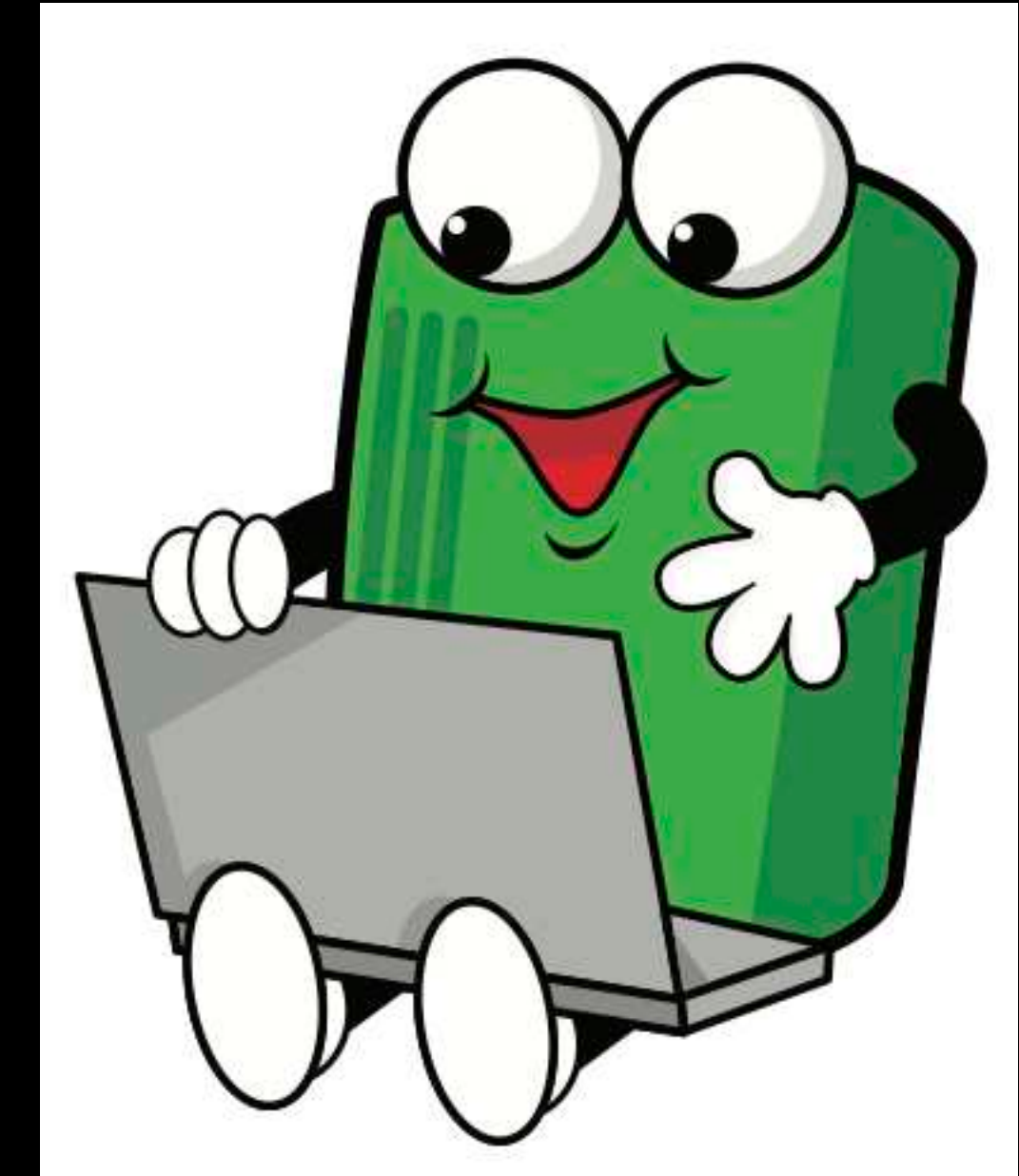


The Psychology of Chaos Engineering

Matty Stratton, PagerDuty



Kitchens

@this_hits_home

.@mattstratton has the best hair of any developer advocate 🌟😊

fite me

4:14 PM · Feb 13, 2019 · [Twitter for iPhone](#)

Chaos Engineering is the discipline of experimenting on a system in order to build confidence in the system's capability to withstand turbulent conditions in production.

<https://principlesofchaos.org/>

“By running Chaos Monkey in the middle of a business day, in a carefully monitored environment with engineers standing by to address any problems, we can still learn the lessons about the weaknesses of our system, and build automatic recovery mechanisms to deal with them. So next time an instance fails at 3 am on a Sunday, we won’t even notice.”

-Netflix Technology Blog, 2011
<https://bit.ly/netflix-chaos>

What chaos engineering is NOT



It's not about breaking things



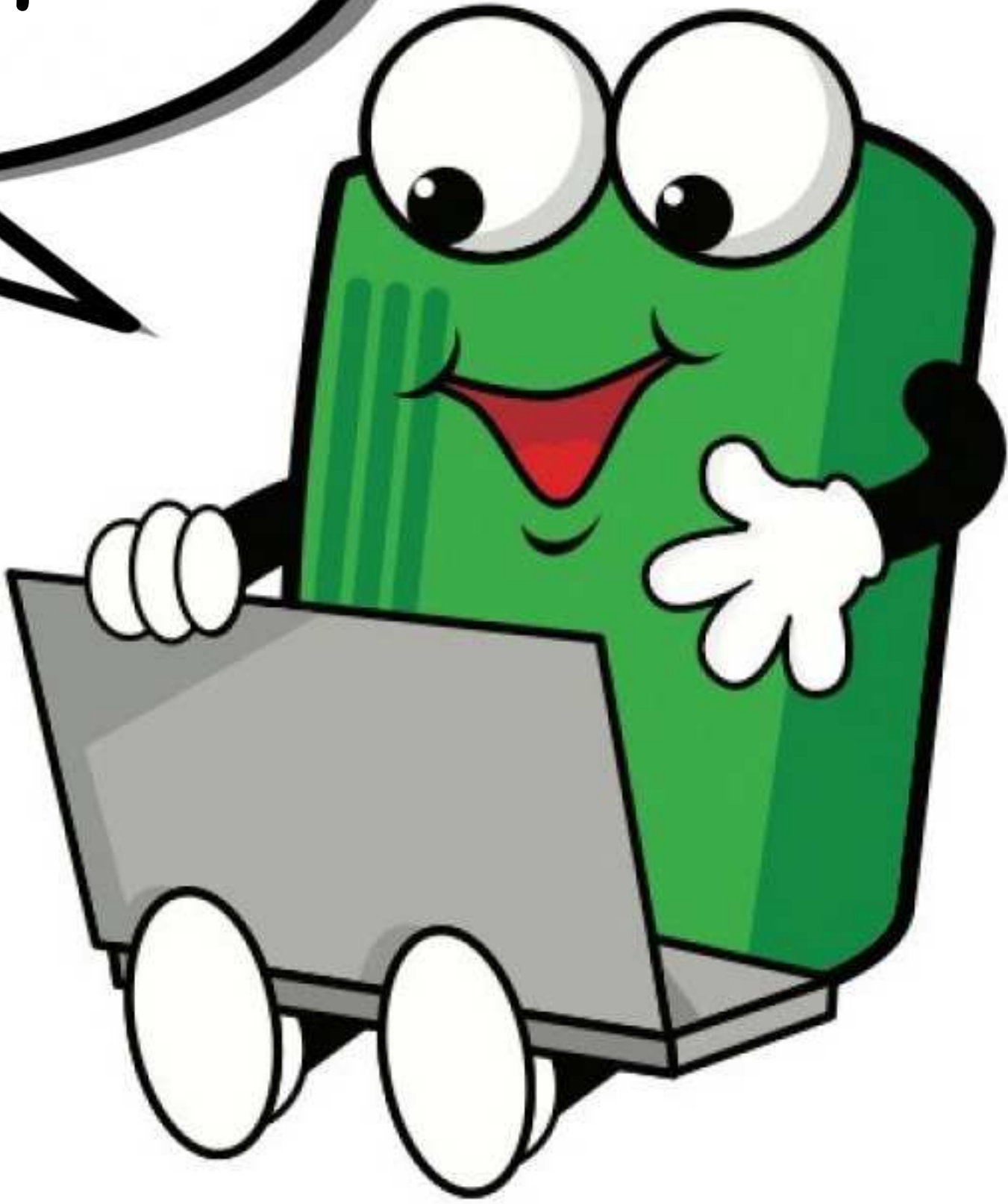
Back off, man... I'm a scientist.

Experimenting in production is
preferred

**You can't do this without good
measurement**

Minimize your blast radius

Something's broken...
...it's your fault



Some helpful tools

- Netflix Simian Army - <https://github.com/Netflix/SimianArmy>
- Gremlin - <https://www.gremlin.com/>
- ChaosToolkit - <https://chaostoolkit.org/>

But what about the people?

**How does it make you feel to know
Netflix practices chaos
engineering?**

What about your bank?



Matty @ devopsdays Baltimore
@mattstratton



If you discover a service you consume uses chaos engineering in production, you feel:

Reassured

91%

Uneasy

9%

Management can get...

...nervous

Consider your words

It's about the philosophy



Cody ☕️ 🦀 🏔️
@valarauca1



(not fully using chaos engineering, but had some recent interesting failures from interns)

In all honesty I generally feel excitement when confronted with a new error that hasn't occurred before. Finding out the root of the error (logic, oversight, etc.) is fun and challenging

Safety first

- Know your conditions - when will you shut down the experiment?
- This isn't about causing stress on your people - be transparent
- There are humans at the other end of those numbers

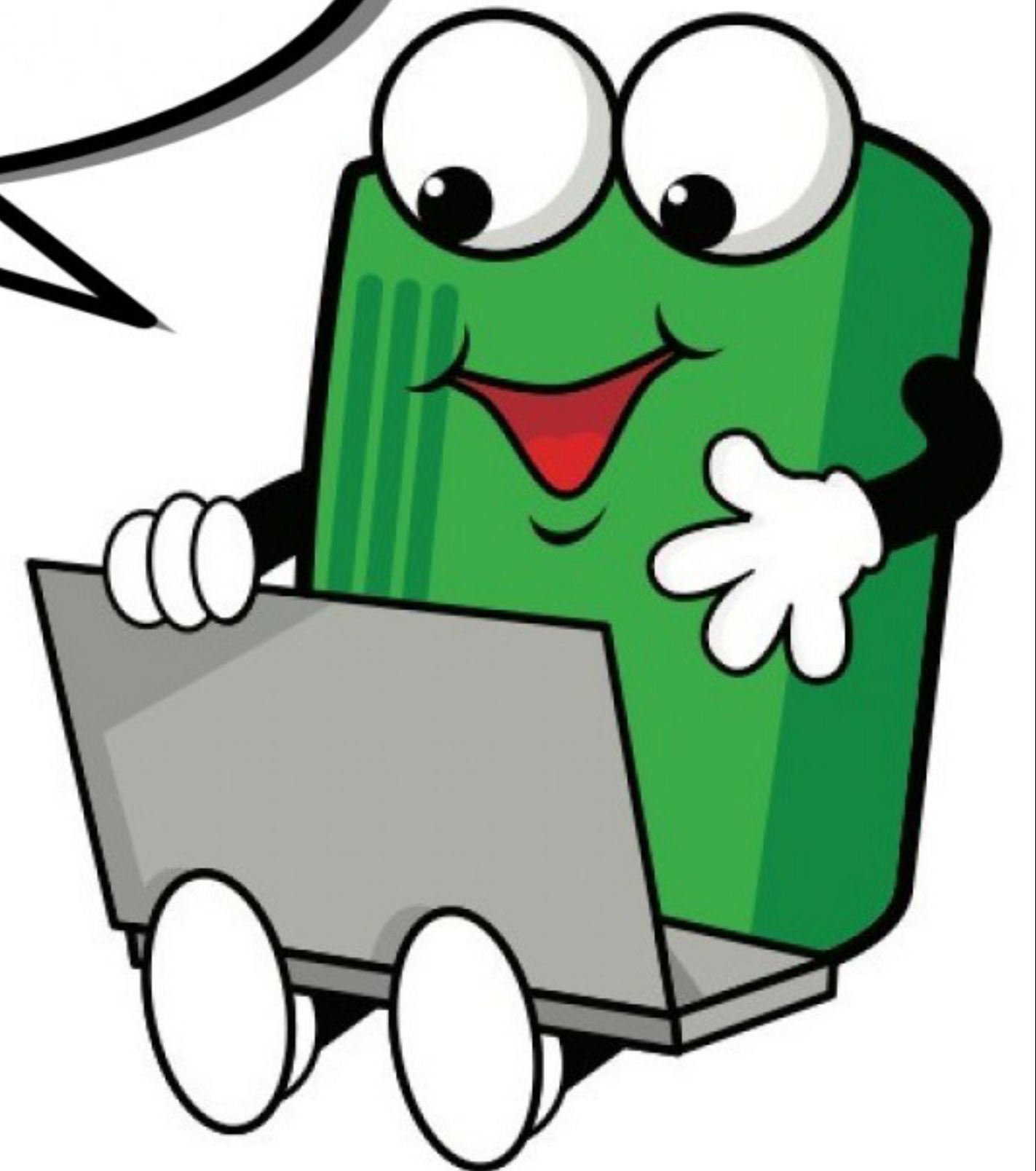
Further Reading

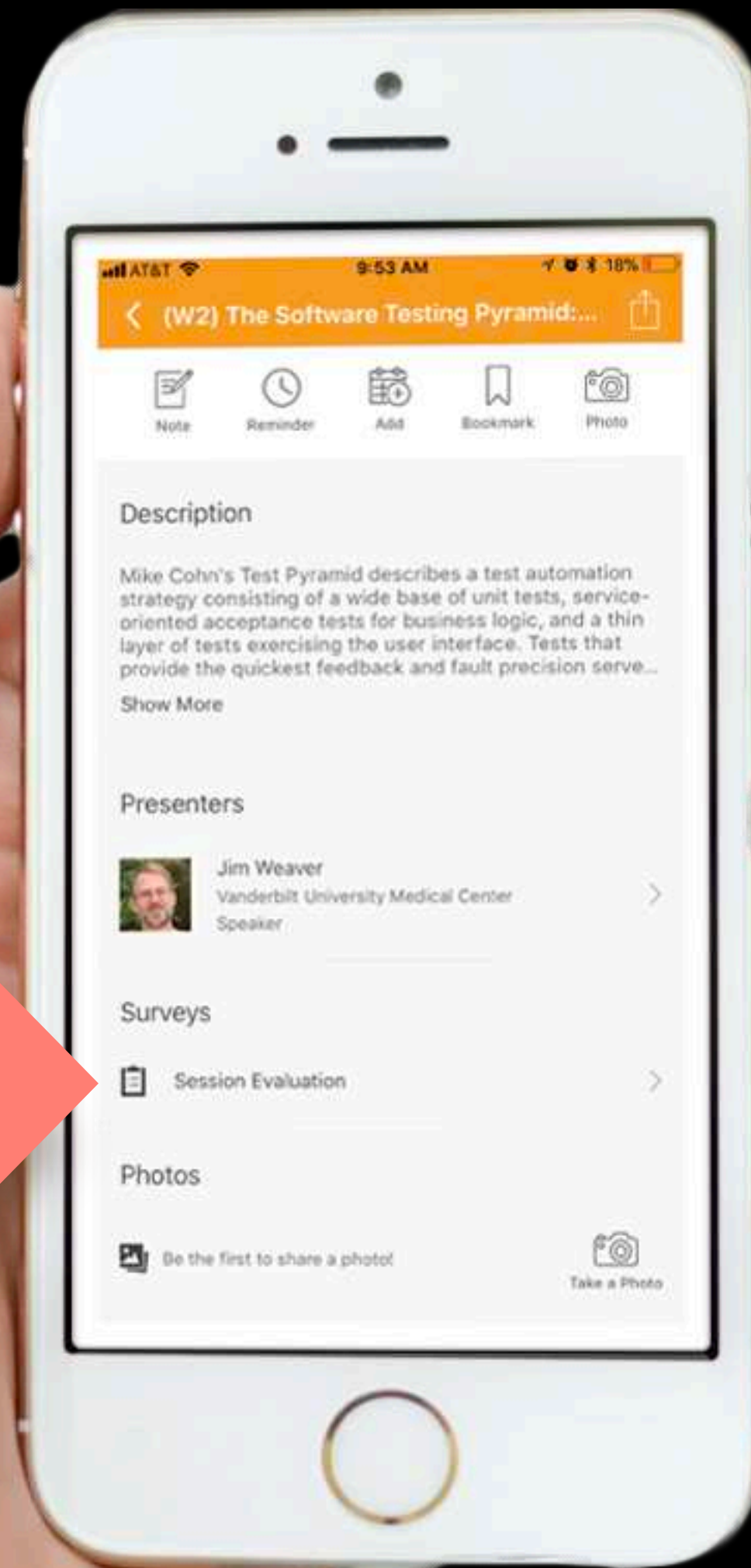
- Chaos Engineering Traps - Nora Jones bit.ly/2Pr53ZH
- ChaosCat: Automating Failure Injection at PagerDuty bit.ly/2UCbdXN
- ChaoSlingr: Introducing Security into Chaos Testing bit.ly/2GDZN1V

<https://speaking.mattstratton.com>

Pagey Says....

Follow
@mattstratton on
Twitter!





Session Evaluations in the App