

Beyond the Pile of Knobs:

Usability and Design for Privacy, Security, Safety & Consent

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Simply Secure

**Everyone deserves
technology they can trust.**

Simply Secure is a US non-profit organization [501(c)3] dedicated to supporting people working with the most **vulnerable** by designing for **safety and privacy**.

IMAGE CREDIT: Stocksy



Simply Secure

How we do it



**Design, UX &
Strategy Support**



**Open Research
& Tools**



**Building Community
& Convening**

The Challenge



Privacy, security, and safety are **critical**.

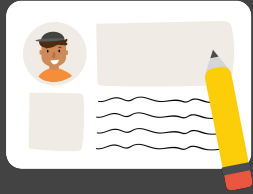


Most teams **lack design and UX capacity**.



The challenges teams face are **complex and overwhelming**.

So how can we design for safety?



User needs

Human-centered design —
research & testing — is key.



Threats & Risks

How does the technology or
product affect someone's safety?
Does it introduce new risks?

Your design choices can cause security holes

- Confused people create workarounds
- Preachy or excessive information makes people tune out and/or get annoyed
- People will do what it takes not to think about security

Image: Wikimedia Commons



OK, but how can I start?

The secret sauce: ux design research

Yes, you can do research
remotely!

Yes, you can do research
in a way that preserves
people's agency and
privacy!



Ask about mental models

“How do you think encrypted messaging works?”

“What do you think a password manager is?”

“Tell me what you think is happening here?”

Image: Molly Wilson



Watch someone use your tool

“What does this do?”

“What do you think it
does?”



Understand your users' contexts.

**Tools need to
work for all of
your users in all
contexts.**

“

*I know I should read the terms
and conditions, but I just need
to get this done right now.*

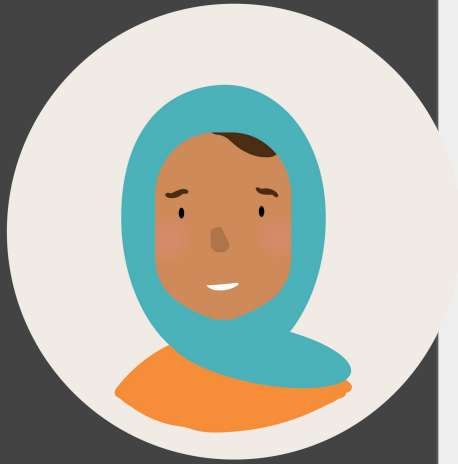


Age: 32

Occupation: Journalist

Threat/Concern: Leaking my sources and data

"I need my sources to know that their information is safe with me and that our communication is private."

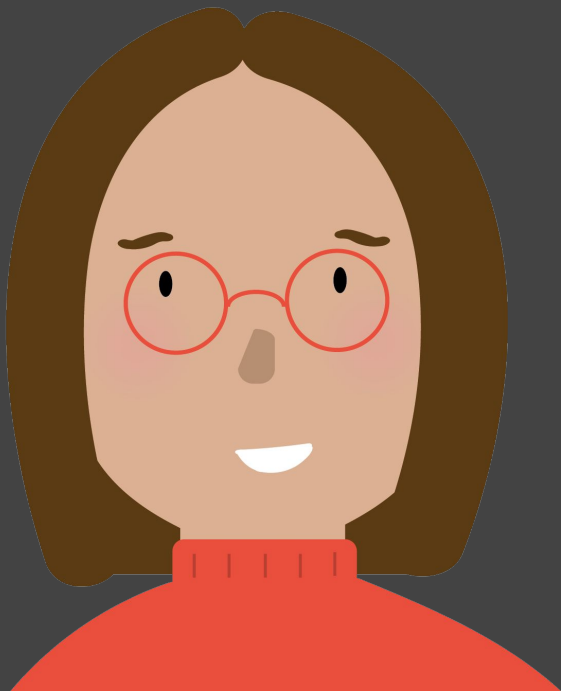


Age: 26

Occupation: Early Career Researcher

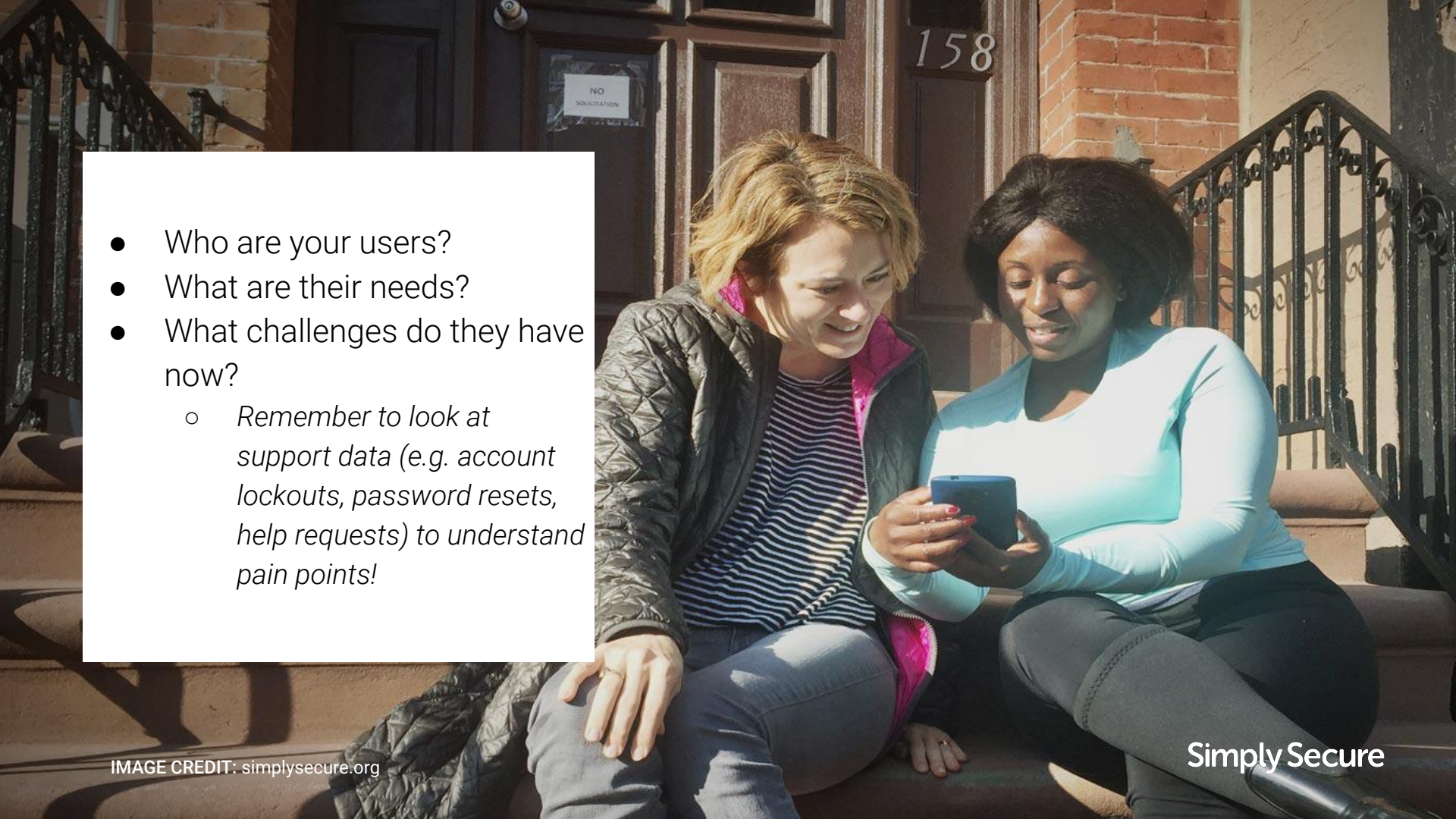
Threat/Concern: Harassment/bullying from other researchers

"It's great that I have to review the code of conduct every time — it will help myself and others remember how to keep this a safe and constructive community"



User research can help you to develop **personas** and **user journeys** to understand where you need to provide **better controls** and tools.

Don't just focus on the majority cases, focus on the **high-risk users** and understand their **threats**.

- 
- A photograph of two women sitting on the stone steps of a brick building. The woman on the left has blonde hair and is wearing a black quilted jacket over a pink and white striped shirt. The woman on the right has dark hair and is wearing a light blue long-sleeved shirt. They are both looking at a blue smartphone held by the woman on the right. The building behind them has a dark wooden door with a 'NO SOLICITATION' sign and a house number '158'. A black metal railing is visible on the right side of the steps.
- Who are your users?
 - What are their needs?
 - What challenges do they have now?
 - *Remember to look at support data (e.g. account lockouts, password resets, help requests) to understand pain points!*

Users need transparency and controls to evaluate changes they might need to make.

Start with good
defaults —
allow people to
opt in, rather
than opt out.

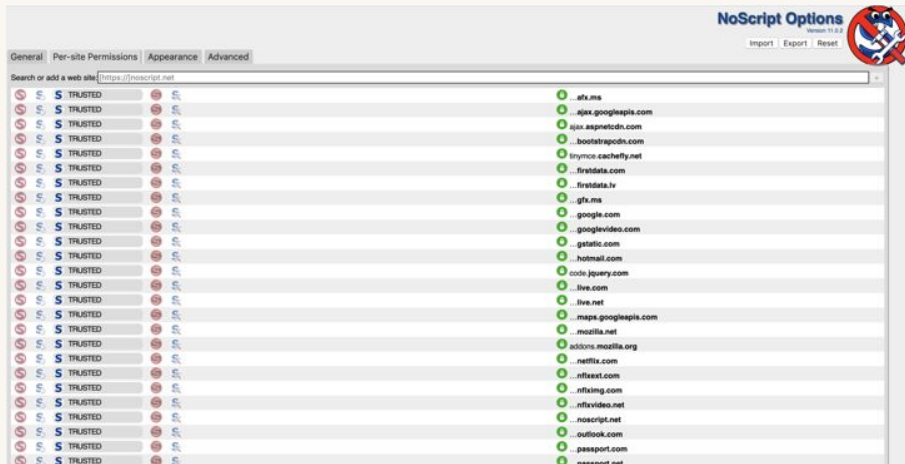
“

*My pseudonym keeps me safe.
If I need to change my account
name, I know that I can change
the setting in my profile.*

OK, show me some examples.

NoScript

Redesign coming soon! Read more: <https://simplysecure.org/blog/noscript-case-study>



NoScript is:

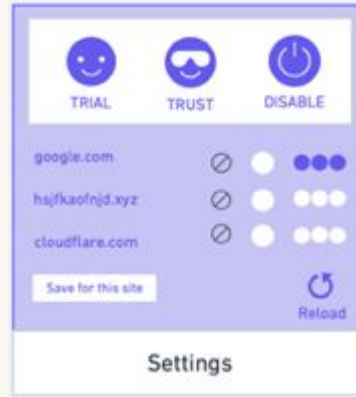
- A tool for power users
- A tool for creating friction, rather than removing it
- Strict by default
- An interactive tool, not a “set and forget” tool

Challenges:

- Too many confusing choices.
- Contradictory terms
- Hard for users to know what settings will protect them



NoScript: Process



- User Interviews
- Created Personas
- Analyzed Ad & Script Blockers
- Analyzed the data
- Created and Iterated on prototypes
- Tested prototypes with users



~~NoScript keeps you safe~~

~~NoScript makes safe
browsing easy for everyone~~

~~NoScript makes safe browsing
easy for power users~~

NoScript buys power users time to make
informed decisions about who they trust

NoScript

Redesign coming soon!

quick&dirty options

fine-tuning

“panic button”

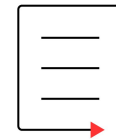


scope configurations

new feature:
per-site settings

PREreview

Check it out: <https://prereview.org/> and Rapid PREreview: <https://outbreaksci.prereview.org/>



PREVIEW

OUTBREAKSCIENCE
Rapid PREreview

Search preprints with reviews or requests for reviews by DOI, arXiv ID or title

Preprints with reviews or requests for reviews **Add Review** **Request Review**

TRENDING • RECENTLY REVIEWED • RECENTLY REQUESTED • DATE PUBLISHED

Uncanny similarity of unique inserts in the 2019-nCoV spike protein to HIV-1 gp120 and Gag
bioRxiv > 10.1101/2020.01.30.927871
Jan. 31, 2020
1 Review | 1 Request
Last requested 20 hours ago

Risk of 2019 novel coronavirus importations throughout China prior to the Wuhan quarantine
medRxiv > 10.1101/2020.01.28.20019299
Jan. 30, 2020
1 Review | 1 Request
Last requested 2 days ago

Estimated effectiveness of traveller screening to prevent international spread of 2019 novel coronavirus
Jan. 30, 2020

medRxiv preprint first posted online Jan. 28, 2020 - doi: <https://doi.org/10.1101/2020.01.26.20018887> - The copyright holder for this preprint (which was not peer-reviewed) is the author/funder, who has granted medRxiv a license to display the preprint in perpetuity. It is made available under a CC-BY 4.0 International license.

1 **Title:**
2 **Epidemiological identification of a novel infectious disease in real time: Analysis of**
3 **the atypical pneumonia outbreak in Wuhan, China, 2019-20**
4

OUTBREAKSCIENCE
Rapid PREreview

Read reviews Add Review Add Request **Login**

Reviews

Epidemiological identification of a novel infectious disease in real time: Analysis of the atypical pneumonia outbreak in Wuhan, China, 2019-20
medRxiv > 10.1101/2020.01.26.20018887

OUTBREAKSCIENCE
Rapid PREreview

Reviews 0
Requests for review 2

PREreview is:

- A platform for crowdsourcing of preprint reviews.
- A tool for cultivating more open feedback in science
- Supporting the development of expertise through open peer review

Challenges:

- Completely new process
- Two iterations at the moment: Rapid & Regular
- Many researchers are still learning how to work in the open
- Researchers fear retaliation

PRReview: Process

Check it out: <https://prereview.org/> and Rapid PReview: <https://outbreaksci.prereview.org/>

The screenshot shows the 'Personas' management interface on the OutbreakScience Rapid PReview platform. The header includes the 'OUTBREAKSCIENCE Rapid PReview' logo and navigation links for 'About', 'Code of Conduct', 'Extension', 'API', and a user profile icon. The main content area is titled 'Personas' and explains that personas allow users to manage their identity, either public (linked to an ORCID profile) or anonymous. It notes that the 'active' persona is used for new reviews and feedback requests. A tip suggests setting an avatar for each persona. Below this is a table with columns for 'ACTIVE', 'DISPLAY NAME', 'ANONYMITY', and an 'Edit' link. Two personas are listed: 'georgiamoon' (active, anonymous) and 'Georgia Bullen' (inactive, public). A 'Give Feedback' button is visible in the bottom right corner.

ACTIVE	DISPLAY NAME	ANONYMITY	
★ Active	georgiamoon	ANONYMOUS	Edit
☆ Activate...	Georgia Bullen	PUBLIC	Edit

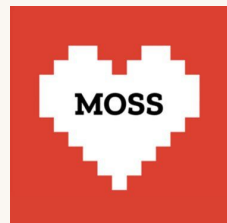
- User research & interviews to understand the challenges, concerns, interests and current contexts

Interesting Design Ideas

- Repetition of the Code of Conduct on every submission
- Users can have multiple ways (identities or personas) to represent them on the platform — one is pseudonymous
- Admins/Moderators can still moderate their behavior

Current Projects

- Improving the usability of the Python PIP CLI (command line interface)
Note: Developers are users too!
- Collaborating with Ura Design to improve the admin and whistleblowing interfaces with GlobaLeaks
- Working with funders to improve their workflows for their applications and websites
- Supporting the design of tools for collecting leads around disinformation in communities
- Working with Tor to make their metrics more accessible & useful
- *And more!*



Need help?

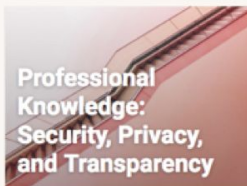
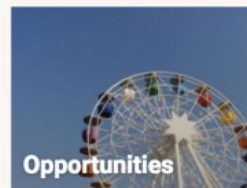
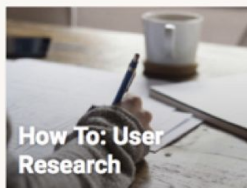
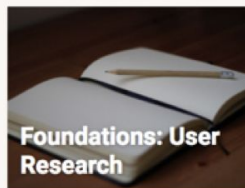
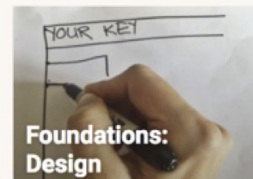
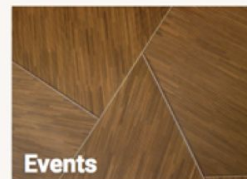
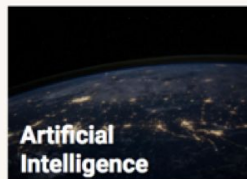
Explore our knowledge base:

<https://simplysecure.org/knowledge-base/>

UX Starter Kit:

<https://simplysecure.org/ux-starter-pack>

Topics from the Knowledge Base



Thank you!

If you are interested in being more involved in our community, working with us, or supporting our work — get in touch!



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