Being a GNOME maintainer

Best practices and known traps for newcomers and seasoned veterans
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 GTK
 Maintained a bunch of projects
Disclaimer
Part I: My Shot
Part I: My Shot
Figure 1: © Jonathan Blandford
GNOME is People

Figure 2: © Metro Goldwyn Meyer
Processes

Figure 3: Transforming People into Software

Being a GNOME maintainer 13 GUADEC 2020
Part II: The room where it happens
Part II: The room where it happens
I guess I’m gonna fin’ly have to listen to you

- You want to be a developer, stick to coding
- You want to be a maintainer, you get to deal with people
Talk less, smile more

- Code is less important than people
- People scale less than code
- You cannot maintain a large project by yourself
Well, hate the sin, love the sinner

_users don’t know what they want_
Well, hate the sin, love the sinner

- Users don’t know what they want
- Users don’t know how things work
Well, hate the sin, love the sinner

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- Users don’t know how things work
- Users don’t know how to give feedback
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- Users are fundamental
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    ców source of new contributors
Well, hate the sin, love the sinner

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- Users don’t know how to give feedback
- Users are fundamental
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  - source of motivation
Well, hate the sin, love the sinner

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- Users don’t know how to give feedback
- Users are fundamental
  - source of new contributors
  - source of motivation
  - source of demotivation
Well, hate the sin, love the sinner

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- Users don’t know how things work
- Users don’t know how to give feedback
- Users are fundamental
  - source of new contributors
  - source of motivation
  - source of demotivation
- You are a user too
Decisions are happening over dinner

ément, low latency
Decisions are happening over dinner

🌟 High bandwidth, low latency
🌟 Chat (IRC, Matrix, whatever)
Decisions are happening over dinner

- High bandwidth, low latency
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- Video conference
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- High bandwidth, low latency
- Chat (IRC, Matrix, whatever)
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- Conferences
- Remember when those were a thing?
No one really knows how the game is played

- Text files in the repository?
- Wikis?
- Mailing list archives?
- Institutional knowledge passed down by community elders around the fire at sundown?
- A basic micro-pulse to the brain, and teleologically experiencing the whole of the GNOME development community memories?
The art of the trade

- Chat
- Discourse
- Wiki
- Foundation sponsoring for hackfests
How the sausage gets made

- Take your time to teach other people
- Write down all that you know
- Mark issues for newcomers, and outline a solution *that will get merged*
- Ask newcomers to review merge requests
We just assume that it happens

- Design
- CI Pipeline
- Localisation
- Documentation
- Nightly builds
I arranged the menu, the venue, the seating

- GNOME infrastructure
  - Chat/Discourse
  - GitLab
  - Damned Lies
  - help.gnome.org
  - gnome-build-meta
No one really knows how the parties get to yes

- Design team
- Release team
- Code of conduct team
- Foundation board
The pieces that are sacrificed in ev’ry game of chess

- You don’t get to be your unique and precious snowflake
- Ask the design team before you go off the deep end
- Involve the localisation team for user visible text
- Talk to the release team about new dependencies
- Talk to the maintainers of modules you depend on, as well as the ones that depend on you
- You are part of a community; you don’t work in a vacuum
Not every issue can be settled by committee

- Rough consensus
- Steering committee
- (SA)BDFL
- User feedback
- At the end of the day, you have to make a decision
It isn’t pretty

😊 Flames
It isn’t pretty

- Flames
- Character assassinations over Planet GNOME
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🌿 Forks
It isn’t pretty

- Flames
- Character assassinations over Planet GNOME
- Passive aggressive emails to other projects
- Revert wars
- Forks
- Publicly leaving the project with grand theatrical gestures
A quid pro quo

⁻ You can’t always get what you want
Well, we’ll see how it goes

♫ But if you try sometimes well you might find you get what you need
We’ll never really know what got discussed

Figure 4: My typical reaction when people bring up tray icons
Click-boom then it happened

🔗 Decisions happen during a discussion
🔗 Some discussions go on for years
🔗 Reviews, issues, chat, hackfests
🔗 Some are logged, some aren’t
When you got skin in the game you stay in the game

- Group maintenance
- Trading reviews
- Personal responsibility
But you don’t get a win unless you play in the game

🧦 Document your process
But you don’t get a win unless you play in the game

- Document your process
  - How to write documentation
But you don’t get a win unless you play in the game

- Document your process
  - How to write documentation
  - How to write code
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- Document your process
  - How to write documentation
  - How to write code
  - How to contribute a feature
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 문서 your process

• How to write documentation
• How to write code
• How to contribute a feature
• How to write issues
But you don’t get a win unless you play in the game

_document your process
- How to write documentation
- How to write code
- How to contribute a feature
- How to write issues
- How to triage issues
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[*Document your process*]

- How to write documentation
- How to write code
- How to contribute a feature
- How to write issues
- How to triage issues
- How to review a merge request
But you don’t get a win unless you play in the game

🎉 Document your process
   🎉 How to write documentation
   🎉 How to write code
   🎉 How to contribute a feature
   🎉 How to write issues
   🎉 How to triage issues
   🎉 How to review a merge request
   🎉 How to make a release
You get love for it

Figure 5: Feedback for a release well done
You get love for it

Everyone loves you when things go according to plan
You get love for it

Everyone loves you when things go according to plan

Of course, you need a plan first
You get love for it

Everyone loves you when things go according to plan
  Of course, you need a plan first
“Thanks for your patience”
You get love for it

Everyone loves you when things go according to plan

- Of course, you need a plan first

“Thanks for your patience”

- Don’t belittle people that use your software
You get hate for it

Figure 6: Linux kernel subsystem maintainer Hayao Miyazaki
You get hate for it

- People invest time and effort before asking you
- Iteration vs Code drops
- Scratching does not continue once the itch is gone
- “Why can’t you just merge this and fix it later?”
- “You don’t care about users because you won’t merge my code”
You get nothing if you wait for it

- Lack of triage
- Lack of review
- Lack of feedback
  - Even negative
- Lack of commitment
I wanna build something that’s gonna outlive me

💡 Plan for you leaving the project
I wanna build something that’s gonna outlive me

🌱 Plan for you leaving the project
🌱 Take breaks, just to see what happens
I wanna build something that’s gonna outlive me

✍️ Plan for you leaving the project
✍️ Take breaks, just to see what happens
✍️ Nominate lieutenants
I wanna build something that’s gonna outlive me

- Plan for you leaving the project
- Take breaks, just to see what happens
- Nominate lieutenants
- Provide historical context and institutional knowledge
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- Take breaks, just to see what happens
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- Provide historical context and institutional knowledge
- Remove yourself from the equation
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- Provide historical context and institutional knowledge
- Remove yourself from the equation
- If everything else fails, archive the repository
If you stand for nothing, then what do you fall for?

- Part of the ship, part of the crew
- You get to share credit, you get to share blame
- You will be seen as a representative, whether you like it or not
The art of the compromise

Involve the engagement team when you have plans that might be controversial
The art of the compromise

- Involve to the engagement team when you have plans that might be controversial
- Talk to the engagement team when you need help dealing the fallout
The art of the compromise

- Involve to the engagement team when you have plans that might be controversial
- Talk to the engagement team when you need help dealing the fallout
- Get moderators to help you with bad faith actors
Hold your nose and close your eyes

🌸 Stop going to hostile places
Hold your nose and close your eyes

🔑 Stop going to hostile places
🔑 Stop trying to correct people on the Internet
Hold your nose and close your eyes

- Stop going to hostile places
- Stop trying to correct people on the Internet
- Write down your position once, and then leave
Hold your nose and close your eyes

👉 Stop going to hostile places
👉 Stop trying to correct people on the Internet
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👉 Never, ever, ever engage with bad faith actors
Hold your nose and close your eyes

- Stop going to hostile places
- Stop trying to correct people on the Internet
- Write down your position once, and then leave
- Never, ever, *ever* engage with bad faith actors
- Filter, ignore, block, lock down issues, and move on
We want our leaders to save the day

Maintainers:

- **You** have the last word
  - That word may be “no” more often than it is “yes”
- **Respect** different opinions, but don’t be afraid to **dissent**
- You don’t owe **anything** to anybody using your project
- You owe even less to anybody not using it
But we don’t get a say in what they trade away

Users:

- **Respect** the maintainer’s opinion
- They probably thought about this longer than you
- They most definitely will be around longer than you
We dream of a brand new start

Definitely, too much stuff in those private structs needs to be accessed, esp for GtkTreeView/GtkIconView (but not only), it will become an unmanageable mess at some point if I have to LD_PRELOAD almost all exported GTK functions, while copying all of the GTK code. So we had a discussion with Wizzup and parazyd (the guys that I am expecting to create devuan-maemo repo) and we decided that GTK fork is the only sane option.

Figure 7: A perfectly valid option

- Downstream patches
- Fork
- Convince downstreams to pick up your fork
But we dream in the dark for the most part

- Lots of effort
- No guarantee of success
- Novelty wears out fast
- Now you get to maintain a whole project by yourself
Dark as the tomb where it happens

قراءة: Maybe better to get involved?
قراءة: You may convince the maintainer
قراءة: You may change your mind after looking at the problem from a different angle
I’ve got to be in the room where it happens

Sometimes, it’s just nice to have a stress-free day. No drama, no twists.

Figure 8: Something that never happened in the history of GNOME

- You will definitely learn something
- Your opinions will carry more weight
- You might end up being the next maintainer
Click-boom

- Automate **ALL** the things!
  - Cl job for code style, static analysis, ASan/UBSan
- Use more bots!
  - First triage, review requests, auto-closing
- Use **CODEOWNERS**
  - It's great; and if GitLab used it to ping people for a review it would be even better *hint hint nudge* 
  - *nudge*
- Mentor newcomers
  - Review trading, document decisions
- Market your project better
  - Development blog (GTK, Shell), Discourse topics (Tracker)
- Stop reading the comments
  - Dunning-Kruger in users leads to Brain Worms in maintainers
Thank you!
Questions?