Testing properties with QuickCheck

Quick overview of QuickCheck

• Demo (basics)

Appeal to authority

• Better than unit tests, Michael Nygard

Testing UI

- Choose your own adventure randomised user actions.
- Demo (arbitrary)

Testing Concurrent Systems with QuickCheck

... or ...

- Concurrent
- with
- Testing
- QuickCheck
- Systems

Testing Concurrent systems (Part 2)

- Google for "Erlang QuviQ"
- Same can be applied to distributed systems.

Further reading

- https://hackage.haskell.org/package/QuickCheck
- Original paper http://www.cs.tufts.edu/~nr/cs257/archive/ john-hughes/quick.pdf

Further reading—Concurrent Systems

- http://www.quviq.com/products/erlang-quickcheck/
- Testing Erlang Concurrency with QuickCheck
- Finding Race Conditions in Erlang with QuickCheck and PULSE

Future reading—Distributed Systems

- Testing Telecoms Software with Quviq QuickCheck
- Modeling eventually consistent databases with QuickCheck (Video), Jon Meredith, Basho.