Google™ 10 I/O

Measure in Milliseconds redux: Meet Speed Tracer

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javascript:alert(new Date())

The (secret) frontend performance series.

Faster apps faster: Optimizing apps with the GWT Compiler
(http://code.google.com/events/io/2010/sessions/faster-apps-faster-gwt-compiler.html)

Architecting for performance with GWT
(http://code.google.com/events/io/2010/sessions/architecting-performance-gwt.html)

Optimizing every bit of your site serving and web pages with Page Speed
(http://code.google.com/events/io/2010/sessions/optimize-site-serving-page-speed.html)

live notes in wave
http://bit.ly/io2010-gwt1

The Plan

a few reasons why performance matters.

a few minutes just showing Speed Tracer.

a few specific examples.

a few new features in Speed Tracer 1.0.

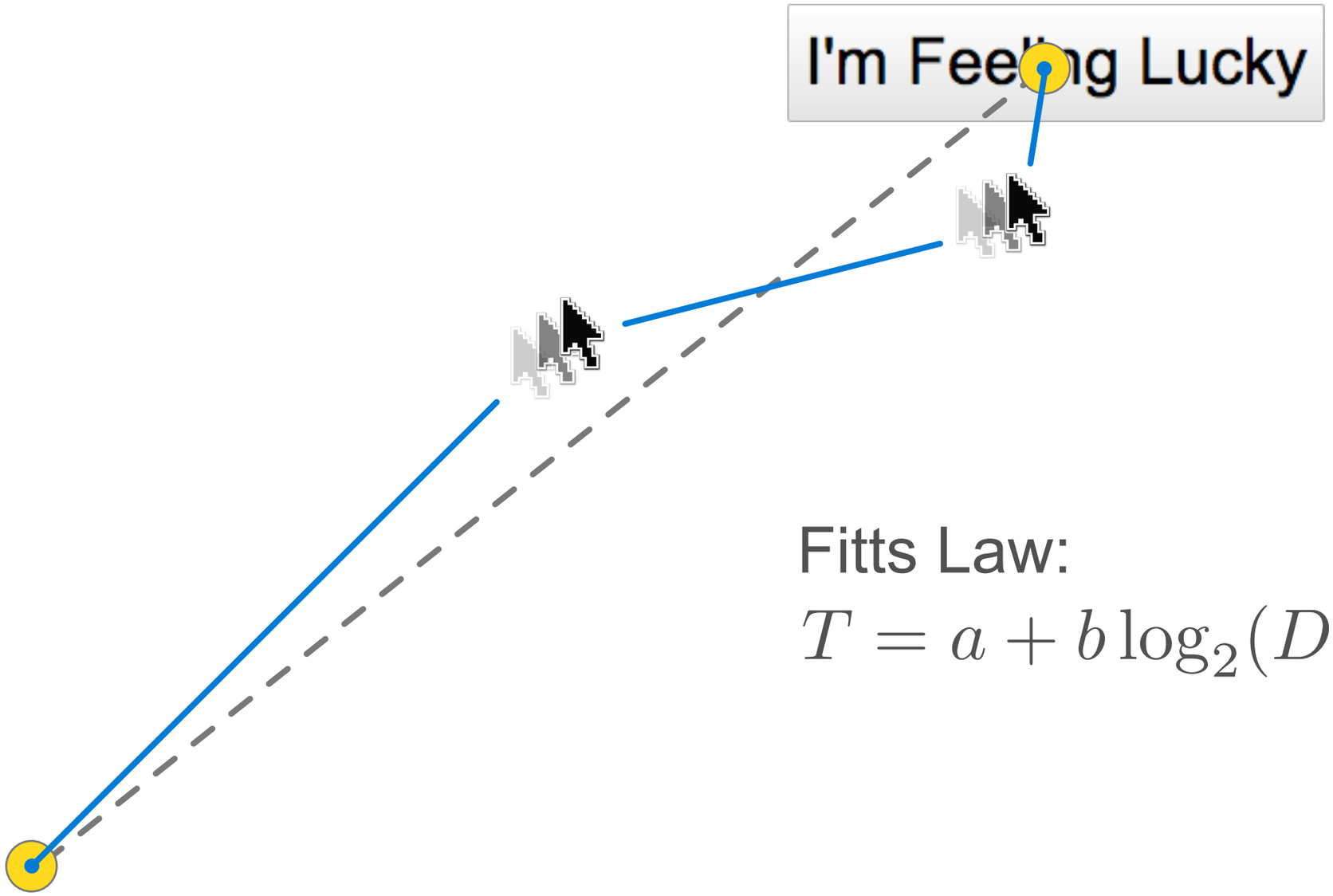
a few questions.

a few reasons why performance matters.

Very simple: It affects your users.

It affects users' ability to use your app.

(http://io-mims.appspot.com/golf)



Fitts Law:

$$T = a + b \log_2(D/W)$$

Very simple: It affects your users.

they are sensitive to small delays.

(http://io-mims.appspot.com/delay)

Very simple: It affects your users.

It affects users' perception of quality of your app.

Borella, M.S., Sears, A., Jacko, J. (1997), "The effects of Internet latency on user perception of information content", IEEE, Global Telecommunications Conference, GLOBECOM '97, http://portal.acm.org/citation.cfm?id=1120212.1120430, Vol. 3 pp.1932-6.

(http://bit.ly/bLYSrF)

Just remember this number.

100ms

a few minutes just showing Speed Tracer.

So why is it so hard to do things in 100ms?

most people don’t even measure. :-(

browsers are all event/callback based.

browsers are complex and impossible to reason about.

Speed Tracer: make your apps faster by

telling you when your app is slow.

timing everything that happens in the browser while your app runs.

a few specific examples.

The mysterious case of too much layout

http://io-mims.appspot.com/layout

The mysterious case of too much data

http://io-mims.appspot.com/wx

a few new features.

Call stack information.

"Can you tell me what line of code, please?"

Call stack information.

"No, I mean the line of Java code in GWT. LOL"

Server-side performance tracing.

"I don't know. It looks like the server is just being slow."

for AppEngine:

http://code.google.com/appengine/docs/java/tools/appstats.html

for Spring's tc Server Developer Edition

http://www.springsource.com/products/tcserver/devedition

Speed Tracer for regression testing.

Gmail - Performance Regression! - xxxxx@google.com

://mail.google.com/mail/?shva=1#inbox/1286e7a27a33b01f

RSS

Google

Documents Web Reader more ▼

xxxxx@google.com | | Settings | He

Search Mail Search the Web

Show search options
Create a filter

« Back to Inbox | Archive | Report spam | Delete | Move to ▼ | Labels ▼ | More actions ▼

‹ New

New window

Print all

About these I

Performance Regression! Inbox | X

Angry Engineer to frontend-team, show details 12:36 PM (2 hours ago) Reply

Hi Team,

We have another [annoying] performance regression. I checked the dashboard this morning and the [all important] load times that I worked so hard to reduce 2 months ago is up to **5 SECONDS!** I hope you [less-experienced engineers] know how to do a binary search, because all we know is the performance regression is in the last **1,200 REVISIONS!**.

p.s. I'll out friday as my anger mgmt class is going rafting.

Reply Reply to all Forward

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Get a copy of the milestone.

http://code.google.com/speedtracer/

a few questions.

me:

knorton@google.com

@kellegous

Speed Tracer:

http://code.google.com/speedtracer/

http://speedtracer.googlecode.com/

View live notes and ask questions on Wave:

http://bit.ly/io2010-gwt1


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