

Improving UX Designer Participation in Open Source Software

Masters Final Project Presentation

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1 Client and Problem

Client and Problem

The Canonical Brief asked for a scalable way to make non-code paths **inviting, engaging, and rewarding** across many repositories without introducing heavy process or proprietary tools.

The project responds by **identifying the social and procedural barriers that suppress UX contribution** and translating practitioner insight into a lightweight operating model that fits repository-centred work.

Designers report:

- unclear entry points
- limited recognition
- developer-centric workflows

these make UX work hard to submit, review, and merge

“ There is a power imbalance between designers and developers... developers hold so much more power because they can put something into production - Participant 8 ”

2 Research Question and Aim

Research Questions and Aim

RQ1

What are the **perceived barriers and motivations** for UX designers to participate in open-source software projects?

RQ2

What **changes would make it easier and more worthwhile for UX designers to contribute** to open-source projects?

OBJ1

Analyse interview and literature evidence to explain the barriers and motivations for UX designers' participation in open-source projects.

OBJ2

To **synthesise practitioner insights into practical recommendations** for UX contribution in open-source projects.

3 Literature Review

Literature Review

1 UX work is Undervalued in Open Source Software

Collaboration is difficult due to **asynchronous communication, global distribution, and weak support for non-code artifacts**. UX activities such as research, information architecture, and content design - rarely appear in issue trackers or release planning, and explicit UX roles are still uncommon across projects.

2 Designer and Developer Collaboration Breakdowns

Asynchronous communication, global distribution, and limited support for non-code artifacts make collaboration harder. **Teams need shared artifacts and routines to make design intent and constraints clear**. Breakdowns occur because designers and developers use different representations of the same problems. Shared artifacts help, but governance and clear UX roles matter more.

3 Tools Can Help Bridge Design and Code

Automated tools that convert designs into code reduce translation loss and make UX artifacts more usable for developers. However, they do not solve the deeper participation and governance issues that limit UX impact.

4 Barriers Affecting UX Participation

Designers face social and technical barriers, including **low visibility of their work, unclear norms, and difficulty navigating developer-centric toolchains**. Recognition systems favour code, which reduces UX contributor influence, motivation, and retention. Issue trackers capture only a fraction of UX concerns, especially research and information architecture.

5 Increasing Contributions

UX contribution growth can be measured through merged **UX pull requests, contribution diversity, review times, acceptance rates, and UX debt reduction**. These metrics adapt established OSS contribution measurements specifically for UX.

6 Governance, Recognition, and UX Interventions

Governance determines whether UX work is taken seriously. Explicit **reviewer roles, ownership of design systems, and clear evaluation criteria** - which help to increase the legitimacy of UX decisions. Recognition - such as credit in release notes or maintainership roles - helps retain designers. Tools alone are insufficient; governance and fair recognition are necessary for lasting improvement.

4 Methodology

Methodology

An **interpretivist qualitative design** was chosen because roles, norms, and recognition in OSS are socially constructed and under-documented; **the goal was to understand lived experience before prescribing change**

8 semi-structured interviews were conducted with UX contributors and one leader of an OSS design tooling initiative, recruited via **LinkedIn outreach, a Canonical referral, and snowballing**

Interviews were held on Microsoft Teams, recorded and transcribed and analysed using **reflexive thematic analysis with inductive coding** to surface shared patterns.

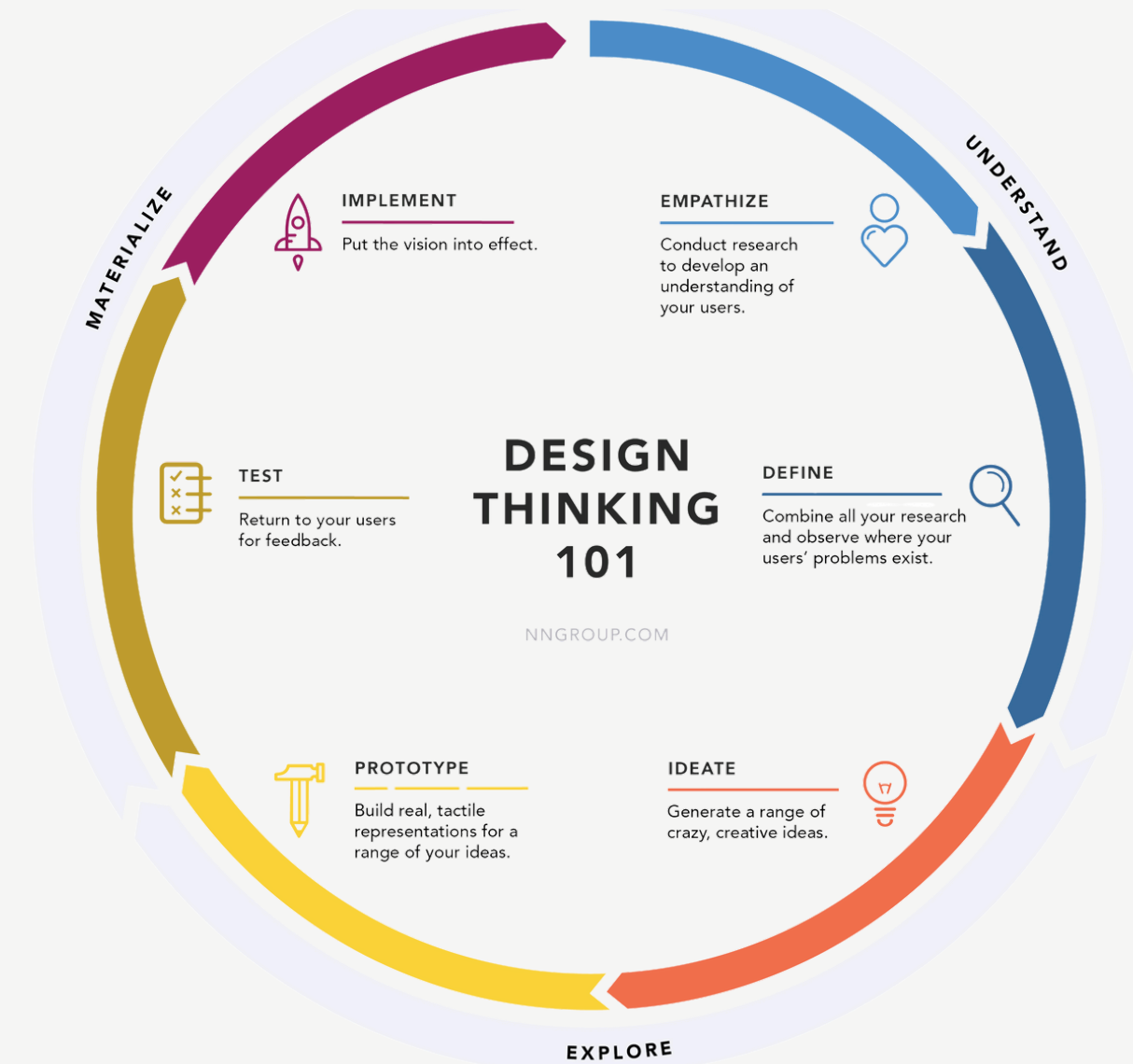
5 UX Development Work

UX Development Work

The process was **anchored in The Design Thinking Lifecycle**, recognising that increasing UX contribution is a socio-technical challenge shaped by governance, incentives, and workflows - not just UI.

Empathise & Define: Eight interviews + reflexive thematic analysis surfaced six themes on barriers, motivations, and change levers

Ideate: Converted themes into two evidence-grounded personas and a contribution journey map aligning designer intent with maintainer priorities.







Prototype & Test: Per Canonical's insight-first brief, no UI prototypes. Instead, repository-friendly guidance designed for a live pilot

User Persona: UX Designer



Emma Locke

 Age	28 Years Old
 Job	Product Designer
 Location	Dublin, Ireland
 Education	BSc in HCI

"Projects do not know what they need from design or how to define it. Designers also lack OSS culture knowledge"

"It is not hard for the designers to learn GitHub. It is just that the incentive is not high enough, I think"

User Description

Emma is a mid-level UX designer with two to three years of experience who wants to contribute to tools she uses. She is fluent in Figma and FigJam, is exploring Penpot for open workflows, and is still learning how to map UX artefacts to GitHub or GitLab. She is motivated by portfolio value and community impact but only if the effort is visible and respected.

Goals

- Build a credible public portfolio and reputation through meaningful UX changes.
- Learn open-source practice and find a repeatable, low-friction way to submit design work.
- Contribute to projects with real user impact and receive visible credit.

Webography

Moderately technical. Uses Figma, FigJam, Penpot, Markdown, Storybook. Learning basic Git for docs and asset management. Primarily laptop based.





Frustrations

- Incentives and recognition are unclear; UX is sometimes reduced to logos or polish.
- Issue trackers feel bug-centric; labels for UX work are missing or vague; few examples exist.
- Long waits for a first response; confusion about where to keep design rationale in the repo.
- Social and political navigation is non-trivial for newcomers.

User Persona: Software Engineer



Luca Martin

 Age	32 Years Old
 Job	Software Engineer
 Location	Berlin, Germany
 Education	BSc in Computer Science

"There is a power imbalance, historically a power imbalance between designers and developers. Developers hold so much more power because eventually they are the ones that can put something into production."

User Description

Luca maintains a core area of an open-source project and reviews pull requests. He is the only coding-focused participant in this sample and also contributes to open-source design tooling. He values reliability, performance, and sustainable maintenance, and welcomes UX input when proposals are actionable inside repository workflows and align with components and tokens.

Goals

- Reduce rework and handoff churn through clear, implementable proposals.
- Keep the codebase coherent and accessible by aligning to the design system.
- Grow a contributor base that can deliver user-facing improvements responsibly.

Webography

Highly technical. Uses Git, CI, code review dashboards, component library or Storybook. Will open Penpot or Figma links but prefers artefacts stored or linked from the repository.

Frustrations

- Design proposals that live outside the repo and are hard to translate into code.
- Lack of acceptance criteria and weak alignment to components or tokens.
- Power and ownership are tied to merge rights; design decisions after merge are ambiguous.
- Discussions are scattered across tools and hard to trace later.

Journey Map: UX Designer



User Journey Map
Emma Locke

Emma is a mid-level UX designer with two to three years of experience who wants to contribute to tools she uses. She is fluent in Figma and FigJam, is exploring Penpot for open workflows, and is still learning how to map UX artefacts to GitHub or GitLab.

Stage	Goal	Pain points	Opportunities	Success signals
Discover & join	See if UX is welcome and how to start	Dev-centric docs; no UX labels; unclear reviewer	Add UX section in CONTRIBUTING; small UX label set; name a UX reviewer	Clear fit; examples visible; known contact; timely first response
Scope an issue	Find a solvable UX task	Bug-centric tracker; UX work hidden; no labels for research/content	Maintain UX starter list; labels for UX, Usability, Accessibility, Design-Research	UX issues discoverable; first-timers can pick tasks
Propose change	Submit an implementable proposal	No place for artefacts; fear of overstepping; UX framed as cosmetic	Repo design-assets folder; short rationale template with components/tokens; acceptance criteria fields	Proposal lives in repo; maps to implementation tasks
Review & implement	Align on scope and ship with intent intact	Slow first comment; intent lost across tools; power tied to merge rights	Target response time on UX items; single issue/PR thread; pair with maintainer; PR UX checklist	Faster reviews; fewer cycles; higher implementation fidelity
Recognise & retain	Feel valued and return	Invisible credit; no follow up	Credit in release notes and CONTRIBUTORS; suggest next UX issue	Repeat contributions; broader participation

6 Findings

Findings

1 Incentives as both barrier and motivator

Designers **perceive weaker rewards than developers**, so contribution often depends on goodwill unless portfolio value, visible credit, or paid work is available. Recognition and visibility drive return contributions.

“ People will see your names... it is a way to make a name for yourself. - Participant 1 ”

2 Cultural and structural misalignment

Decision rights, language, and review practices are developer-centric, leaving designers peripheral even when their work improves outcomes. Without explicit roles and inclusive guidance, UX remains secondary.

“ Culture is built around code—tech complexity over accessible UX; ideal user is the creator. - Participant 3 ”

Findings

3 Tooling and workflow gaps

Git and issue trackers fit code better than research, IA, content, or interaction rationale. Designers lack an open, repository-centred way to submit and discuss UX artefacts alongside implementation tasks.

“ It’s not a tech-stack problem; you need the right process to make tools work for design. - Participant 6 ”

4 Ambiguity about what counts as a design contribution

Projects rarely define UX contribution types or how to evaluate them. Lack of labels, templates, and acceptance criteria hides research and rationale and slows review

“ We did things like logo design, but serious work was human-centered research—people often conflate the two - Participant 3 ”

Findings

5 Success defined by collaboration and implementation quality

Practitioners value faster handoffs, fewer misunderstandings, and higher fidelity to design intent over raw commit counts

“ If time is reduced before and after using the tool, then I think it’s a success. - Participant 1 ”

6 Hope with realistic constraints

Participants are optimistic about tools and visibility but expect slow progress without shifts in incentives, recognition, and decision rights

“Tooling isn’t made for designers; you need technical fluency and a different workflow. Power still lies with code mergers — ‘patches welcome. - Participant 7 ”

7 Recommendations for Canonical

Recommendations for Canonical

1 Publish a clear design-contribution pathway

- ↳ 1. States where UX work lives in the repo
- 2. How to submit research, IA, content, and interaction proposals
- 3. Who reviews submitted work

2 Name UX reviewers or maintainers in each repository

- ↳ 1. Credit non-code labour in releases and contributors
- 2. Enable portfolio-friendly links

3 Align open workflows

- ↳ 1. Store design artefacts alongside code Enable portfolio-friendly links
- 2. Link concise rationale and acceptance criteria to implementation tasks to ensure intent survives handoff

4 Evaluate collaboration

- ↳ 1. Time to first review on UX-labelled items Enable portfolio-friendly links
- 2. Proportion of UX PRs merged without rework
- 3. Diversity of acknowledged non-code contributors

5 Start with one Canonical-run pilot

- ↳ 1. Learn, then codify into a reusable open design kit that scales across projects

8 Contributions

Contributions

Contribution to UX Research

Practitioner-led evidence clarifying how incentives, decision rights, and “what counts” as UX shape participation in open source. The study **reframes evaluation away from code volume toward collaboration** outcomes such as handoff speed, miscommunication reduction, and implementation fidelity. Methodologically, it shows how interpretivist thematic analysis can feed personas and a contribution journey map that act as boundary objects and translate insight into repository-ready guidance.

Contribution to Canonical

A practical, **low-overhead operating model to grow UX participation** without building a new product. It specifies **four levers that fit Canonical's existing repos**: a clear design-contribution pathway, named UX reviewers, design-friendly open workflows that keep rationale and acceptance criteria alongside code, and a small measurement set focused on collaboration quality.

Thank You!

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