

Minetest and Open Source

- Contributing to open source for over decade
- Talk about
 - That project
 - Experiences contributing
 - Being an open source maintainer
- Finish by giving some tips on how to get involved
- Disclaimer
 - My experience and opinions
 - Open source projects are different

What is open-source software?

- Use
- Study / learn from
- Modify
- Redistribute
- Sell
- ...for anyone and for any purpose

Open source software is software with source code that anyone can inspect, modify, redistribute, and sell.

- Contrast to closed source
 - Instagram and personal data, no source code
 - Modify to add new accessibility feature
- Possible with open source
 - Developers share code with the world
 - Developed in the open
 - Can add accessibility feature
- Open source is not just about having the source code
 - Rights are essential

You already use open-source software

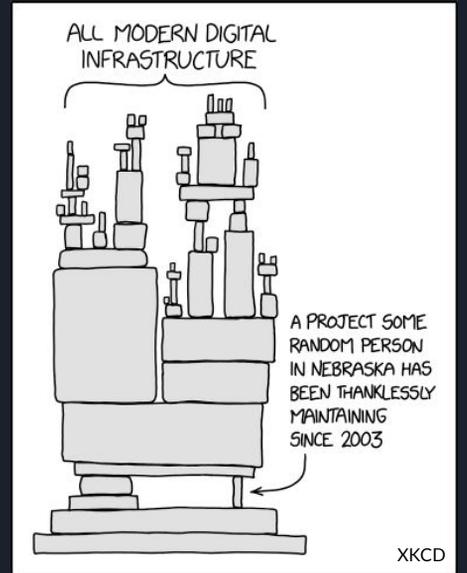
Fully open source



Uses open source

Everything

Partly open source



- You already use open source
- Using open source directly
- Projects that are mostly open source
 - Chrome is Chromium with closed source additions
 - Android is open source, why so many diff manu can make phones
- Projects that use open source libs or components
 - Pretty much everything
 - Rare for a project not to use open source
 - Industry relies on open source

Why Open Source?

- Use without restrictions or rug-pulling
- Efficiency and sharing work
- Better for user freedom
 - 'Free Software' - free as in freedom

- Not many restrictions
 - No oppressive contract / EULA
 - Corp changing terms
 - If devs make a change - fork
- Industry can share work
 - Reinvent
 - Makes dev much cheaper
- Good for user freedom
 - More control over code on computer
 - Free software - free as in freedom
 - Different names for the same thing
 - Different groups different ideologies
 - Advocates, computer freedom, users should be able to modify and tweak
 - OSS just about practical benefits



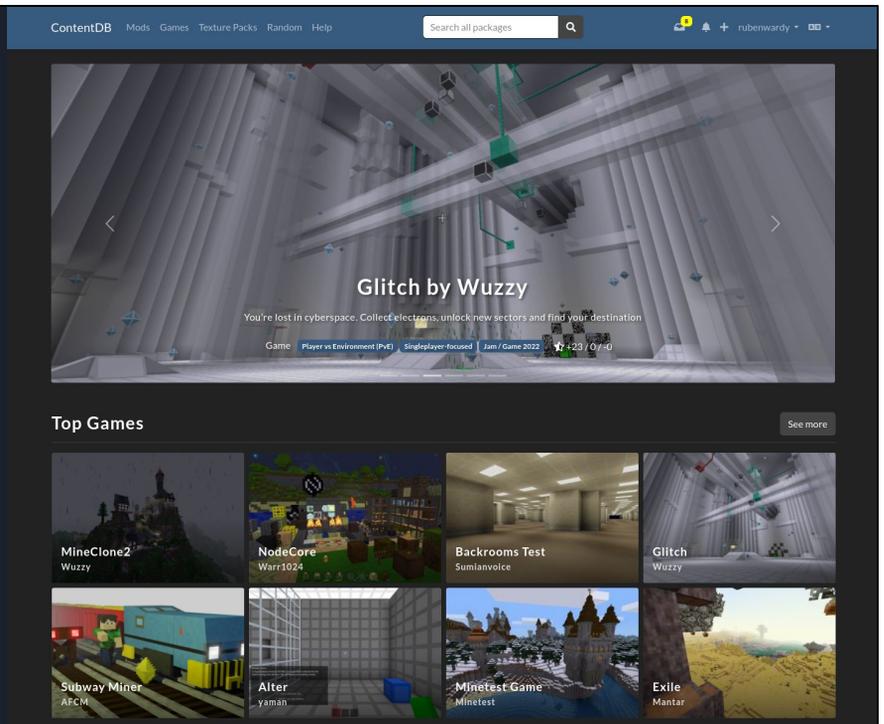
Minetest

Open-source voxel game creation platform
minetest.net

- Minetest
- Terrible name, temporary
- Open source voxel game creation platform
- Voxel
 - Made up of cubes
 - Minecraft, not the first
- Game creation platform
 - Make and share games
 - Game engine and GCP are the same thing
 - Platform => can also share games

Developers can make and share games

Players can find games using Minetest



- Dual audience
- Developers => make and share games
- Players => find and play games
 - Inside the Minetest client, ContentDB
 - Servers

Started as a user



- First found the project
- Started as a player, servers
- Making mods. Lua
- Making games. CTF
 - Two teams of players battle to claim the other team's flag whilst defending their own
 - Not multiplayer fan, destructive environment
- Bugs and things I wanted. Contributing to the engine

Contributing to open source



- Error dialog
 - Log files
 - User interface
- Cool thing about open source

Contributing to open source

- You have the code
- Volunteer project. Self-driven, work on what drives you
- Community-driven, developed in the open
- Can contribute in more ways than just code

- You have the code. If something annoys you, you can fix it
 - Closed source, soulless company
- Volunteer and community run
 - No boss
 - Self-driven
- Developed in the open
 - Get involved
 - Issues and chatrooms
 - Disagree? Fork
- More than one way to contribute
 - Bugs
 - Documentation
 - Art
 - Help users
 - Participate

What does an open source maintainer do?

- Concept review
- Code review and merging PRs
- Contributing changes
- Everything else

- Invited to be a maintainer
- Someone on core dev team with commit access
- Concept review
 - Trickier bits, lots of you and want to do
 - Prioritise. Be mindful of whether something makes other things more difficult in the future
- Code review
- Still act as contributors
 - Specialities and priorities
 - I focus on API, UI, and UX
 - ContentDB
- Everything else
 - Web design, press releases, outreach, moderation, community management, and mentoring

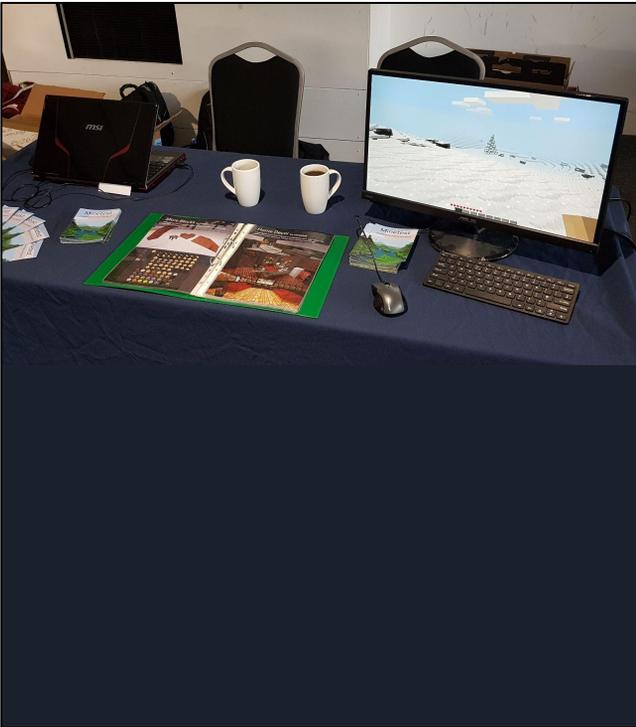


It's about the people too

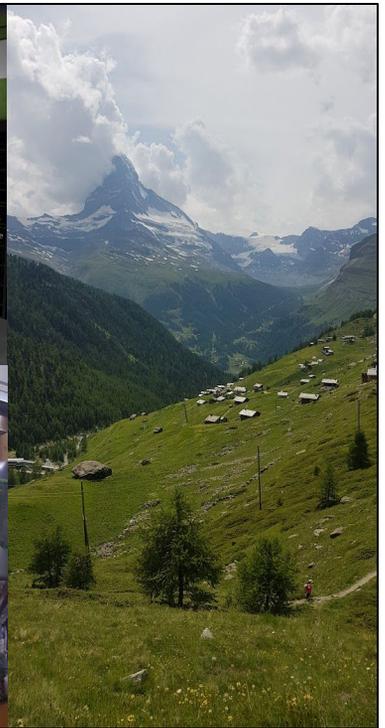
- Not just about code
- People are an integral part
- Big international community all working and collaborating towards a common goal
- Pretty awesome
- I wouldn't be working on Minetest if it wasn't for the social part

Freenode Live, Bristol

2017 and 2018



- Not just online
- In 2017 and 2018, I represented MT at freenode live. OS conference in Bristol
- Set over a weekend. We ran a stall and talked about the project
- Opportunity to meet people from wider community
 - Other stalls, talks
 - Food and drinks
- Cool experience

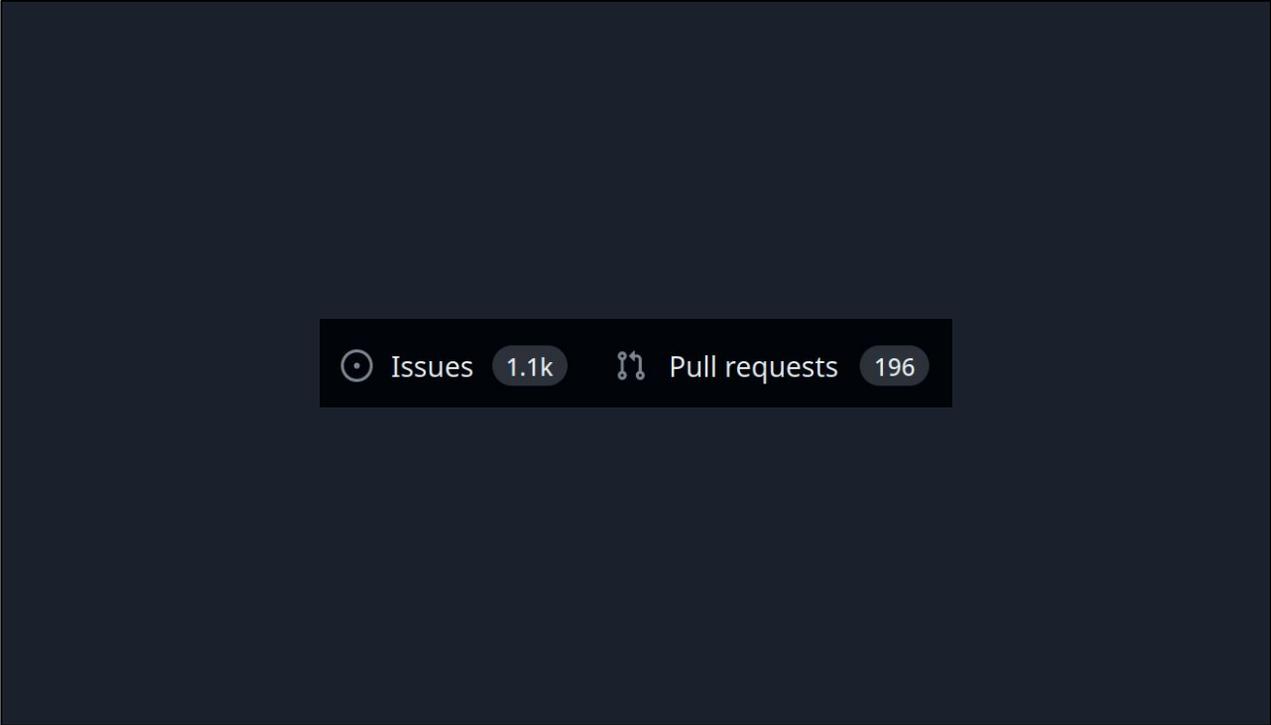


- Collab with CERN in 2019
- CERN
 - Non-profit research org
 - Largest particle physics lab
 - Large Hadron Collider
 - World Wide Web
- 30th anniversary of the web
 - CERN engineer reached out
 - Long weekend, group of MT game devs
 - Game to teach about creation of WWW
- Minetest inedu
 - Policies that restrict the use of closed source
 - LibreOffice and MS Office
 - MT is FOSS => more accessible
- Funded by UN Mission to Geneva. Open source
- Switzerland, meet up with a friend
 - Climbed a mountain
 - Cool example of the friends you can make around the world by participating in open source

Challenges



- I thought it would be interesting to give a full view not just a rosey one
- Couple of years ago, burnout
- Everything felt difficulty
- Big part of it was just how much there was to do



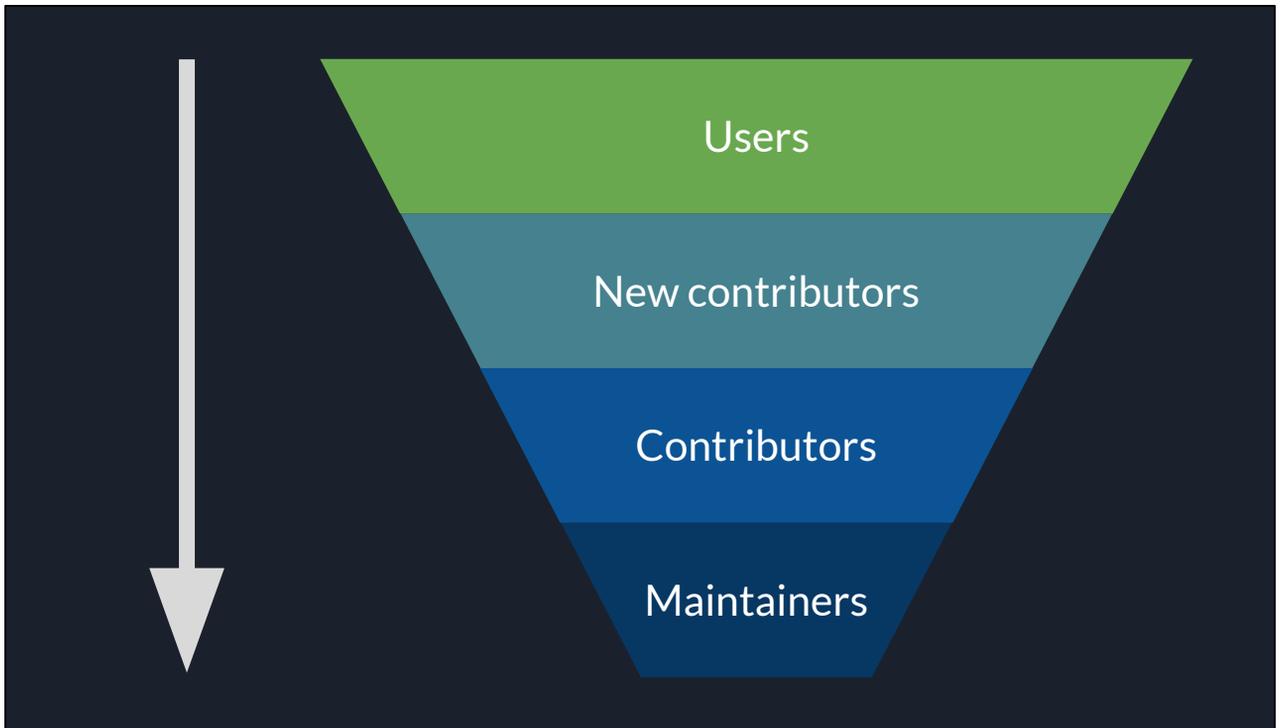
A screenshot of a GitHub repository interface. The background is dark blue. In the center, there is a dark grey rounded rectangle containing two items: 'Issues 1.1k' with a circular icon to its left, and 'Pull requests 196' with a pull request icon to its left.

- Minetest saw a lot of growth.
- Issues were piling up and PRs were flooding in faster than we could review them
- Feel much better now because of a few changes we introduced

Solutions

- Remember that this is just a hobby to me
- Delegate
- Prioritise - create a roadmap
- Recruit more maintainers

- Remember this is just a hobby
 - Spending any more time than I want to
 - Not enjoying => take a break
- Delegated all the stuff I could
 - Review submissions to the content store
 - Triaging
 - Two people
 - Labelling new issues and PRS
 - Was quite time consuming
- Prioritise what we work on. Make it clearer what would be accepted
 - Didn't have a formal roadmap
 - Decentralised dev
 - Frustrating, burnout inducing
 - Brought maintainers together, produced roadmap
- Recruited more maintainers
 - You may be thinking this is obvious



- Maintainer funnel
 - Users => start contributing => gain trust => maintainer
 - Takes a while, possibility of attrition
- Approach to get more maintainers
 - Identify candidates and mentor to get through this process quicker
 - Reduce the requirements
 - C++ expert or code base knowledge
 - Focus on: android, graphics, map gen, UI
- We've seen a big benefit

Number of open Pull Requests against time



How do I start contributing to open source?

- What projects do you use?
- Fix a bug that annoys you or add something you need
- Look for “good first issue” or “beginner friendly” labels
- Don’t be afraid to ask for help
- Hacktoberfest!

- What open source projects already using?
 - More motivated
 - Have an idea of what needs to be done
 - You’ll benefit from your contributions
- Bug that annoys you, a feature you need?
- Good first issue, beginner-friendly
 - These are signposts
- Chat room, forum, or some place
 - Don’t be afraid to use these to ask for help
- Hacktoberfest!
 - Good opportunity
 - More likely to be friendlier to new contributors

The end

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