@steshaw

"Choose your own adventure"

Lightning talk, Brisbane Software Testers

Quick overview

- Test properties of your programs.
- Randomised test inputs.

Better than unit tests—Michael Nygard (2013)

Testing UI

- Choose your own adventure.
- randomised user actions.

Testing Concurrent Systems

... or ...

- Concurrent
- Testing
- Systems

:P

Concurrent systems (2)

- Google "Erlang QuviQ" to find reports and talks.
- Distributed Systems are Concurrency Systems that span multiple nodes.
    - i.e. these ideas apply to Distributed Systems.
    - i.e. web

References

- Original QuickCheck paper from 2000—Claessen and Hughes (PDF)
- QuickCheck homepage and manual
- Testing and quality assurance—Chapter 11 of Real World Haskell
- Introduction to QuickCheck on Haskell Wiki

References (2)

- https://github.com/steshaw/quickcheck-examples

Testing Concurrent Systems

- Erlang QuickCheck
- Testing Erlang Concurrency with QuickCheck (PDF)
- Finding Race Conditions in Erlang with QuickCheck and PULSE (PDF)

References (3)

Testing Distributed Systems

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

See Also

- SmallCheck for exhaustive checking of your properties (rather than QuickCheck style random samples)
- Comparison of QuickCheck and SmallCheck