminate nonfree software”

# Baby Steps to Freedom

Why little steps are needed.

Most people...

- \* Barely understand computers.
- \* Don't have time to learn **all about** software freedoms and why they should care.
- \* Rarely hear about free software issues from:  
**News, teachers, business leaders, politicians, religious leaders, movies, music, or friends.**

# Baby Steps to Freedom

## Why little steps are needed.

Most people

### Baby Step Tip:

If you are active in any of these areas, then help spread the word there!

Example: **Tell a musician about Audacity!**

\* Bare

\* Don

fr

\* Rarely hear about free software issues from:  
News, teachers, business leaders, politicians,  
religious leaders, movies, music, or friends.

# Baby Steps to Freedom

## Why little steps are needed.

Most truly free software (e.g., not Android)...

- \* Is not well-funded. Donation-based mostly.
  - \* Or, the “pro” version is proprietary.
- \* Can suffer from maintenance problems because of the lack of funding or development help.
- \* Has some quirks or is not newbie-friendly.
  - \* Again, not enough \$\$\$ to maintain/improve.

# My Personal Road to Freedom

- 1<sup>st</sup> Era:** Playing **proprietary** video games as a kid.
- 2<sup>nd</sup> Era:** Mastering **MS Windows** (DOS, Registry, etc.)
- 3<sup>rd</sup> Era:** Learning how to program/network/hack.
- 4<sup>th</sup> Era:** Exploration of "**Linux**" **without knowing much** about **GNU/FSF** or software licenses.
- 5<sup>th</sup> Era:** I now teach others about **free software**.



# Let's look more closely about my story. What motivated me?

**1<sup>st</sup> Era:** Playing **proprietary** video games as a kid.

## Why?

- \* Because **kids like to play games!**
- \* Most young **kids don't care about legal or potential ethical software aspects.**

Let's look more closely about my story.  
What motivated me?

2<sup>nd</sup> Era: Mastering MS Windows (DOS, Registry, etc.)

Why?

- \* I was fascinated with the computer my family had.
- \* I began to teach myself all about it.

# Let's look more closely about my story.

## What motivated me?

**3<sup>rd</sup> Era:** Learning how to program/network/hack.

### Why?

- \* I wanted to know how the computer “**magic**” worked.
- \* I taught myself and sought out computer classes.
- \* The power to abuse / cause mischief (“**hack**”) with computers also sounded **interesting**!
  - \* *I did not try to cause harm to others, though.*

# Let's look more closely about my story.

## What motivated me?

4<sup>th</sup> Era: Exploration of "Linux" without knowing much about GNU/FSF or software licenses.

### Why?

\* "Oh, there's this Linux system that is powerful, great for servers, free (\$0.00), and hackable?"

"I'm definitely going to learn about this!"

\* Legal concepts like copyright sounded boring!

# Let's look more closely about my story.

## What motivated me?

**5<sup>th</sup> Era:** I now teach others about **free software**.

### Why?

- \* After I got hooked on "**Linux**", I started to **slowly get introduced** to concepts like:
  - \* Organizations: **GNU, FSF, OSI, Mozilla, Apache**
  - \* Licenses: **GPL, LGPL, MPL 2.0, BSD 3-Clause**
  - \* Legal: **Copyright, Patents, and Trademarks**
- \* Afterwards, **I wanted to teach these ideas!**

# Baby Steps:

It is based on psychology.

“Nudge Theory” of behavioral science/psychology:  
Most people can be influenced by little hints.

- \* Fruits first, desserts last, in a cafeteria.
  - \* People will eat fruit more often.
- \* Sign: “Take the stairs, stay in shape!”
  - \* Less people will use the elevator.

# Carefully taking Baby Steps

Try to not sound judgmental or elitist.

Rule #1: Do NOT judge people.

## Bad Nudge:

“Ugh, you’re a developer and you use Windows?”

## Good/Fun Nudge:

“Hmm, you use Windows? But, all the cool people use GNU/Linux! Come join us!”

# Carefully taking Baby Steps

Don't talk a person's ear off.

(If you are not teaching students...)

**Rule #2: Keep it simple, stupid!**

## Bad Nudge:

Anything that cannot be explained in **<5 minutes**.

## Good Nudge:

- \* 1-5 minutes max!
- \* Don't get too complex.
- \* Focus on: **more privacy, trust, and control.**



# Carefully taking Baby Steps

We might need to look inward first.

Rule #3: We need a strong community.

## Bad Nudge:

“Open Source Software is a bad phrase.”

## Good Nudge:

“Open Source Software is also called Free Software.”

Currently, we are a  
divided community.

Free Software  
GNU/Linux

vs.  
vs.

Open Source Software  
Linux

However, these terms are so entrenched now...

- \* Free Software Foundation (FSF)
- \* Open Source Initiative (OSI)
- \* The Linux Foundation
- \* Red Hat Enterprise Linux
- \* F/LOSS, FOSS, and Libre (more neutral)

# A word about words...

The goal is freedom. Not word choice.

## My two observations:

1. “Open Source Software” is more widely used than “Free Software”.
2. “Linux” is more widely used than “GNU/Linux”.

## However, I agree that:

- \* Many people who have heard of “Open Source Software” and “Linux” do not understand the values of Free Software.

# Explaining Open Source Software to Educate People about GNU/FSF

“Let’s talk about Open Source Software:

The original term is called Free Software which came from the GNU Project and the Free Software Foundation (FSF).”

# Explaining Linux to Educate People about GNU

“Let’s talk about Linux:

Many people are familiar with Linux as an OS. Technically, Linux is a kernel. Also, a more respectful term is to say GNU/Linux as the OS was started by the GNU Project in the early 1980s.”

# Infuse **Freedom** into Open Source Software

“Open Source Software gives you  
**four essential freedoms.**”

## Freedom to:

0. **Run** the software.
1. **Study** and **modify** the code. **More trust & privacy!**
2. **Redistribute** the software.
3. **Distribute** modified versions.

“Also called **Free Software**, like in terms of freedom.”

# Team Freedom

Let's embrace each other, please?

meet the free software gang



# Moving onto: Baby Step Strategies

More people to use or ❤️  
Free Software

---

- \* Small, simple suggestions.
- \* Don't let perfect be the enemy of good.
  - \* Temporary sacrifices!

More money or developers  
to support Free Software

---

- \* Give/help yourself.
- \* Inform others.
- \* Project Leader?  
**Sell your software!**



Get more people to use Free Software  
If they don't use it, they won't love it!

Baby Step: Recommend one, easy-to-use replacement.

- \* Example: Firefox instead of Google Chrome.
- \* Explain that Firefox:
  - \* Doesn't try to collect all of their data.
  - \* Gives you more privacy.
- \* Tip: Don't fret about DRM for now (IceCat).  
I know, DRM is terrible. Remember: Baby steps!

# Web Browser Statistics (Feb 2022): gs.statcounter.com: Worldwide, All Platforms

**Chrome: 62.8%**

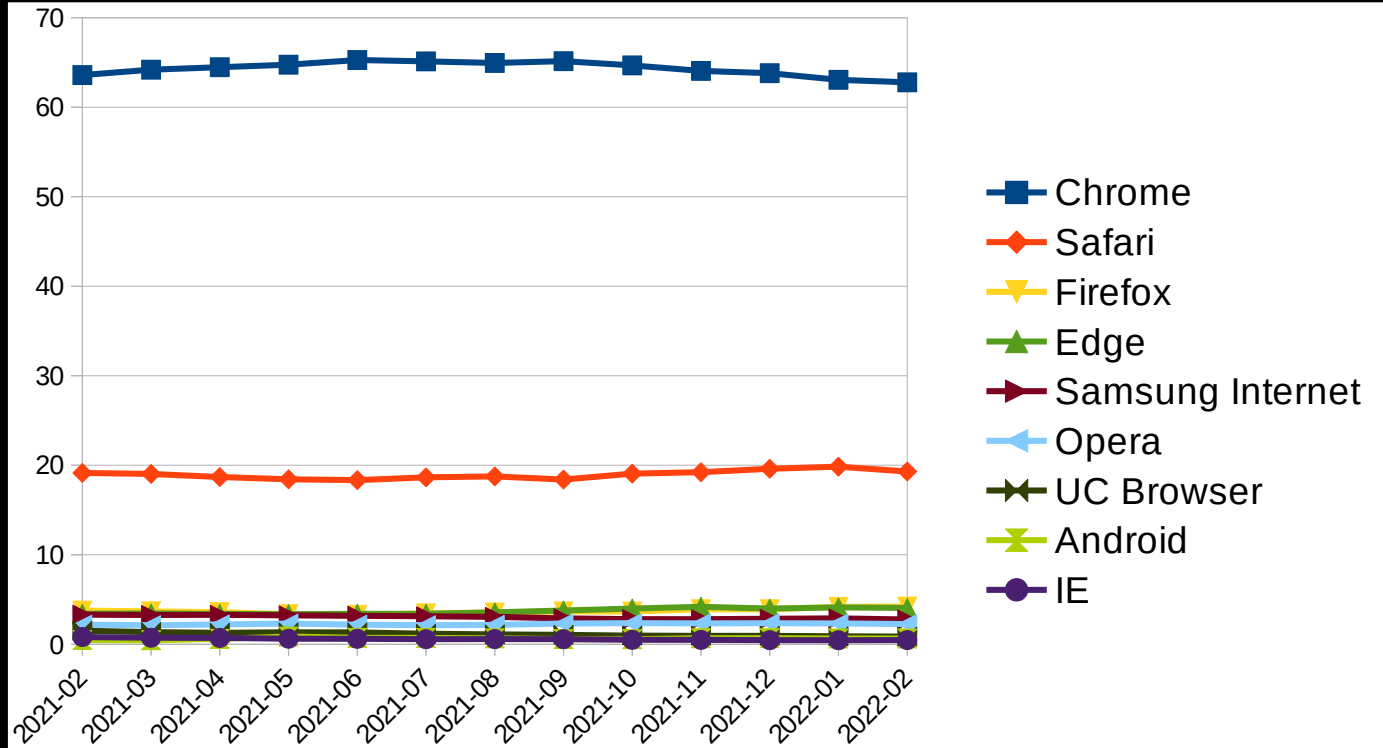
**Safari: 19.3%**

**Firefox: 4.2%**

**Edge: 4.1%**

**Samsung: 2.8%**

**Opera: 2.3%**



Get as many people to use Firefox!  
It works on all major platforms.

## Firefox works on:

- \* GNU/Linux
- \* Microsoft Windows
- \* macOS
- \* Android
- \* iOS

(Firefox uses the weak copyleft MPL 2.0 license.)

# Other Simple Suggestions

## Desktop (Windows or Mac):

- \* Office Documents: LibreOffice
- \* Video/Audio Player: VLC
- \* Gaming: 0 A.D.
- \* Graphics: GIMP, Inkscape, Krita, Blender

## Mobile (Android or iOS):

- \* Secure Conversations: Signal Private Messenger

# Help popularize Free Software!

If they don't know about it, they won't care about it.

## Baby Step: Advertise a Free Software project!

\* Visual cues: Stickers, T-shirts, hats, cups!

\* Word-of-mouth: Casually talk about a project.

“Ooo, I really like **Firefox**'s new updates!”

“Want more privacy? Check out **Tor** or **IceCat**!”

Help them take another Baby Step.  
Explain what DRM is (in <5 minutes)!

Baby Step: Discuss DRM concerns with Firefox.

\* Tip: Don't try to explain too many ideas at once! Otherwise, people may tune you out!

\* Can help get more interest in IceCat!

(IceCat is the DRM-free version of Firefox.  
It is actively developed, but needs help!)

# Simple DRM Explanation

DRM: Digital Restrictions Management

“DRM is a weird legal concept.

Imagine that you bought a physical book.

Now, say you read the book and you want to give it away to a friend. Is this a crime? Nope.

But, it can be a crime if it's an e-Book!

Make sense? No! Hence: DRM is weird and terrible.”

# DRM Concerns with Firefox

Lets you watch Netflix, etc.

## Digital Rights Management (DRM) Content

Play DRM-controlled content [Learn more](#)

- \* Be aware that **most people** want the ability to **watch Netflix, Hulu, etc. in their web browsers.**
- \* So, again, **DRM** may be temporarily needed for now.



If you disable the **DRM** in **Firefox**...  
(Meaning, a person can't watch Netflix now.)

Most people will likely...

- \* Think Firefox is a **stupid** web browser.
- \* Go back to using Chrome, Safari, or Edge.

Some people (like **0.5%** of them)...

- \* May **really care** a lot about **anti-DRM** efforts after explaining to them what **DRM** means.

But, getting rid of DRM currently is very hard!  
Priority for now: **Awareness campaign!**

Don't let perfect be the enemy of good.  
Use a gradual, long-term strategy.

Baby Step: Encourage solid foundations of freedom.

- \* The average person is intimidated by computers.
- \* Therefore, most people want easy solutions.
- \* I will list out some choices that I know are not popular by members of GNU or the FSF, but...
- \* Remember: We need people to start somewhere.
- \* This was similar to my path to freedom, too!

Don't let perfect be the enemy of good.  
Use a gradual, long-term strategy.

Baby Step: Get more people to use Ubuntu.

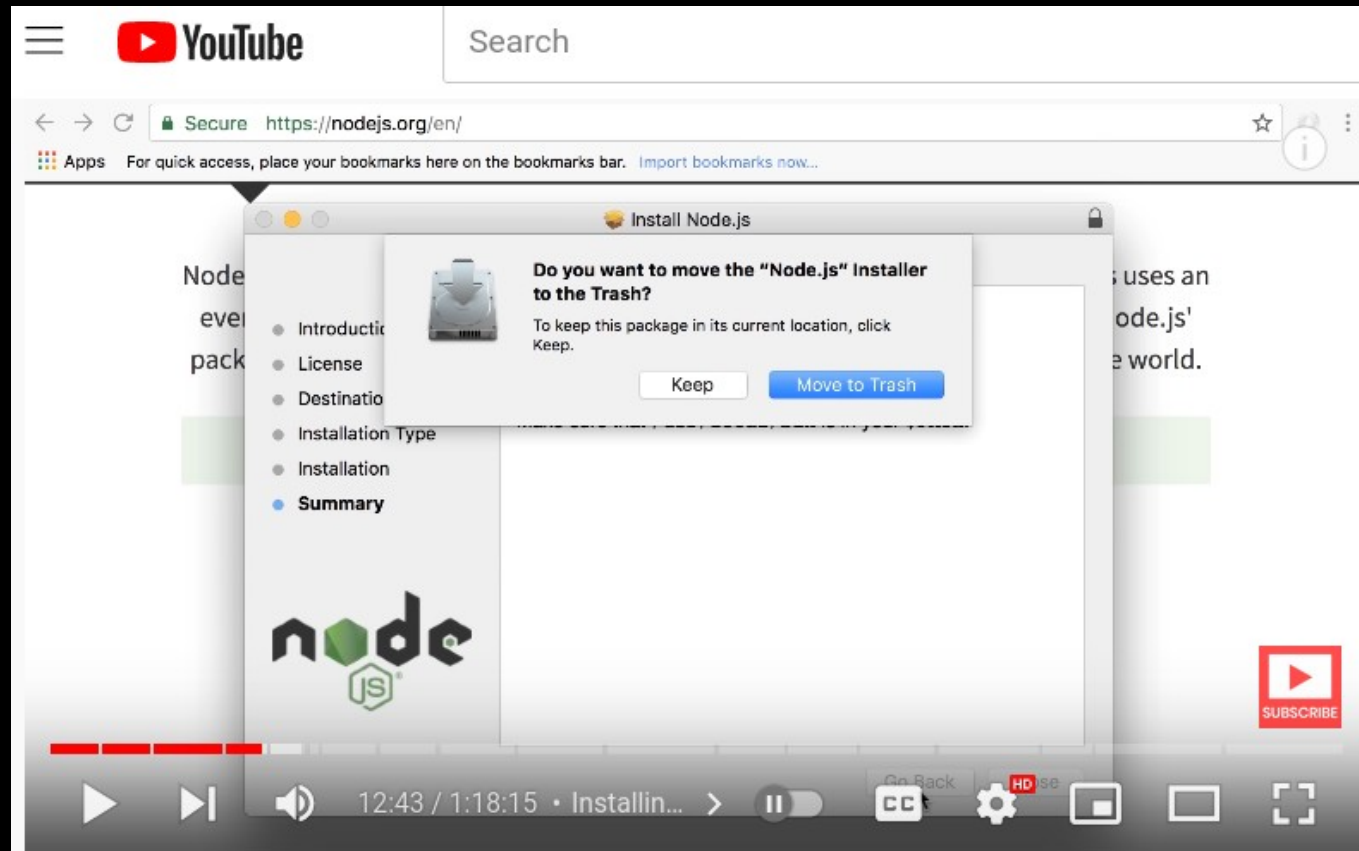
- \* I know, this isn't an approved GNU listed OS.
- \* Trisquel and PureOS are more free, but Ubuntu solves more hardware and software headaches.
  - \* Yes, Ubuntu may install proprietary software.
- \* After a person gets comfortable with Ubuntu: then recommend Trisquel or something else!

Don't let perfect be the enemy of good.  
Use a gradual, long-term strategy.

If you have the chance to get someone to use  
Ubuntu instead of Windows or macOS...

They are now actively using GNU/Linux and hundreds  
of other free software tools!

But, if Trisquel is too difficult for them, then,  
guess what? That person will likely not switch to  
GNU/Linux! (Remember: Baby steps!)



# Node.js Tutorial

Shown using:

- \* macOS
- \* Chrome browser

4 million views!

Problem:

We **need** more developers who want to use **GNU/Linux**.

**Ubuntu** is easiest path forward.

Node.js Tutorial for Beginners: Learn Node in 1 Hour

4,037,833 views...

👍 67K    🗨 DISLIKE    ➦ SHARE    ✂ CLIP    ≡+ SAVE    ...



Programming with Mosh ✓

2.37M subscribers

SUBSCRIBE

# To be clear on Ubuntu: (It's all about the Baby Steps, baby!)

- \* I personally use Ubuntu. Why?  
To encourage others to use **GNU/Linux** as well!
- \* But, I would be **EXTREMELY HAPPY** if **Trisquel** becomes more popular than Ubuntu.
- \* Or, if **Ubuntu** itself becomes more free from **proprietary** dependencies (firmware/software).
- \* I shamed **Ubuntu** over their Amazon deal (2013).

# Steam Platform for Gaming

People want to play computer games!



STEAM®

- \* **Upside:** As of March 10<sup>th</sup>, 2022, there are:  
**9,709 games** for **GNU/Linux** via **Steam!** [[Link](#)]
- \* **Downside:** Most games are **proprietary** with **DRM**.
  - \* But, getting a **Windows** gamer to **switch** to **GNU/Linux** via **Steam** is a **massive Baby Step!**

Microsoft Office 365 (Office.com)  
works on GNU/Linux via Firefox!

I personally use LibreOffice wherever possible.  
\* I also inform Windows and Mac users about it.

But, unfortunately, Microsoft documents are in  
a quasi-free/proprietary format.

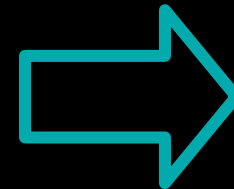
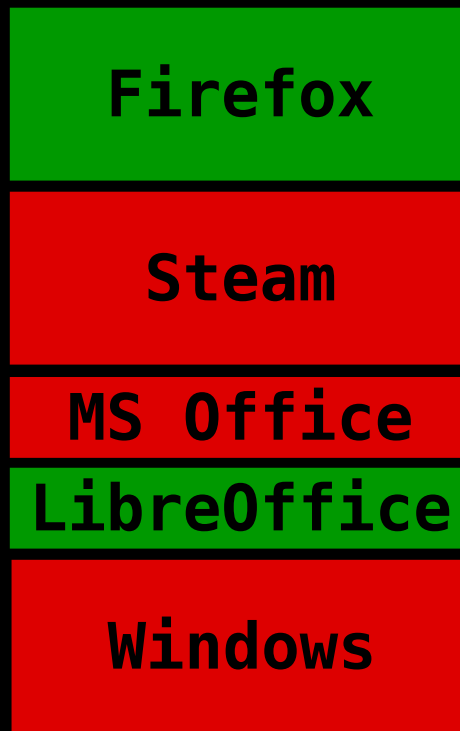
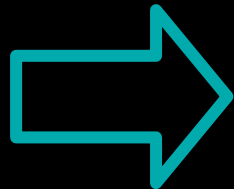
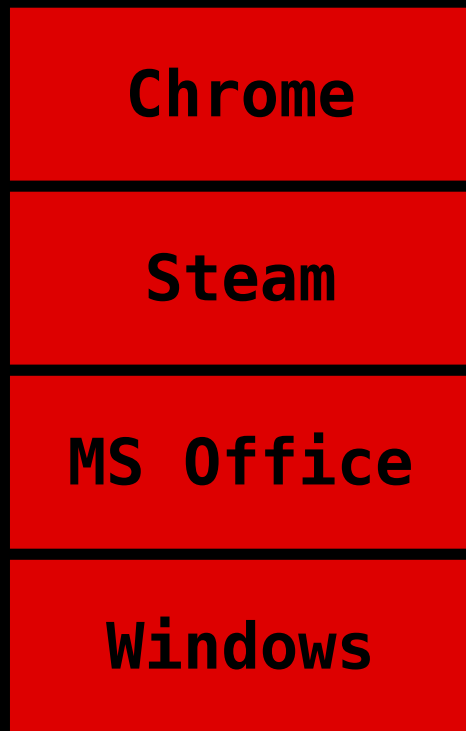
\* Only Microsoft can properly read/write docs.

So... to help encourage standard office usages of  
GNU/Linux: Microsoft Office 365 does in fact work!



# Baby Steps Strategy: Part I

## Example of a Windows User



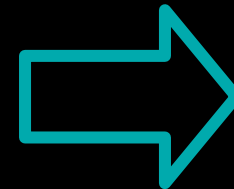
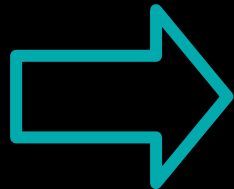
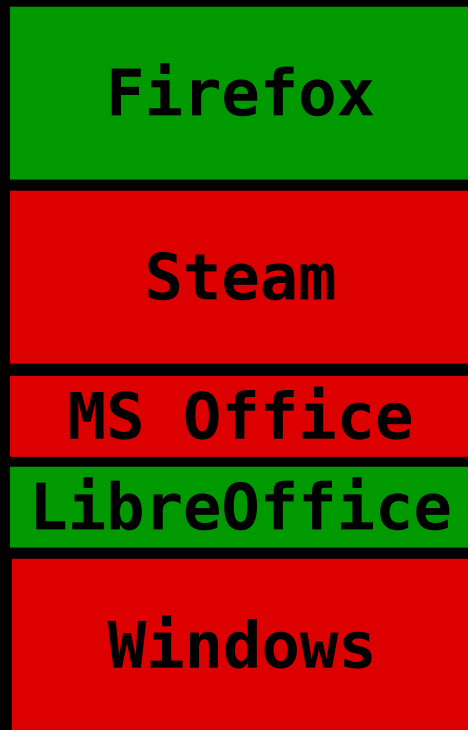
“Hmmm... I wish more software cared about my privacy.”



Ubuntu  
(Introduce)

# Baby Steps Strategy: Part II

## Example of a Windows User



“This idea of free software is great. I want more!”



Trisquel  
(Introduce)

# Get more money or developers to support Free Software

Scenario: More people are now using Ubuntu.

- \* The **software industry** will **care** more to support **GNU/Linux**. Helps all distros (e.g., **Trisquel**).
- \* **Websites** will ensure it **works** for **Firefox**.  
(Prevents the trend where **only Chrome works**.)
- \* More **developer positions** will require **GNU/Linux** skills to **reduce Windows/Mac** dev environments.

# If you are a developer: Sell your software!

- \* Most free software projects: **Funded by donations.**
- \* But, **many people don't value free (\$0.00) things.** Like my wife, for instance. And **other people.**
- \* **Think about it:** Why do people stand in line to buy the latest, expensive iPhone?
  - \* The **cost** makes it seem **chic/cool/important.**
  - \* Also: **Money** helps **ensure it will be supported.**

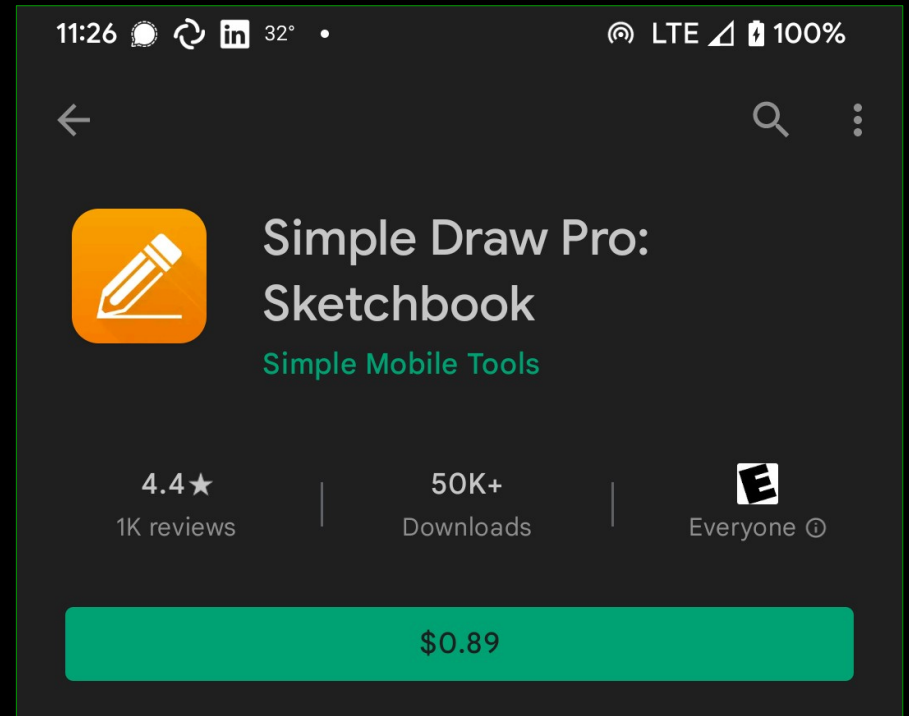
# If you are a developer: Sell your software!

- \* Yes, you can sell software under the AGPL and other free software licenses.
- \* Article: Selling Free Software  
<https://www.gnu.org/philosophy/selling.html>
- \* Also, you can make money by being a freelance developer, releasing your code as free software.  
“I am creating the software, but you can use it how you want, change it, and such under the AGPL.”

# Selling an Android App

$\$0.89 * 50,000 = \$44,500$

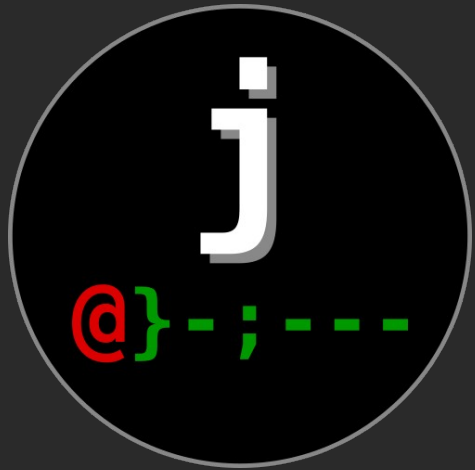
- \* This is an “Open Source” app for **\$0.89** (USD).  
(License: **GPL 3.0**)
- \* On **Google Play** & **F-Droid**
- \* Opinion: **F-Droid** needs to support payments **beyond** Bitcoin in the future.



# Any questions/comments?

- \* Hopefully, you don't want to throw (**too many**) **eggs** or **rotten fruit** at me!
- \* **Long-term**, I want a world where **Free Software** is the default, preferred software.
  - \* Same goes for **free hardware and networking**.
- \* We can't get there without **more** **hearts & minds!**

Please keep in touch!



j u n k t e x t

Lorem Ipsum

William Paul Liggett

<https://junktext.com>

 @junktext