

# **Design Systems at Instructure**

The 5 Ws

# Jennifer Stern

Principal UI Engineer



# Design Systems

# What?

“A **system** is a set of interconnected parts that form a unified whole.”

# **Parts of a Design System**

## Resources, Tooling, & Processes

# Resources

Themes, Component Library, Living Style Guide,  
Sketch Symbol Library, Documentation

# Tooling

Theme System, A11y & Visual Testing Utilities,  
Sketch app plugins, Prototyping tools

**Design +  
Technology = ❤️**



# Process

A community of collaborative, interconnected  
people

# Design at Scale

# **Who? Product, Design & Engineering**

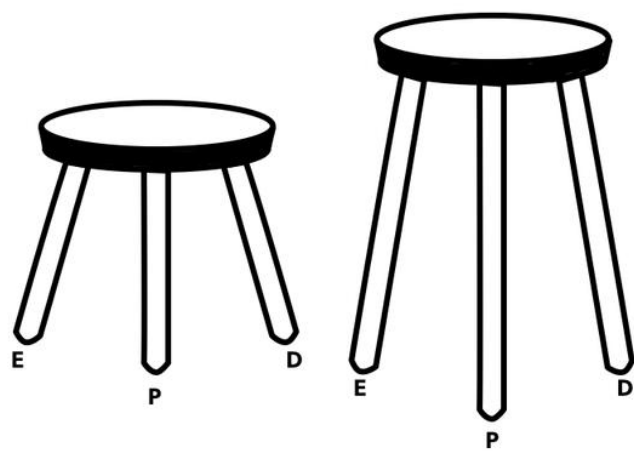


Figure A

Figure B

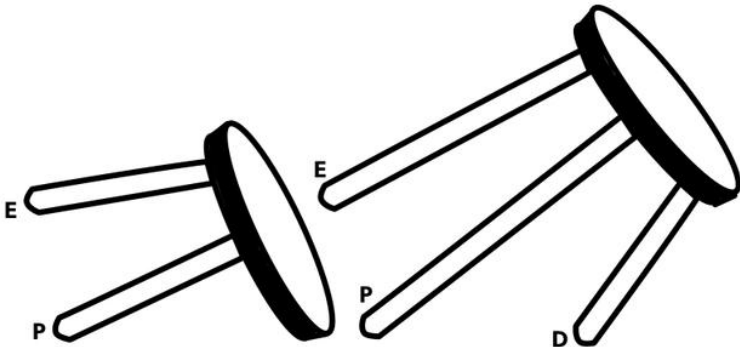


Figure C

Figure D

# Design Ops?

**ADOPT**

1. Lightweight Architecture Decision Records

**TRIAL**

2. Applying product management to internal platforms *NEW*
3. Architectural fitness function *NEW*
4. Autonomous bubble pattern *NEW*
5. Chaos Engineering *NEW*
6. Decoupling secret management from source code
7. DesignOps *NEW*
8. Legacy in a box
9. Micro frontends
10. Pipelines for infrastructure as code *NEW*
11. Serverless architecture
12. TDD'ing containers *NEW*

**ASSESS**

13. Algorithmic IT operations *NEW*
14. Ethereum for decentralized applications *NEW*
15. Event streaming as the source of truth *NEW*
16. Platform engineering product teams
17. Polycloud *NEW*
18. Service mesh *NEW*
19. Sidecars for endpoint security *NEW*
20. The three Rs of security *NEW*

**HOLD**

21. A single CI instance for all teams
22. CI theatre
23. Enterprise-wide integration test environments
24. Recreating ESB antipatterns with Kafka *NEW*
25. Spec-based codegen



# ~~Dev~~ Design Ops Principles

Holistic systems thinking, Rapid feedback,  
Automation, Break down silos



# UI Dev Team

@Colleen Palmer // Director of UI

## UI Developers

@Jennifer Stern // Principal UI Developer

@Matt Zabriskie // Senior UI Developer

@Steve Jensen // UI Developer

@Ken Meleta // UI Developer

## UX Developers

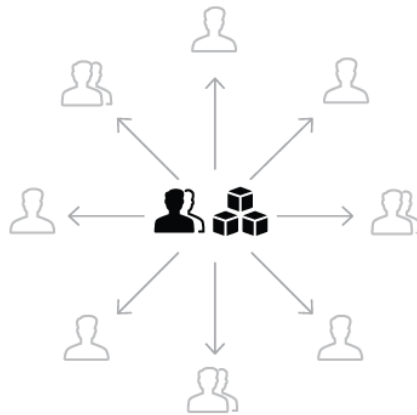
@Chris Hart // Senior UX Developer

@Pam Hiett // Senior UX Developer

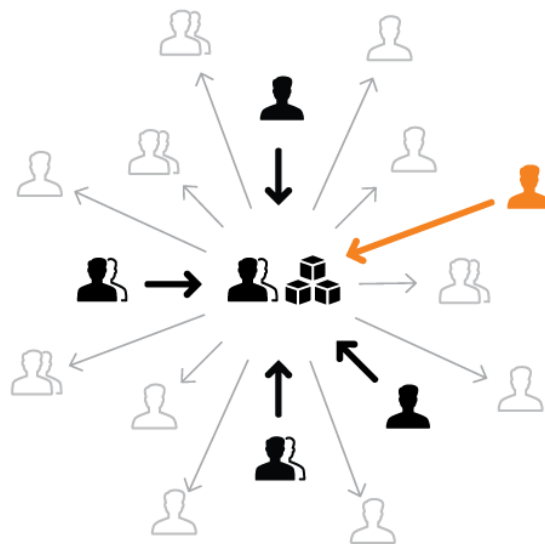
@Justin Daining // UX Developer (Bridge)

Slack Channel: #instui

# Centralized



# Federated



# Why?

# Collaboration & Alignment

Across teams, disciplines, & products

# ~~Consistency~~ Cohesion

Across applications, platforms and products

# Efficiency

Speed through reusability, Faster feedback loops

# Trusted Resources

Centralized documentation



# **When? Now!**

# In production

in Canvas, Quizzes, Gauge and Arc

# 43 Contributors

Across 10 teams

# What's next?

Sketch app integration, Pattern documentation,  
Testing Utilities

# Where?

Slack: #instui, #design-systems

<https://instructure.github.io/instructure-ui/>

gerrit:instructure-ui

gerrit:bridge-ui-components