

The Open Road: The Web and Mobile Innovation

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Developer Relations,
Mozilla
12 March, 2009



mozilla
Firefox[®]

Mozilla's mission

promote
choice
and
innovation
on the
Internet





Mobile application development

A red traffic cone stands in the center of a narrow alleyway between concrete walls. The scene is lit from the left, creating strong shadows. The text is overlaid on a semi-transparent grey band across the top of the image.

Mobile application development

Many platforms

Multiple languages and SDKs

Different distribution, security,
upgrade models

A red traffic cone stands in the center of a narrow alleyway between brick walls. The cone is the central focus, with its base resting on a concrete surface. The walls are made of reddish-brown bricks, and the ground is a mix of concrete and asphalt. The lighting is somewhat dim, with shadows cast by the walls and the cone.

Mobile application development

Longer development cycles

Higher maintenance costs

Lower quality

Mobile application development



The Web is the open mobile platform



The Web is the open mobile platform

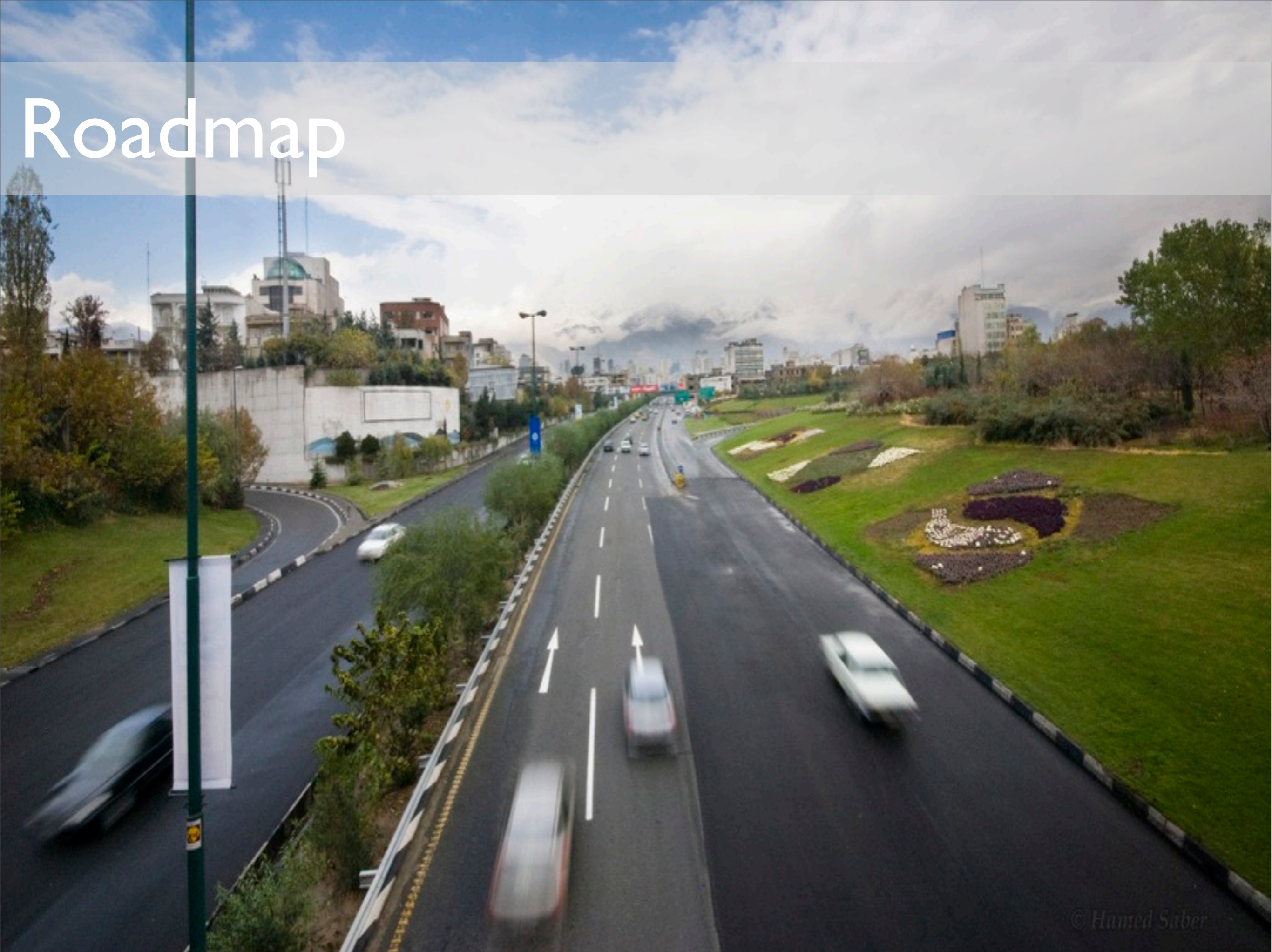
HTML/CSS/JavaScript for rapid development

Works across all platforms

Low learning curve

The Web is the open mobile platform

Roadmap



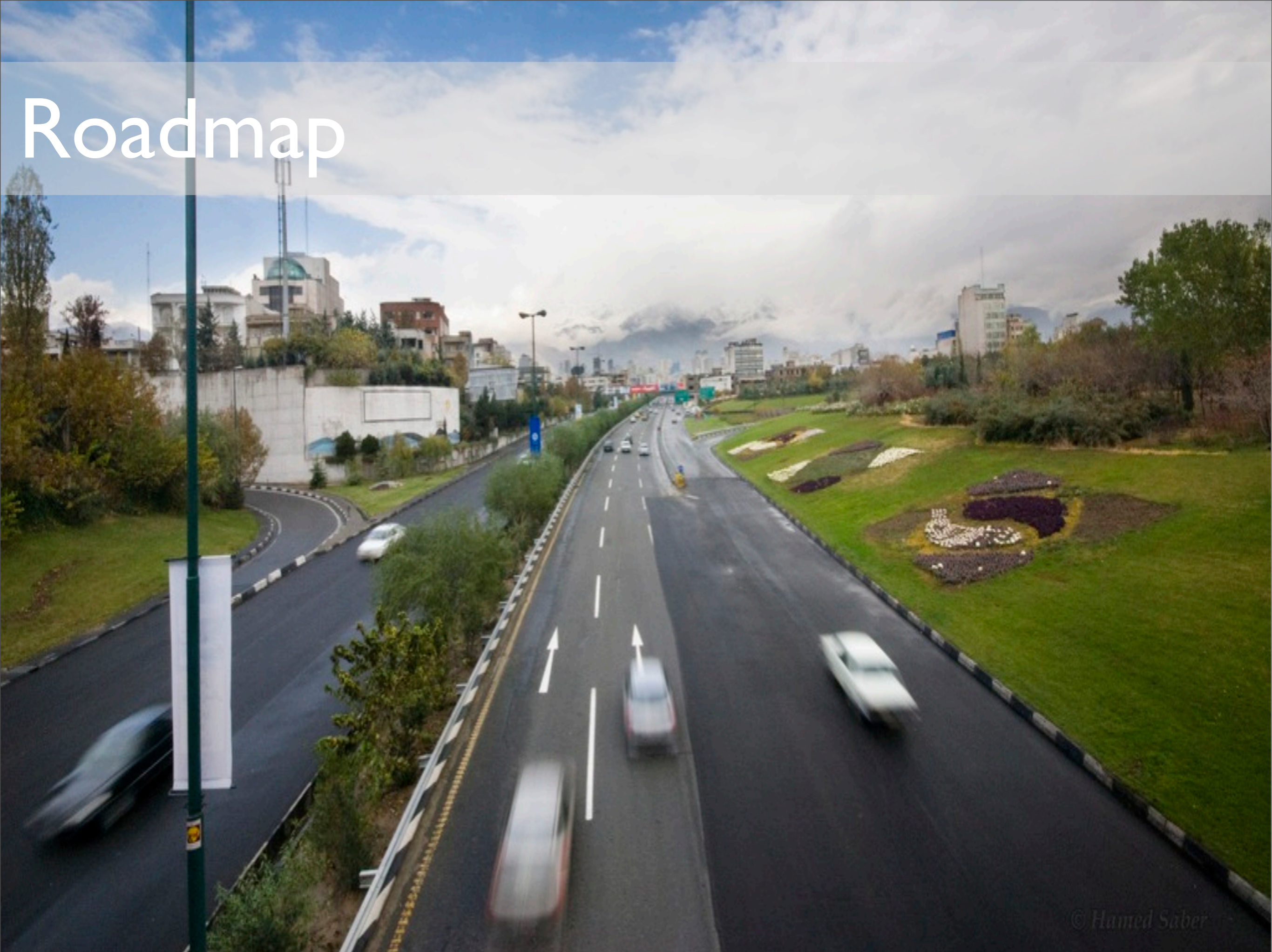
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Roadmap

Canvas, SVG, Video tag

Widgets/Web runtime

Roadmap



© Hamed Säber

Fennec - Firefox for mobile

- Simple, fast navigation to Web content
 - “Awesome bar” for mobile
 - seamless transition between mobile and desktop browsers
 - integrated search
 - ...and much more
- Add-ons
- Linux, Windows Mobile and Symbian



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 - ...and much more
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The Web as mobile platform

web site



HTML

CSS

JavaScript

Plug-ins

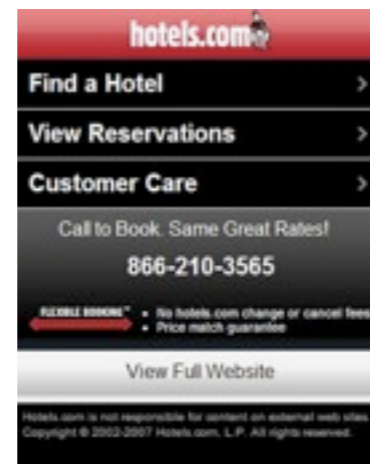


The Web as mobile platform

web site



mobile-friendly layout



HTML

Just more CSS

CSS

server-side access to
device capabilities data

JavaScript

Plug-ins

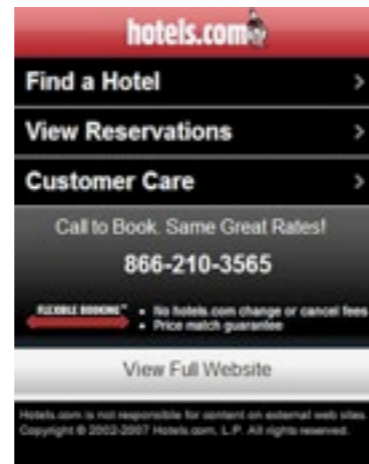


The Web as mobile platform

web site



mobile-friendly layout



mobile widget



HTML

Just more CSS

Widget metadata

CSS

server-side access to
device capabilities data

Update mechanism

JavaScript

Plug-ins

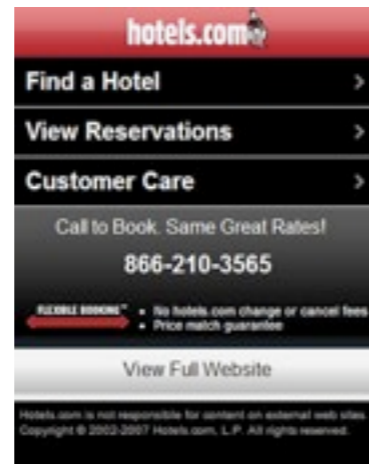


The Web as mobile platform

web site



mobile-friendly layout



mobile widget



device integration



HTML

Just more CSS

Widget metadata

JavaScript/DOM

CSS

server-side access to
device capabilities data

Update mechanism

access to
device features

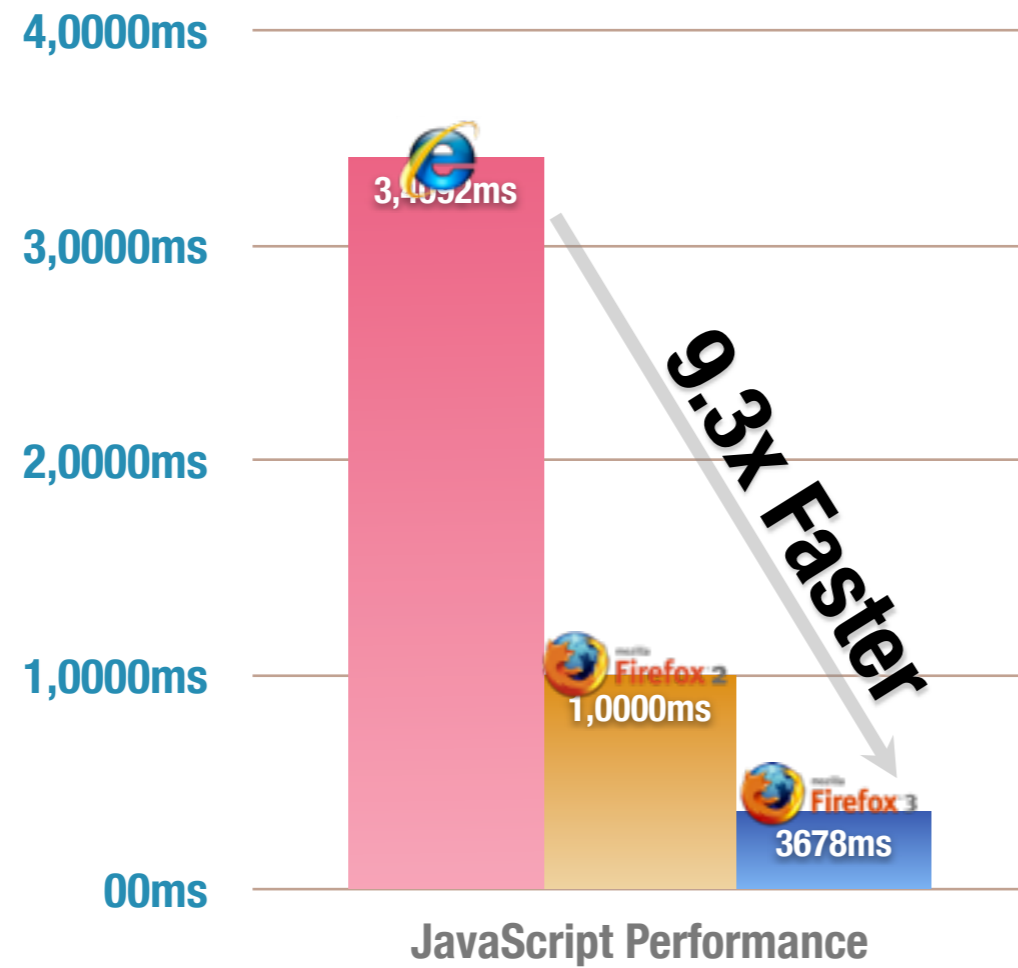
JavaScript

Security model

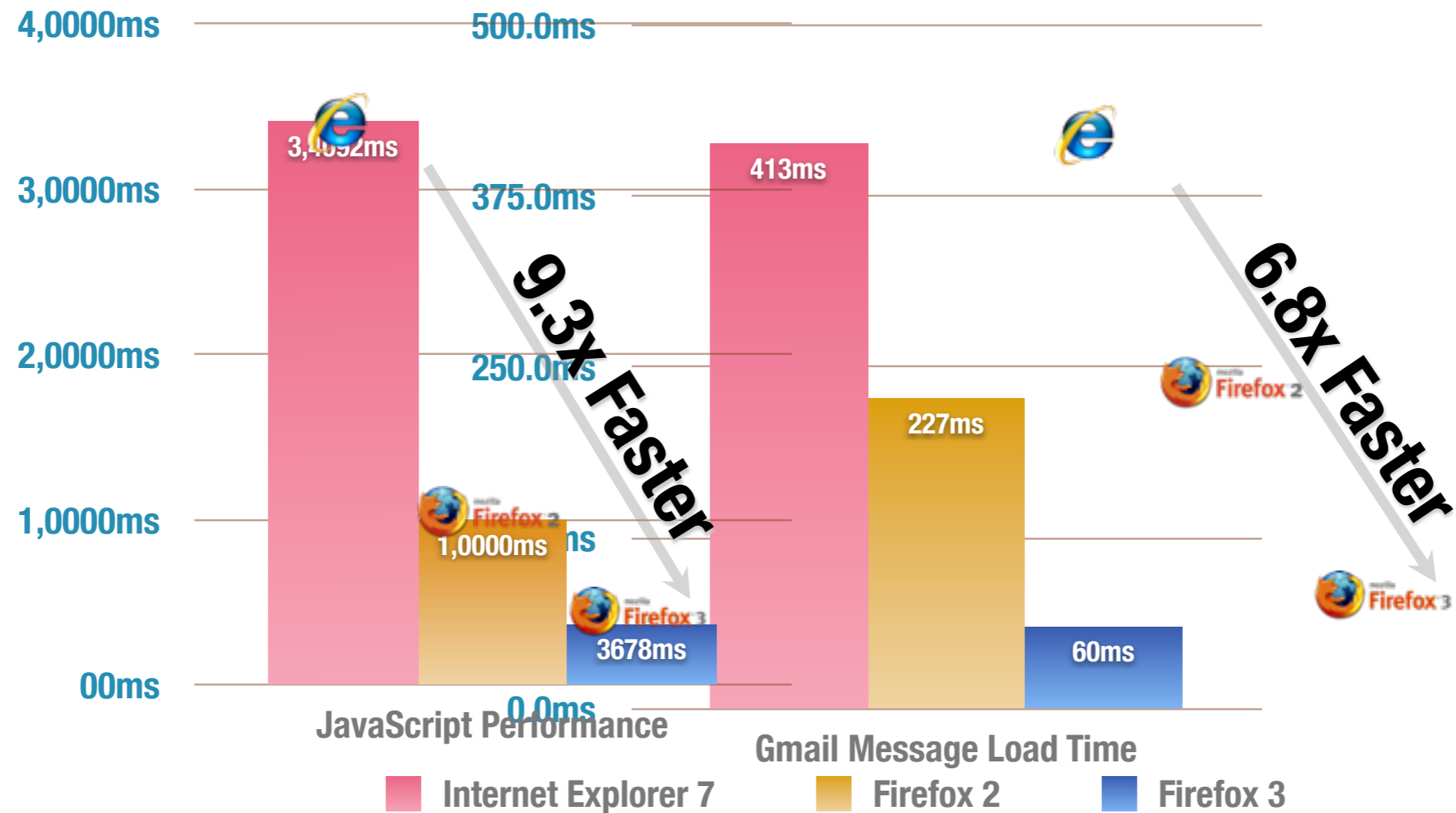
Plug-ins



JavaScript performance

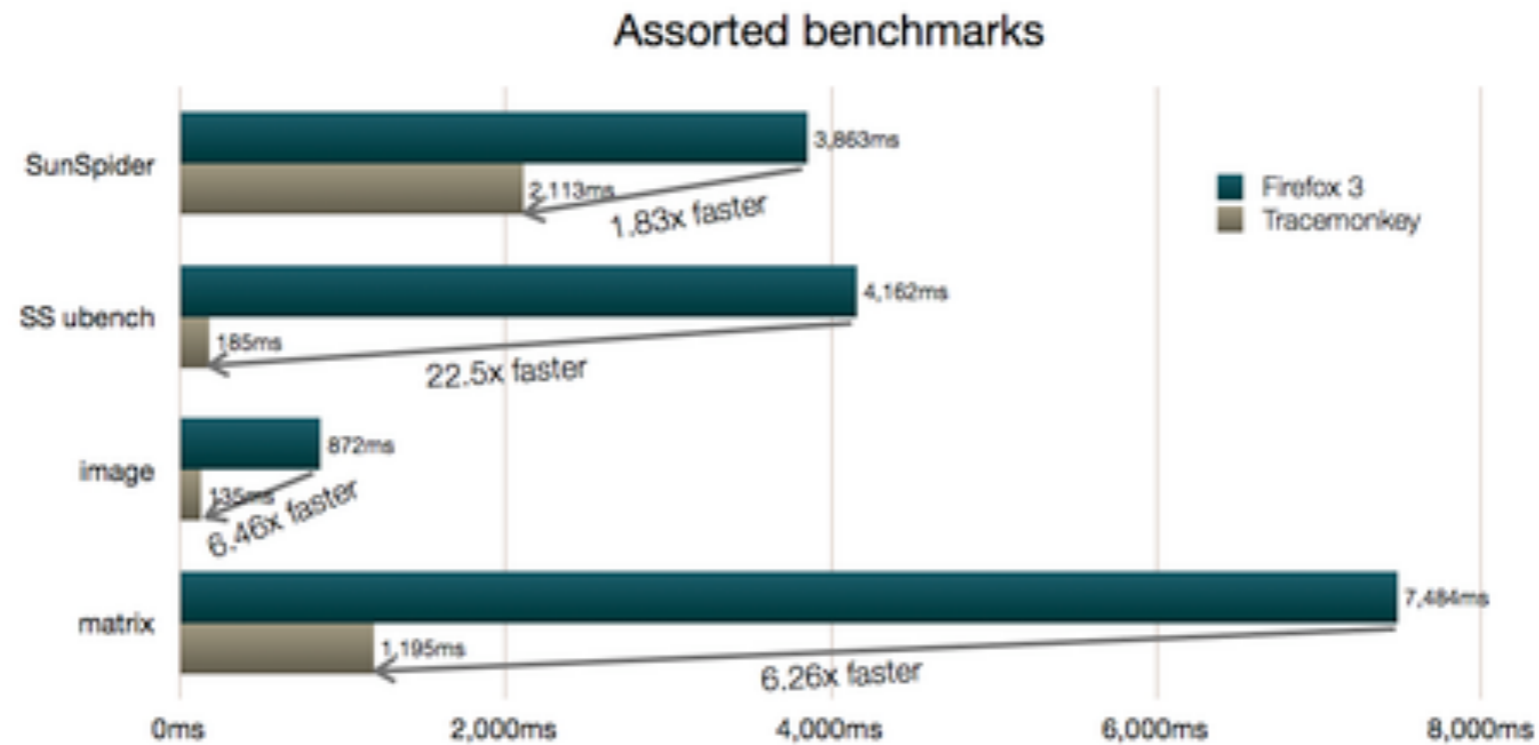


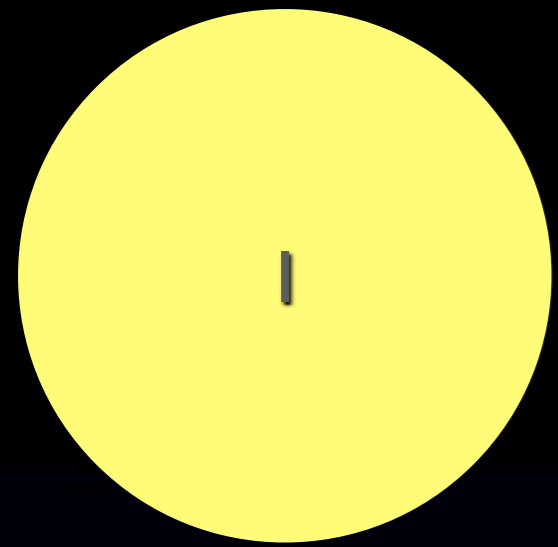
JavaScript performance



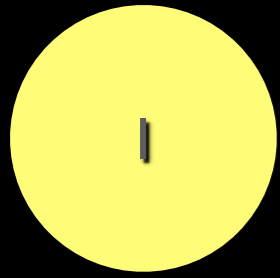
JavaScript performance

Further improvements with TraceMonkey



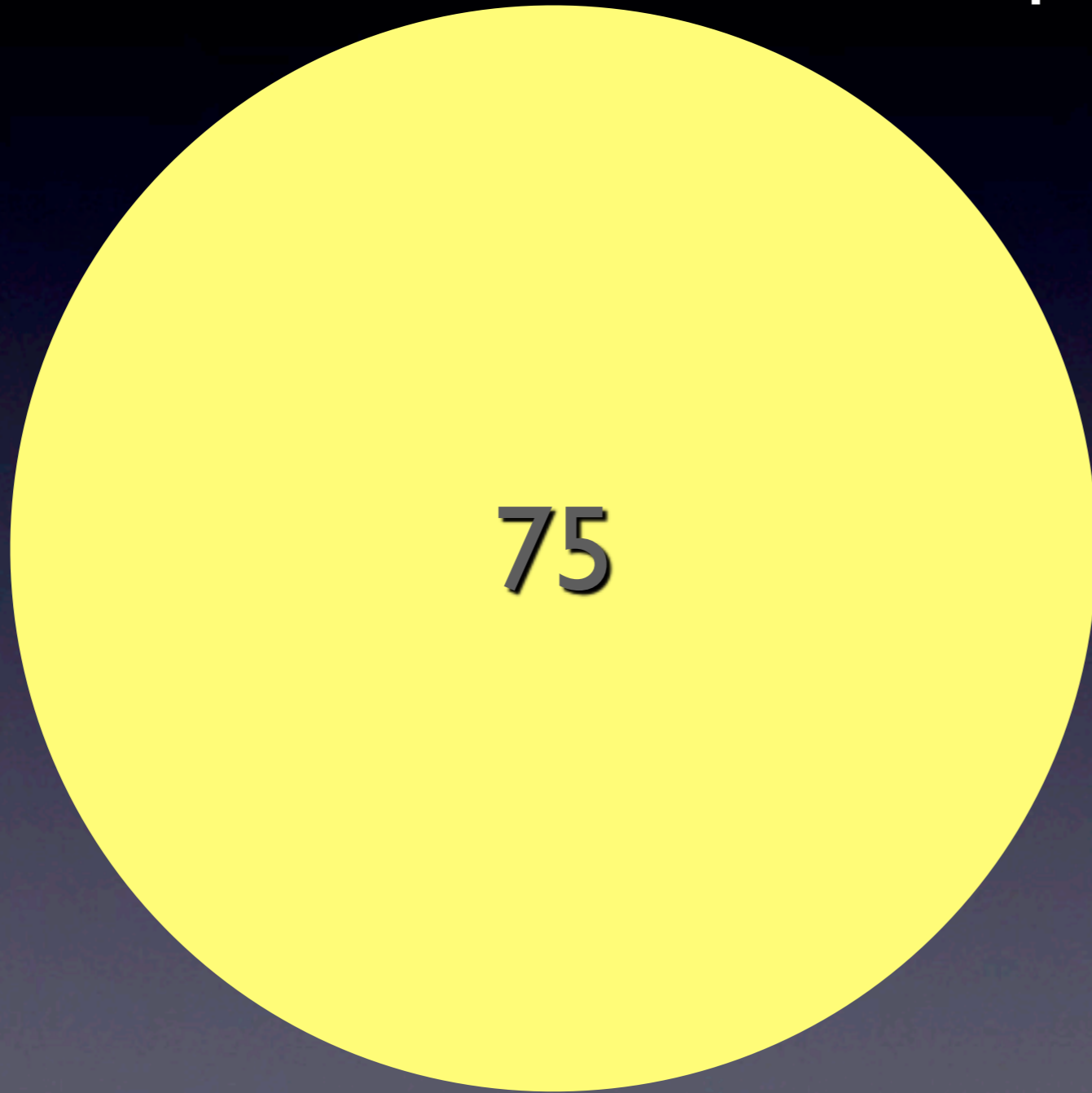


Me



Me

Mozilla Corporation Development Team

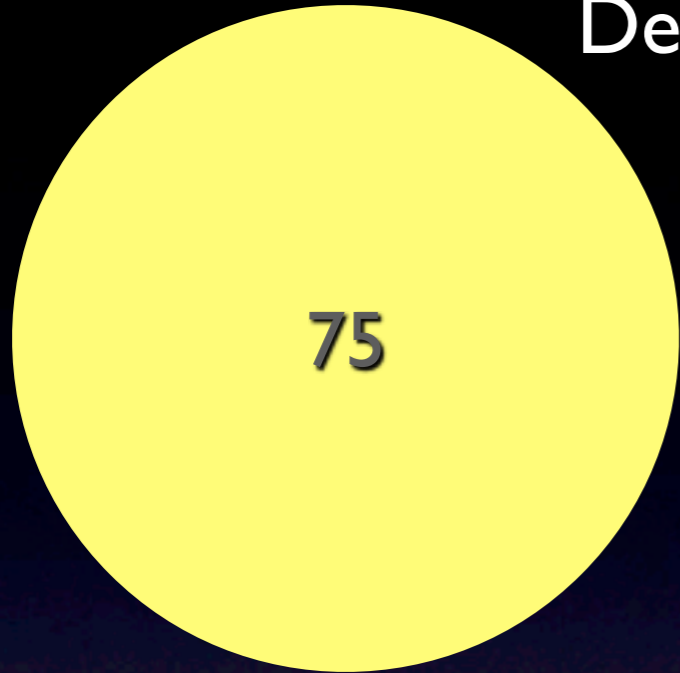


75



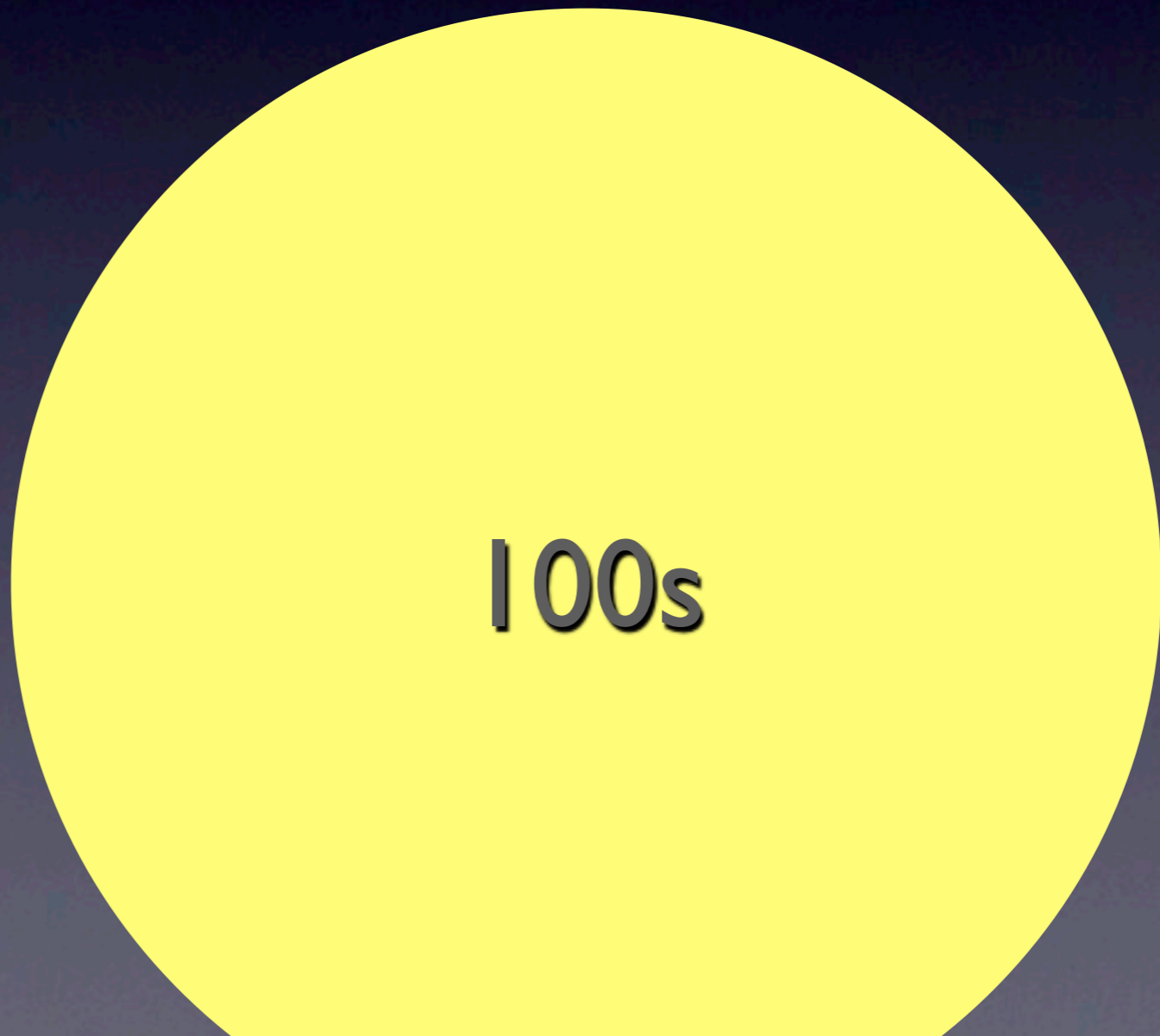
Me

Mozilla Corporation
Development Team



75

Daily
Contributors



100s



Mozilla Corporation
Development Team

40

100s

Daily
Contributors

Contributors

1 000s

Daily
Contributors



Contributors

Nightly testers

10,000s

Daily Contributors

Contributors

Nightly testers

10,000s

Beta testers

1,000,000

Contributors

Nightly testers

Beta testers

500k

Active users

(~ 200M)

how does this work?



Warning! Model mismatch!

Using the wrong model can be harmful to your health

This model works for Mozilla; might not work for you...

Open doesn't mean democracy!

Embracing the chaos...

“The URL bar should be removed.”

“Fitts’ says bigger buttons are better.”

“What’s with the dirty house?”

“My mom doesn’t understand tabs.”

“There should be a preference setting.”

“Nobody uses the ‘Go’ button.”

“Add support for BitTorrent.”

“Everyone uses tags, not bookmarks.”

“OpenID is the future!”

“That’s great!”

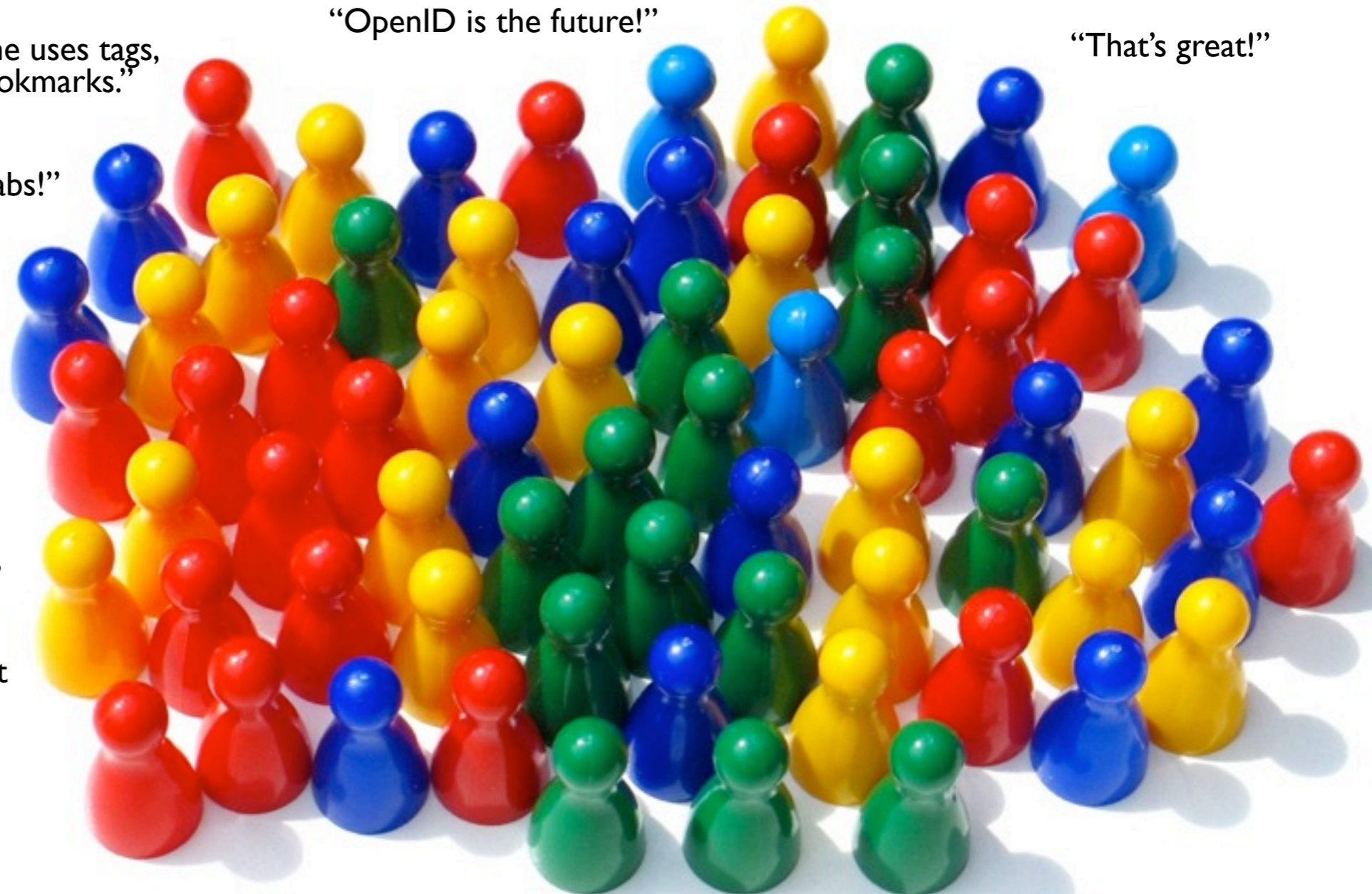
“I love tabs!”

“The profile manager should be redesigned.”

“Add support for Ogg Vorbis.”

“That’s awful”

“Closebuttons are better at the end of the tabstrip.”



Chaos

Anyone can propose a change

Bug #	Dupe Count	Change in last 30 day(s)	Component	Severity	Op Sys	Target Milestone	Summary
319196	107	15	Startup and Profile System	critical	Windows XP	---	customized toolbar always reset to default on restart, bookmarks and search engines lost, unable to add search engines (localstore.rdf corruption on upgrade or crash). SEE URL FIELD FOR SUPPORT LINK
239223	50	0	General	critical	Windows XP	---	[Meta] firefox.exe doesn't always exit after closing all windows; session-specific data retained
284099	49	0	Bookmarks	critical	All	---	bookmarks lost when upgrading Firefox
249150	43	0	Bookmarks	critical	All	---	Bookmarks file is overwritten (deleted) randomly in Firefox versions without places
215762	34	2	General	normal	All	---	autoscroll (middle click) causes "XML pretty print" to unformat (disappear, clear)
283697	31	0	Preferences	normal	All	---	Firefox Options (Preferences) panels are cropped (cut off)
195031	28	0	Bookmarks	normal	All	---	Bookmarks menus should be sticky (should remain open in some cases)
299372	23	0	File Handling	normal	All	---	Content-Disposition headers no longer looked at for Save Link As filename, so it uses e.g. "attachment.cgi" in bugzilla instead of the name of the attachment; Save Page As works fine
254714	21	1	Location Bar and Autocomplete	major	All	---	while loading a page, on a new tab/window, the location bar does not display the address
			Download				Cross-Session resumable downloads (resume after quitting)

Chaos

Anyone can *comment* on a proposal for a change

Bug 18574 (mng) – restore support for MNG animation format and JNG image format (edit)

Status

[Cosmin Truta](#) 2003-06-06 19:09:11 PDT

Comment [#101](#) [reply]

Severity

Private

Keywords

Since G

White

not

URL:

I am tr

Product

Cosmin

Component

Version

Hardware

OS:

Assignee

QA Contact

Priority

Target Milestone

[Glenn Randers-Pehrson](#) 2004-06-08 17:58:10 PDT

Comment [#456](#) [reply]

Private

Re [comment](#)

from moz

that som

[Gerard Juyn](#) 2007-03-28 07:00:38 PDT

Comment [#725](#) [reply]

Private

Cosmin

I'm just

restarting

this comment

for the 59th

time in the

last week or

so.....

Can we please

all agree that

this is going

nowhere? The

decision not to

support MNG

natively has

been made and

[Peter W](#)

Private

I am run

--enable

and Linu

display

official

to the l

anyway i

1. The f

[appear w](http://w</p></div><div data-bbox=)

backgrou

backgrou

Now as for

APNG, can we

please move

that discussion

to [bug 257263](#)

and let this

one rip? There

are some things

I'm just restarting this comment for the 59th time in the last week or so.....

Can we please all agree that this is going nowhere? The decision not to support MNG natively has been made and we have been offered an alternative. The big question is only, is it a workable alternative and who has the ability/time to spend on building it? Since it's proposal I haven't been made aware of any new bugs opened to even start this thing. If they have then please let me know as I'd like to listen in :-)

Now as for APNG, can we please move that discussion to [bug 257263](#) and let this one rip? There are some things that people need to be aware of that are not getting addressed on here, because it would definitely defeat the purpose of a bug repository. (although I personally think good ol bugzilla is a little more than that)

The short story (but again please go to [bug 257263](#) for the long story):

Chaos

Anyone can submit a change to the code

```
Index: browser/base/content/browser.js
=====
RCS file: /cvsroot/mozilla/browser/base/content/browser.js,v
retrieving revision 1.777
diff -u -8 -p -r1.777 browser.js
--- browser/base/content/browser.js      13 Apr 2007 01:26:38 -0000      1.777
+++ browser/base/content/browser.js      14 Apr 2007 23:36:20 -0000
@@ -1818,16 +1818,18 @@ function addBookmarkForBrowser(aDocShell
     title = url;
   }
   BookmarksUtils.addBookmark(url, title, charSet, aIsWebPanel, description);
 }
#endif

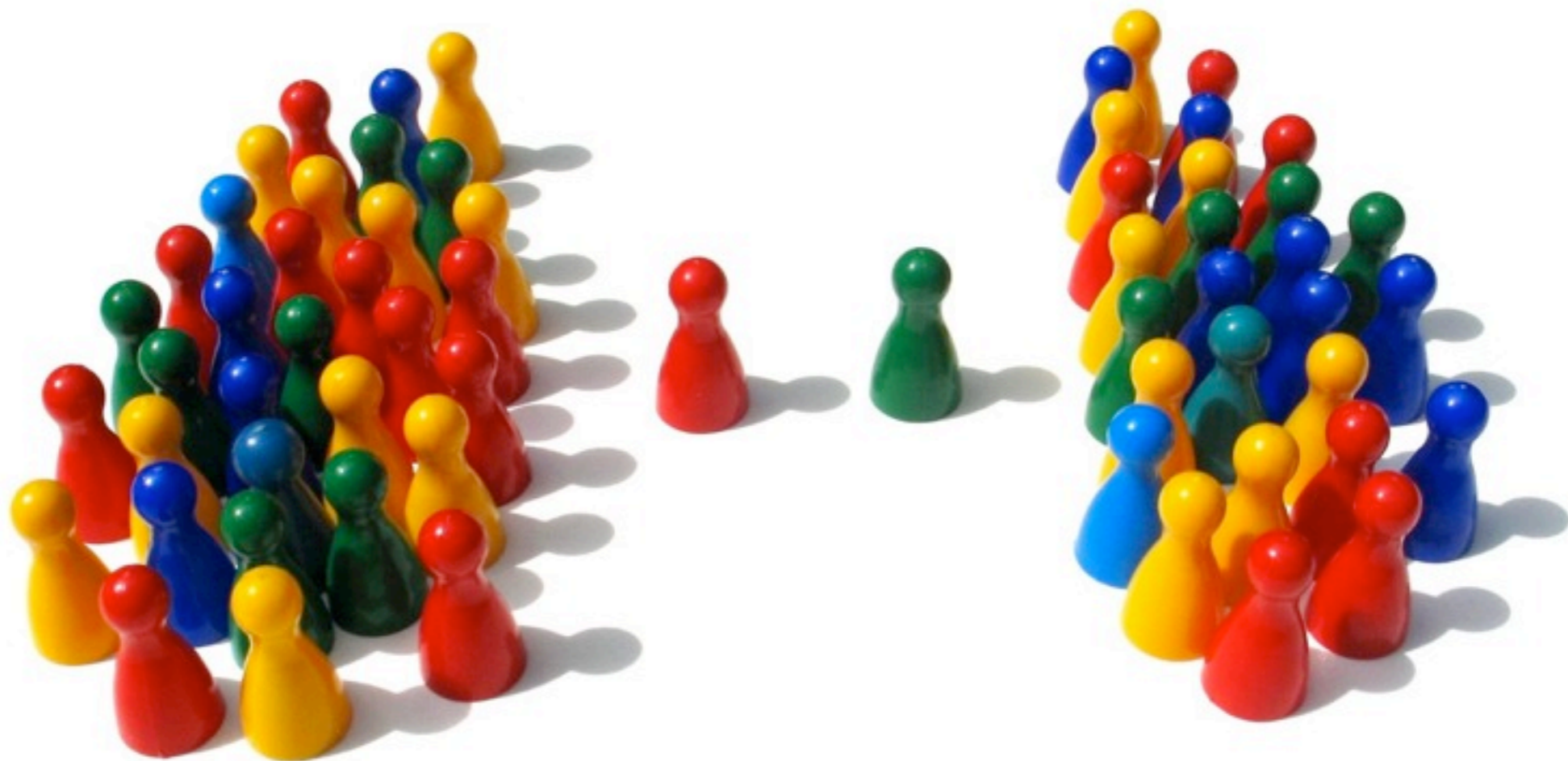
function openLocation()
{
+  if (window.fullScreen)
+    FullScreen.mouseoverToggle(true);
+  if (gURLBar && isElementVisible(gURLBar)) {
    gURLBar.focus();
    gURLBar.select();
    return;
  }
#ifdef XP_MACOSX
  if (window.location.href != getBrowserURL()) {
    var win = getTopWin();
@@ -3090,16 +3092,18 @@ const BrowserSearch = {

    win = window.openDialog("chrome://browser/content/", "_blank",
```

[Edit Attachment As Comment](#) | [View Attachment As Diff](#)

Chaos

camps are formed quickly



Chaos

easier to comment than to do





Chaos into order: organizing a chorus

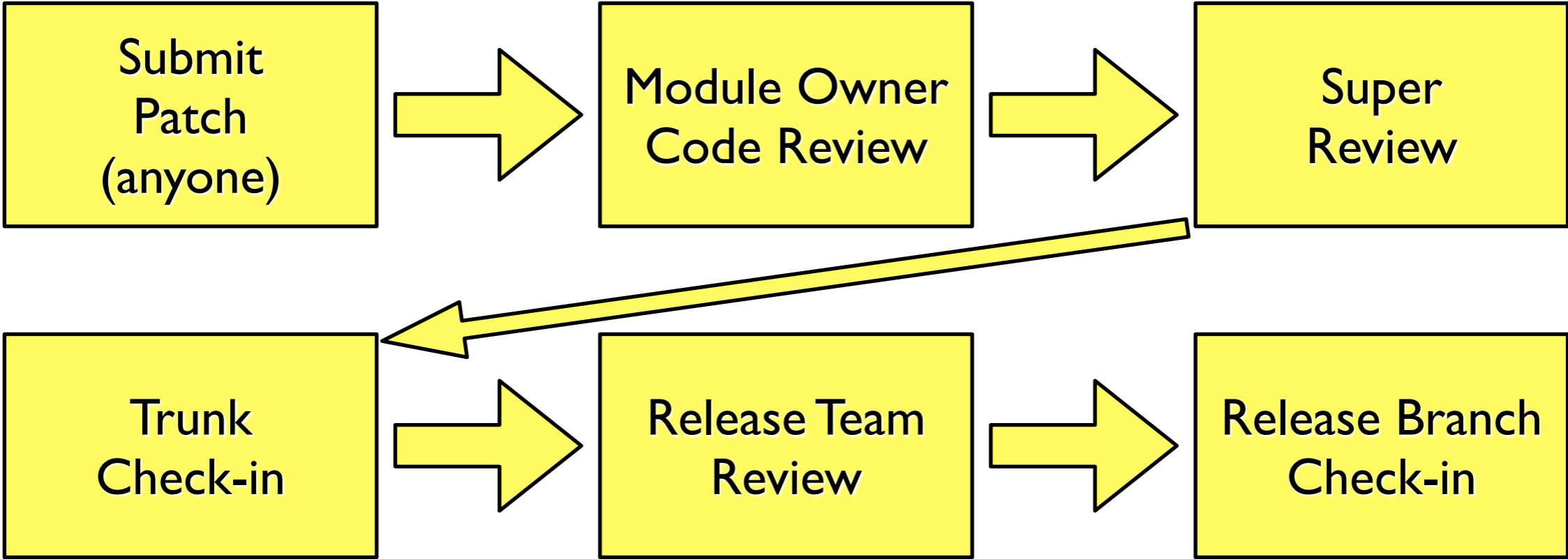
Order

Key: Not everyone can *approve* a change



Order

Multiple Code Reviews



Order

Visibility into every change



tinderbox

tree: Firefox (2007-05-26 19:42 PDT)

The tree is open

Build Time	Guilty	Linux argo-vm Dep Nightly	Linux bi-bldlx01 Dep argo-vm test perf	Linux bi-bldlx01 Dep fx-linux-tbox test perf	Linux fx-linux-tbox Dep	Linux fxdebug-linux-tbox Dep	Linux qm-rhel02 dep unit test	MacOSX Darwin 8.8.4 bm-xserve08 Dep Universal Nightly	MacOSX Darwin 8.8.4 qm-xserve01 dep unit test	WINNT 5.1 bi-bldxp01 Dep fx-win32-tbox perf test	WINNT 5.1 qm-winxp01 dep unit test	WINNT 5.2 fx-win32-tbox Dep Nightly	WINNT 5.2 qm-win2k3-01 dep unit test
2007/05/24 09:00:01	Olli Pettay benjamin bent.mozilla bienvenu clrbld dbaron dietrich dmose gijskruitbosch igor.jonas joshmoz longsonr mozilla neil peterw rflint scott sdwalsh sharparrow sspitzer stefanh												
2007/05/24 08:32:02													
08:29:03													
08:19:01													
08:10:01													
08:07:01													
08:06:02	sspitzer												
08:00:02													
2007/05/24 07:51:01													
07:50:02													
07:48:02													
07:44:02													
07:40:00													
07:38:02													
07:37:48													
07:37:02													
07:35:00													
07:33:00													
07:30:03													
07:30:02													

Order

educate



Order

identify and elevate smart contributors





Provide a path of least resistance to channel the input to where you want it



Create a clear path
for contributors

Join us

