

HOW TO TEST PERFORMANCE

AND NOT DIE TRYING



◁TestingUy▷

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Agenda

- Why it matters
- What to test
- How to test

Why it matters

Why is performance important for our business?

- **Google**: 2% slower = 2% less searches/user
- **Yahoo**: 400 ms faster = 9% more traffic
- **Amazon**: 100ms faster = 1% more revenue
- **Shopzilla**: 5s faster
 - 25% more site visits
 - 7 to 12% more revenue
- **Google** takes load times into account when ranking a site

Why it matters

Why is performance important for ourselves?

"The best part about performance testing is how much you learn about technology in general"

What to test

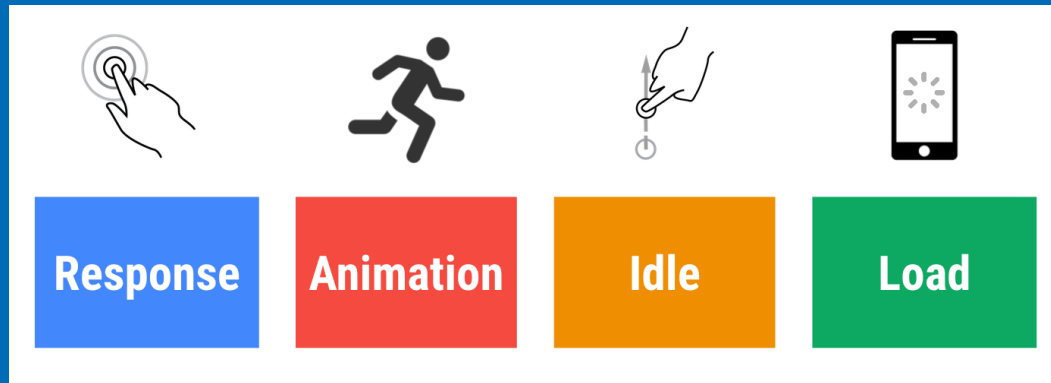
What should we measure?

- Response times and speed ←
- How much load we can handle
- How the system behaves

What to test

Have a goal in mind - 3 alternatives

- Performance budget
- Business-specific goal
 - Twitter's "time to first tweet"
- Google's RAIL model



How to test

First rule

1. Measure



2. Optimize

How to test

Second rule



How to test

Alternatives

Synthetic monitoring

Emulate a browser, run a test case and record response times for each request

Real user monitoring (RUM)

Passively send performance information directly from the user's application

How to test

Synthetic monitoring

- Tools
 - [WebPage Test](#) (free, web)
 - [Google PageSpeed Insights](#) (free, web)
 - [StatusCake](#) (free/paid, web)
 - [Keynote/Dynatrace](#) (paid, web)
 - [Monkop](#) (free/paid, mobile)

How to test

Real user monitoring

- If RUM tools are used during testing, you can go live with know how on how to interpret the results
- Tools
 - [Google Analytics](#) (free, web/mobile)
 - [StatusCake](#) (free/paid, web)
 - [NewRelic](#), [Pingdom](#) (free/paid, web)
 - [HP AppPulse](#) (paid, mobile)



Resources

- Link to slides
diegocard.com/testinguy
- RAIL
<http://bit.ly/rail-performance>
- Microsoft's performance testing guidelines
<http://bit.ly/microsoft-performance>

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