

SATURN 2018

14th Annual SEI Architecture Technology User Network Conference

MAY 7–10, 2018 | PLANO, TEXAS

Growing Great Software Designers Workshop Summary

SATURN Workshop Goals

- Explore a topic in depth
- Ask questions
- Find (some) answers
- Uncover ignorance

In a good workshop you have
more questions at the end
than you had at the start

Participants

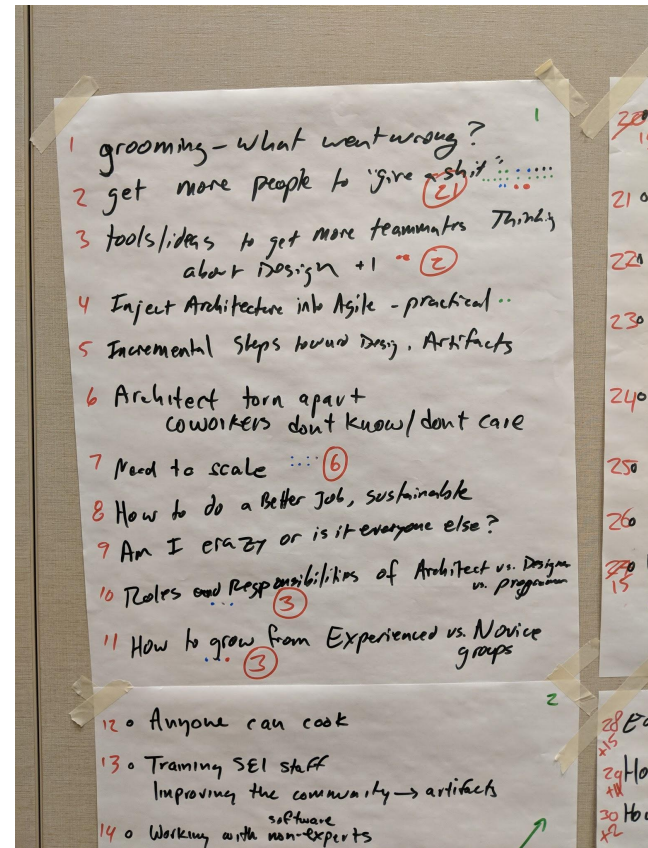
- Adam Wynne
- Eltjo Poort
- George Fairbanks
- Harald Wesenberg
- James Ivers
- Joe Runde
- Jorn Olmheim
- Matthias Kittner
- Michael Keeling
- Michael Turner
- Randy Ynchausti
- Sebastian von Conrad
- Thijmen de Gooijer
- Yogeshwar Srikrishnan



Notes from the workshop are available on GitHub:

<https://github.com/michaelkeeling/saturn2018-growing-great-software-designers-workshop>

Topic Selection



What makes for a great designer?

- Set of base technical skills, a Silver Toolbox
 - We still debate specifics...
 - Depends on designer's focus and perspective
 - e.g. software vs. enterprise vs. user interaction vs. information vs. ...
- Traits and Abilities
 - Abstraction
 - Communication
 - Design Thinking
 - Curiosity
 - Humbleness
 - Make trade-offs
 - Elegance
 - Reflection, introspection
 - Scientific mindset
 - Connect different designers together
 - Leadership
 - Trustworthy
 - Passion for lifelong learning

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 - Abstraction - **up to a point**
 - Communication
 - Design Thinking
 - **Curiosity**
 - **Humbleness**
 - Make trade-offs
 - **Elegance**
 - Reflection, introspection
 - Scientific mindset - **mechanics, not mindset**
 - **Connect different designers together**
 - Leadership
 - **Trustworthy**
 - **Passion for lifelong learning**

We can teach all the
required skills

**Many traits require
something hard to teach**

(some) Things that make designers great

- Diversity of experiences
- Mentors
- Reading.... a lot
 - Nearly 10k pages of recommended reading!
 - Problem: the design “canon” is poorly packaged, overwhelming
- Learned from failure: “... burned their hand on the stove”

How might we find potentially great designers?

Look for...

- Past projects that seem to go well
 - Especially “medium difficult” and “difficult” projects
- People who take ownership over projects
- Revealing traits
 - Reflect on failures and learn
 - “Elegance” in design (difficult to define, you know it when you see it)
- People with the ability to explain design rationale
- Designs that focus on possible failures, not only happy path
- A hacker mentality
- Curious, analytical inference

(some) Concrete approaches for growing great designers

At my company we do...

- Tech ladder with design skills and behaviors
- Design thinking foundation
- Makes the decision process visible
 - Architecture decision records (ADR)
 - Share architecture patterns
 - After sprint design review and ADR
 - Pre-mortems
- Enterprise architecture network
- Mentoring and training
- Hack days, time for experiments
- Internal tech talks

Questions from the workshop

Do we understand the future of the “architect” role?

- Does every project need an architect?
- Can most teams assemble off-the-shelf software systems well enough?
- Is brute force good enough in some cases?
- What practices from the past must be adapted for the future?
- What practices from the past should we abandon?
- What skills are required by architects vs. developers?

Questions from the workshop

How can we ensure our ideas are being applied in 5 years?

- Why don't people pick up our ideas?
- Where is that 100-page intro to software architecture?
- Do we really know how to grow software designers?

Questions from the workshop

How can we invigorate passion about software design?

- Why do so many developers seem apathetic toward architecture?
 - Is this really as bad as it seems?
- How can we calibrate incentives within organizations to favor design?
- What do we do as a software design community to promote or inhibit passion?
- How can we help great designers avoid burnout, becoming jaded, quitting?

Questions from the workshop

Does “internet speed” mentality impede good design?

- Do companies in their actions value architecture, or heroic firefighting?
- Can every company copy Netflix practices and succeed?

Are we headed toward a *software design crisis?*

Caveat: Possible hyperbole

See something? Say something.

Did this inspire thoughts?

Bring your ideas to SATURN 2019

Presentation Name

Thank you!