

# Engineer's Guide to Design: Merging Technical and Creative Skills in Open Source Projects

Khushi Garg

Product Designer @Red Hat

## Misconceptions Between Roles



Engineers think designers only focus on  
“making things pretty.”

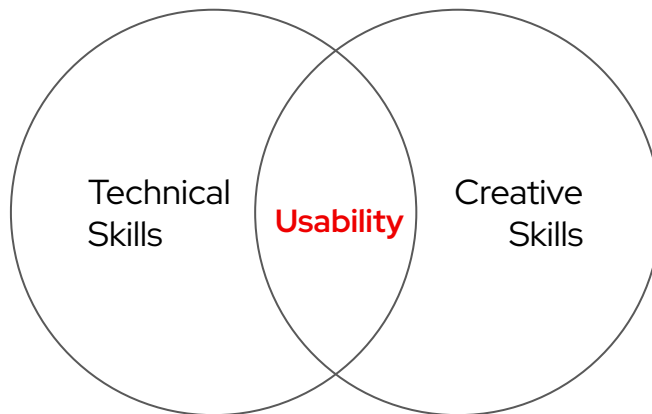


Designers think engineers are all about  
functionality, ignoring UX.





## The Shared Goal



Collaboration = Better Solutions

# How designers can support engineers

1. Speak like an engineer
2. Consider engineers your design partners
3. Design for feasibility and scalability
4. Good documentation
5. Advocate for your engineers

# #1 Speak like an engineer



- ▶ Learn basic technical concepts
- ▶ Enough to communicate effectively
- ▶ Start by asking questions in meetings, reading articles or watching tutorials
- ▶ You will feel more confident in conversations

## #2 Engineers are your design partners



- ▶ Don't design alone
- ▶ Involve engineers early-on
- ▶ Identify technical challenges and opportunities before you invest time
- ▶ Share wireframes, sketches and gather their feedback

## #3 Design for feasibility and scalability



- ▶ Your design should not only look great but also be easy to build and be scalable as a product grows

## #4 Good documentation



- ▶ Can save hours of back and forth during handoffs
- ▶ If something's missing they'll have to guess
- ▶ Document all these scenarios: loading states, error handling, success messages



## #5 Advocate for your engineers



- ▶ Engineering resources are limited, deadlines are tight and not everything can be built right now
- ▶ Don't just push for your wish, understand and partner with your engineers
- ▶ Value their expertise and be willing to work together

# How engineers can support designers

1. Understand Design Principles
2. Provide Feedback on Feasibility
3. Get familiar with design tools
4. Encourage a Design-First Culture
5. Advocate for accessibility

# #1 Understand design principles



- ▶ Knowing basic design principles helps engineers align better with designers and appreciate their decisions
- ▶ Learn key design concepts like hierarchy, contrast, white space, and typography to understand the reasoning behind design choices
- ▶ When engineers understand design language, collaboration becomes smoother, avoiding unnecessary debates or misinterpretations

## #2 Provide feedback on feasibility



- ▶ Engineers can guide designers by sharing technical insights while preserving the design intent
- ▶ Offer practical advice on what's achievable given time, tools, or platform limitations, without outright rejecting ideas
- ▶ Instead of saying "this can't be done," propose a similar solution that aligns with the project's goals

## #3 Get familiar with design tools



- ▶ Tools like Figma and Adobe XD let engineers see designs in full detail, including dimensions, fonts, and colors
- ▶ Add feedback or questions directly on the design, ensuring context is maintained and discussions are traceable
- ▶ Many design tools allow engineers to export assets or inspect code snippets, speeding up implementation

## #4 Encourage a design-first culture



- ▶ Advocate for involving designers in the initial planning stages to align technical and creative goals from the start
- ▶ Highlight the importance of user experience to other team members and stakeholders

## #5 Advocate for accessibility



- ▶ **Implement Accessible Code:** Use semantic HTML, proper heading structures, and ARIA attributes to support screen readers and assistive technologies
- ▶ **Test for Accessibility:** Run automated tests using tools like Lighthouse and manually check for keyboard navigation and contrast issues

## Key Takeaways



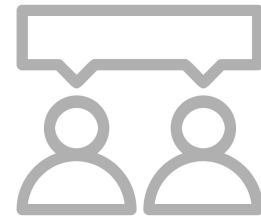
Design and engineering need to work hand in hand



Even small design efforts can significantly improve usability in open source



Tools and processes exist to help engineers and designers collaborate better





Thank You

