

회사원에서 오픈소스개발자로 거듭나기 :)

첫번째 이야기: 오픈소스를 통해 회사로부터 독립하기

방진호



안녕하세요! 방진호입니다

저는 현재 10억 다운로드 **삼성인터넷**을 개발하고 있습니다 

개인적인 취미로 다양한 **오픈소스**에 참여하고 있습니다



“

여러분이 속한 조직(회사, 학교 등)에서
다들 **충분히 만족**하고 계신가요?

“

저는 **불만 가득한 신입개발자**였습니다

06

BAD COMPANY

“

2011년 1월 부푼마음으로 현재 회사에 입사

08

“

처음 배치받은 곳은 PC사업부

MS Windows Driver팀

“

소프트웨어 개발자를 꿈꾸던 나인데
그곳에서는 코딩 한 줄 짤 입이 없었다..



패기넘치는
신입 나부랭이

야 인사 담당자야
난 소프트웨어 개발자로 입사한거지 테스터로 입사한게 아니다
나를 지금 당장 진짜 개발할 수 있는 부서로 옮겨내라. **안그럼 퇴사한다.**

신입따위가 매우 건방지지만 너의 패기가 가상하니
어쩔 수 없이 **코딩지옥**으로 옮겨줄게



인사 담당자

“

그래서 두번째로 일한 곳은 PC사업부

Linux Platform 팀



합동안 과도한 **불꽃코딩**하면서 꽤나 만족했음

꽤나 만족스럽긴 했지만..

- 언제 어딜가도 있다는 상따르기가 존재
- 조직의 비전이 너무나도 불확실 했음
- 고용 불안
- **돈을 적게 받았음**
- 당시에 관심있던 기술 스택과는 달랐음

“

그래서 도전하기 시작한
이직과 잡포스팅(Job Posting)



서류 광탈의 반복,
마치 시한부 인생을
사는 느낌이 쏘!

“

어찌다가 **운중계(?)** 면접도 없이 **잡포스팅 합격**

(12전 1승 11패)

“

그래서 세번째로 일한 곳은 Mobile사업부
Web Platform팀

“

처음 맡은 일은 또 다시 **개발이 아닌 업무**

“

웁긴지 얼마되지 않아서 받은 **(나쁜)업무평가**

“

나쁜평가를 받으면 연봉이 오르지 않는다고 한다

이 상황에서 다음 중 내가 할 수 있는 선택은?

1. 아무 일 없었던 것처럼 잊고, 더 열심히 일한다
2. 평가자에게 쌍욕을 하고, 핏김에 퇴사한다
3. 다른 팀으로 또 다시 옮겨간다
4. 다른 회사로 이직한다

“

객관적인 능력증명서가 필요하다



2014 오픈소스개발자이야기

요약: 커미터가 되면 **실력↑, 연봉↑, 이직확률↑**

“

**오픈소스 커미터가 되면
회사로부터 독립할 수 있겠구나!**

26

BECOME A COMMITTER

“

어떤 **오픈소스**에 기여해야 할까?

내가 선택한 것은 Chromium/Blink, 왜 때문일까?

- 어릴적부터 브라우저를 만들고 싶었기 때문에
- 큰 프로젝트라 멋있어 보여서

내가 선택한 것은 Chromium/Blink, 왜 때문일까?

- 어릴적부터 브라우저를 만들고 싶었기 때문에
- 큰 프로젝트라 멋있어 보여서
- 회사에서 하는 일과 교집합이 많기 때문에

“

어떻게 커미터(Committer)가 될 수 있을까?

Become a Committer - The Chromium Projects

https://www.chromium.org/getting-involved/become-...

The Chromium Projects

Home
Chromium
Chromium OS

Quick links
Report bugs
Discuss
Sitemap

Other sites
Chromium Blog
Google Chrome
Extensions

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[Getting Involved](#) >

Become a Committer

What is a committer?

Technically, a committer is someone who has write access to the Chromium Git repository or the Chromium OS Git repository. A committer can submit their own patches or patches from others.

This privilege is granted with some expectation of responsibility: committers are people who care about the Chromium projects and want to help them meet their goals. A committer is not just someone who can make changes, but someone who has demonstrated their ability to collaborate with the team, get the most knowledgeable people to review code, contribute high-quality code, and follow through to fix issues (in code or tests).

A committer is a contributor to the Chromium projects' success and a citizen helping the projects succeed. See [Committer's responsibility](#).

What is written below applies to the main Chromium repos, except for the note at the bottom about ChromiumOS. For some other Chromium repos (e.g., the infra repos), we follow the same policies as the main Chromium repos, but have different lists of actual committers. Certain other repos may have different policies altogether. When in doubt, ask one of the OWNERS of the repo in question.

Becoming a committer

In a nutshell, contribute 10-20 non-trivial patches and get at least three different people to review them (you'll need three people to support you). Then ask someone to nominate you. You're basically demonstrating your

- commitment to the project (10+ good patches requires a lot of your valuable time),
- ability to collaborate with the team,
- understanding of how the team works (policies, processes for testing and code review, [OWNERS](#) files, etc),
- understanding of the projects' code base and coding style, and
- ability to write good code (last but certainly not least)

A current committer nominates you by sending email to committees@chromium.org containing the following information. Please do not CC the nominee on the nomination email.

- your first and last name
- your email address. You can also ask to get an @chromium.org email address at this time, if you don't already have one.
- an explanation of why you should be a committer,
- embedded list of links to revisions (about top 10) containing your patches

Two other committers need to second your nomination. If no one objects in 5 working days (U.S.), you're a committer. If anyone objects or wants more information, the committers discuss and usually come to a consensus (within the 5 working days). If issues can't be resolved, there's a vote among current committers.

That's it! There is no further action you need to take on your part. The committers will get back to you once they make a decision.

In the worst case, this can drag out for two weeks. Keep writing patches! Even in the rare cases where a nomination fails, the objection is usually something easy to address like "more patches" or "not enough people are familiar with this person's work."

Once you get approval from the existing committers, we'll send you instructions for write access to Git. You'll also be added to committees@chromium.org. If you work for Google, you are expected to [become a sheriff](#) at this point as well (see the internal instructions for how to add yourself to the rotations).

이 사이트 검색

목차

- 1 What is a committer?
- 2 Becoming a committer
- 3 Other statuses
 - 3.1 Try job access
- 4 Maintaining committer status
- 5 Chromium OS Commit Access (Code-Review +2)

The screenshot shows a web browser window displaying the Chromium Projects website. The page title is "Become a Committer" under the "Getting Involved" section. The main content area is titled "Become a Committer" and includes a sub-section "What is a committer?". The text explains that a committer is someone with write access to the Chromium Git repository and that this privilege is granted with the expectation of responsibility. A large quotation mark is overlaid on the text. To the right, there is a table of contents with five items: "1 What is a committer?", "2 Becoming a committer", "3 Other statuses" (with a sub-item "3.1 Try job access"), "4 Maintaining committer status", and "5 Chromium OS Commit Access (Code-Review +2)". Below the main text, there are bullet points listing requirements for nomination, such as "commitment to the project (10+ good patches requires a lot of your valuable time)", "ability to collaborate with the team", "understanding of how the team works", and "ability to write good code". The page also includes a sidebar with navigation links like "Home", "Chromium", "Chromium OS", "Quick links", and "Other sites".

“

고작 20개의 패치만 작성하면 된다

커미터 4주 완성 계획: 1 Day 1 Patch

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
	첫번째 패치	두번째 패치	세번째 패치	네번째 패치	다섯번째 패치	
	여섯번째 패치	일곱번째 패치	여덟번째 패치	아홉번째 패치	열번째 패치	
	열한번째 패치	열두번째 패치	열세번째 패치	열네번째 패치	열다섯번째 패치	
	열여섯번째 패치	열일곱번째 패치	열여덟번째 패치	열아홉번째 패치	스무번째 패치	

D-DAY
나도 커미터다!!

“

그렇다면 어떻게 **패치(Patch)**를 만들 수 있을까?



오픈소스에 기여하려면 !



스트가 정상적으로 돌아가는지 설정 빠진 게 없는지 체크한다.)

기여할 것 찾는 법

- 열심히 사용해보기 (보통 써봐야 이슈나 버그를 찾을 수 있어서..)
- 최근 이슈 둘러보기

열심히 사용해보기

기여하는 방식

- 버그가 있는 경우 개선하기

“

첫번째 시도: 크롬 **열심히** 사용해보기

“



그러나 내겐 너무나도 완벽했던 크롬



“

두번째 시도: 무작정 코드 들여다보기

당시 Flash의 대항마였던 HTML5 <canvas>



- 0 1 <canvas> 내부의 행렬 변환에 필요한 여러 연산들
rotate(), shear(), rotateFromVector() 존재
- 0 2 shear()와 rotateFromVector()가 내부적으로
rotate()를 사용함
- 0 3 rotate()는 radian이 아닌 degree를 입력받기
때문에 degree를 radian으로 변환해야함
- 0 4 rotateRadians()라는 함수를 도입하여
불필요한 degree <--> radian 변환을 제거

Issue 166273019: Add rotateRadi... x

https://codereview.chromium.org/166273019/

Chromium Code Reviews [Help](#) | [Chromium Project](#) | [Gerrit Changes](#) | [Sign in](#)

Issues Search

[Open Issues](#) | [Closed Issues](#) | [All Issues](#) | [Sign in with your Google Account](#) to create issues and add comments

Issue [166273019](#): Add rotateRadians function to AffineTransform (Closed)

Created:
5 years, 4 months ago by [zino](#)

Modified:
5 years, 4 months ago

Reviewers:
[Justin Novosad](#), [pfeldman](#), [eseidel](#)

CC:
blink-reviews

Base URL:
[@master](https://chromium.googlesource.com/chromium/blink.git)

Visibility:
Public

[More Reviews](#)

Description

Add rotateRadians function to AffineTransform

Currently, rotate function takes an argument in only degrees. In many cases, rotate function is often required radian value instead of degree value. If we add new rotateRadians function, we will be able to reduce unnecessary operations.

```
Before : rad -> rad2deg -> deg2rad -> calc sinNcos
After  : rad                               -> calc sinNcos
```

As a result, we can reduce two multiplication and two division.

Similar case: https://bugs.webkit.org/show_bug.cgi?id=87317
Applications: <https://codereview.chromium.org/173593002/>

Committed: <https://src.chromium.org/viewvc/blink?view=rev&revision=167603>

Patch Set 1

Created: 5 years, 4 months ago Download [\[raw\]](#) [\[tar.bz2\]](#)

	Unified diffs	Side-by-side diffs	Delta from patch set	Stats (+10 lines, -5 lines)	Patch
▶	M Source/platform/transforms/AffineTransform.h	View		1 chunk +2 lines, -1 line 0 comments	Download
	M Source/platform/transforms/AffineTransform.cpp	View		4 chunks +8 lines, -4 lines 0 comments	Download

Messages

Total messages: 9 (0 generated)
[Expand Messages](#) | [Collapse Messages](#)

zino 5 years, 4 months ago (2014-02-20 11:38:14 UTC) [#1](#)

Justin Novosad 5 years, 4 months ago (2014-02-20 19:31:18 UTC) [#2](#)

On 2014/02/20 11:38:14, zino wrote:

lgtn

“

그러나 코드읽기만으로는
지속적인 기여를 이어나가기 쉽지 않았다

“

세번째 시도: **FIXME, TODO** 검색하기

The screenshot shows a web browser window with the following elements:

- Address Bar:** `https://cs.chromium.org/...`
- Search Bar:** Contains the text `FIXME TODO file:*cc`. A `Search Code` button is to its right.
- Page Header:** Includes the Chromium logo, a dropdown menu set to `Chromium`, and the text `restricts to: package:chromium`. There are also `Feedback` and `Shortcuts` links.
- Results Summary:** `Results 41 - 50 of 345 (0.136 seconds)`. A `View style` dropdown is on the right.
- Result 1:**
 - File: `[chromium] src/third_party/blink/renderer/core/loader/ping_loader.cc`
 - Code snippet:


```
blink::<anonymous>::BeaconDOMArrayBufferView::Serialize
135: // FIXME: a reasonable choice, but not in the spec; should it give a
136: // default?
```
 - Code snippet:


```
blink::PingLoader::SendLinkAuditPing
228: request.SetKeepalive(true);
229: // TODO(domfarolino): Add WPTs ensuring that pings do not have a referrer
230: // header.
```
- Result 2:**
 - File: `[chromium] src/third_party/blink/renderer/core/animation/animation.cc` with a `Show 33 matches` link.
 - Code snippet:


```
blink::Animation::updatePlaybackRate
933:                                     ExceptionState& exception_state) {
934: // TODO(crbug.com/916117): Implement updatePlaybackRate for scroll-linked
935: // animations.
```
 - Code snippet:


```
blink::Animation::Update
1282: double event_current_time = NullValue();
1283: // TODO(crbug.com/916117): Handle NaN values for scroll-linked
1284: // animations.
```
 - Code snippet:


```
blink::Animation::EffectInvalidated
1327: SetOutdated();
1328: // FIXME: Needs to consider groups when added.
1329: SetCompositorPending(true);
```
- Result 3:**
 - File: `[chromium] src/third_party/blink/renderer/core/input/event_handler.cc` with a `Show 25 matches` link.
 - Code snippet:


```
blink
349: // TODO(bokan): This should be merged with logicalScroll assuming
350: // defaultSpaceEventHandler's chaining scroll can be done crossing frames.
```
 - Code snippet:


```
blink::EventHandler::ActiveIntervalTimerFired
2139: if (frame_ && frame_>GetDocument() && last_deferred_tap_element_) {
```
- Footer:** A partial URL is visible at the bottom: `https://cs.chromium.org/chromium/src/third_party/blink/renderer/core/animation/animation.cc?q=FIXME+TODO+file:*cc&sq=package:chromium&l...`

“

그러나 FIXME, TODO는 **당장 해결이 어려운**
초보자에게는 쉽지 않은 문제가 많았다

“

네번째 시도: 모든 **Issue** 다 들여다보기

47

Issues - chromium - An open-s x +

https://bugs.chromium.org/p/chromium/issues/list?&q=&sort=-modified&colspec=ID%20Pri%20... jinho.bang@samsung.com

Select: All None Actions... 1 - 100 of 63164 Next > Grid Chart

	ID	Pri	Component	Status	Owner	Summary + Labels	Modified
<input type="checkbox"/> ☆	979610	3	Internals>Installer, Privacy	Untriaged	aysusayin@google.com	Trigger full disk wipe through keypress on "You are about to recover your computer" screen	moments ago
<input type="checkbox"/> ☆	979401	2	Blink>JavaScript	Untriaged	verwaest@chromium.org	Crash when parsing a class with 1017 static functions	3 minutes ago
<input type="checkbox"/> ☆	979278	1	Blink>MemoryAllocator>GarbageCollection	Assigned	bikineev@chromium.org	Chrome: Crash Report - blink::NormalPage::ToBeFinalizedObject::Finalize	4 minutes ago
<input type="checkbox"/> ☆	967598	2	Internals>Services>Identity	Started	je_julie.kim@chromium.org	Eliminate OAuth2TokenService	5 minutes ago
<input type="checkbox"/> ☆	976151	2	UI>Browser>Downloads	Unconfirmed	ben.lewis@microsoft.com	Non-admin users downloading files to network-share Downloads folders no longer works.	6 minutes ago
<input type="checkbox"/> ☆	979259	2	Internals>Media>Audio	Assigned	armax@chromium.org	*/MediaTest.VideoBearWavAlaw/* is flaky	7 minutes ago
<input type="checkbox"/> ☆	979579	2	----	ExternalDependency	----	Chrome_iOS: Crash Report - objc_release	11 minutes ago
<input type="checkbox"/> ☆	929021	2	Test>Tast	Started	hidehiko@chromium.org	UIAutomator tests are flaky	12 minutes ago
<input type="checkbox"/> ☆	974427	1	Internals>Cast>Streaming	Assigned	miu@chromium.org	CastV2PerformanceTest.Performance/* is flaky	12 minutes ago
<input type="checkbox"/> ☆	979535	1	Internals>Views, UI>Browser	Assigned	avi@chromium.org	Regression: Unable to open any drop-down using mouse click on canary #77.0.3837.0	13 minutes ago
<input type="checkbox"/> ☆	972041	2	UI>Shell>MultipleProfile	Assigned	igorcov@chromium.org	User unable to login with second user	13 minutes ago
<input type="checkbox"/> ☆	976288	2	UI>Browser>Mobile>Start	Assigned	gambard@chromium.org	Chrome_iOS: Crash Report - -[SnapshotGenerator snapshotBaseView:frameInBaseView:]	13 minutes ago
<input type="checkbox"/> ☆	738724	2	UI>Browser>Mobile>CustomTabs	Untriaged	peconn@chromium.org	Chrome tabs not redirecting back to app without user interaction (OAuth2)	16 minutes ago

시간 순 정렬

open source loop



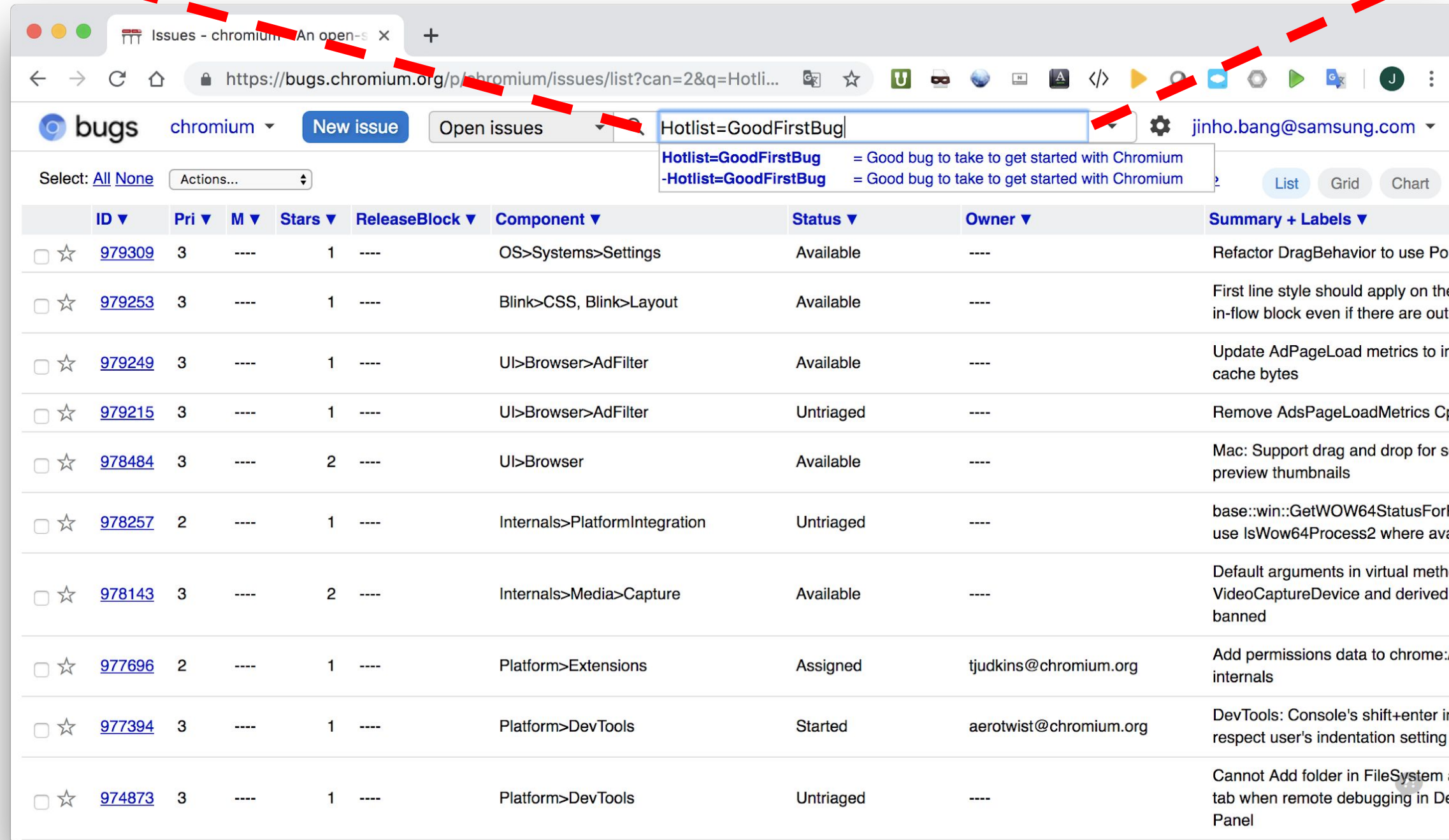
“

지속적인 반복으로 어느정도 기여할 수 있었다

“

꿀팁: 초심자를 위한 **GoodFirstBug**

Hotlist=GoodFirstBug



The screenshot shows the Chromium bug list on the website <https://bugs.chromium.org/p/chromium/issues/list?can=2&q=Hotli...>. The search filter is set to "Hotlist=GoodFirstBug". The table below lists the resulting bugs.

ID	Pri	M	Stars	ReleaseBlock	Component	Status	Owner	Summary + Labels
979309	3	---	1	---	OS>Systems>Settings	Available	---	Refactor DragBehavior to use Poin
979253	3	---	1	---	Blink>CSS, Blink>Layout	Available	---	First line style should apply on the in-flow block even if there are out-c
979249	3	---	1	---	UI>Browser>AdFilter	Available	---	Update AdPageLoad metrics to inc cache bytes
979215	3	---	1	---	UI>Browser>AdFilter	Untriaged	---	Remove AdsPageLoadMetrics Cpu
978484	3	---	2	---	UI>Browser	Available	---	Mac: Support drag and drop for sc preview thumbnails
978257	2	---	1	---	Internals>PlatformIntegration	Untriaged	---	base::win::GetWOW64StatusForP use IsWow64Process2 where avai
978143	3	---	2	---	Internals>Media>Capture	Available	---	Default arguments in virtual metho VideoCaptureDevice and derived c banned
977696	2	---	1	---	Platform>Extensions	Assigned	tjudkins@chromium.org	Add permissions data to chrome:// internals
977394	3	---	1	---	Platform>DevTools	Started	aerotwist@chromium.org	DevTools: Console's shift+enter inc respect user's indentation setting
974873	3	---	1	---	Platform>DevTools	Untriaged	---	Cannot Add folder in FileSystem at tab when remote debugging in Dev Panel

Trivial 패치의 반복을 통해 개발 프로세스에 익숙해짐

- 빌드하는 방법, 테스트 돌리는 방법
- 이슈 트래커를 관리하는 방법
- 코드리뷰 보내는 방법
- 테스트를 작성하는 방법
- 패치를 사냥하는 방법

“

그러나 커미터가 되려면 **Non-trivial** 페이지
20개 이상이 필요하다

“

다섯번째 시도: **상호운용성(Interoperability)**

“

다른 브라우저에는 있지만 크롬에만 없는 기능

“

크롬에만 미구현 된 항목들을 구현 도전

먼저 이슈를 Reporting하고

The screenshot shows a web browser window displaying a Chromium bug report. The browser's address bar shows the URL `https://bugs.chromium.org/p/chromium/issues/detail?id=330506`. The page title is "330506 - Add some path APIs". The bug report details are as follows:

- Owner:** jinho.bang@samsung.com
- Status:** Fixed (Closed)
- Modified:** May 7, 2014
- Editors:** ----
- EstimatedDays:** ----
- NextAction:** ----
- OS:** ----
- Pri:** [2](#)
- Type:** [Launch-OWP](#)
- OWP-Design-No:** OWP-Design-No
- Your Hotlists:** [Update your hotlists](#)

Issue 330506: Add some path APIs to CanvasRenderingContext2D
Reported by jinho.bang@samsung.com on Mon, Dec 23, 2013, 7:44 PM GMT+9 Project Member [Code](#) [1 of 15](#) [Back to list](#)

(See <http://www.chromium.org/blink#launch-process> for an overview)

Change description:
Add some path APIs to CanvasRenderingContext2D (overloaded method)

Changes to API surface:

- fill(path)
- stroke(path)
- drawSystemFocusRing(path, element);
- drawCustomFocusRing(path, element);
- clip(path);
- isPointInPath(path, x, y);
- isPointInStroke(path, x, y);

Links:
Public standards discussion:
<http://www.whatwg.org/specs/web-apps/current-work/multipage/the-canvas-element.html#drawing-paths-to-the-canvas>

Support in other browsers:
Internet Explorer: No
Firefox: No
Safari: No

***Make sure to fill in any labels with a -?, including all OSes this change affects. Feel free to leave other labels at the defaults.**

구현을 위해 웹 표준 스펙을 읽기 시작

HTML Standard

https://html.spec.whatwg.org/multi...

HTML

Living Standard — Last Updated 28 June 2019

← 4.12 Scripting — Table of Contents — 4.13 Custom elements →

4.12.5 The **canvas** element

- 4.12.5.1 The 2D rendering context
 - 4.12.5.1.1 Implementation notes
 - 4.12.5.1.2 The canvas state
 - 4.12.5.1.3 Line styles
 - 4.12.5.1.4 Text styles
 - 4.12.5.1.5 Building paths
 - 4.12.5.1.6 **Path2D** objects
 - 4.12.5.1.7 Transformations
 - 4.12.5.1.8 Image sources for 2D rendering contexts
 - 4.12.5.1.9 Fill and stroke styles
 - 4.12.5.1.10 Drawing rectangles to the bitmap
 - 4.12.5.1.11 Drawing text to the bitmap
 - 4.12.5.1.12 Drawing paths to the canvas
 - 4.12.5.1.13 Drawing focus rings and scrolling paths into view
 - 4.12.5.1.14 Drawing images
 - 4.12.5.1.15 Pixel manipulation
 - 4.12.5.1.16 Compositing
 - 4.12.5.1.17 Image smoothing
 - 4.12.5.1.18 Shadows
 - 4.12.5.1.19 Filters
 - 4.12.5.1.20 Working with externally-defined SVG filters
 - 4.12.5.1.21 Drawing model
 - 4.12.5.1.22 Best practices
 - 4.12.5.1.23 Examples

[File an issue about the selected text](#)

HTML Standard

https://html.spec.whatwg.org/multi...

§ 4.12.5 The **canvas** element

Categories:

- Flow content.
- Phrasing content.
- Embedded content.
- Palpable content.

Contexts in which this element can be used:

Where **embedded content** is expected.

Content model:

Transparent, but with no **interactive content** descendants except for **a** elements, **img** elements with **usemap** attributes, **button** elements, **input** elements whose **type** attribute are in the **Checkbox** or **Radio Button** states, **input** elements that are **buttons**, **select** elements with a **multiple** attribute or a **display size** greater than 1, and elements that would not be **interactive content** except for having the **tabindex** attribute specified.

Tag omission in text/html:

Neither tag is omissible.

Content attributes:

- Global attributes
- width** — Horizontal dimension
- height** — Vertical dimension

DOM interface:

```
IDL
typedef (CanvasRenderingContext2D or
ImageBitmapRenderingContext or WebGLRenderingContext or
WebGL2RenderingContext) RenderingContext;

[Exposed=Window,
HTMLConstructor]
interface HTMLCanvasElement : HTMLElement {
```

[File an issue about the selected text](#)

Support: canvas
Chrome for Android 75+
MDN RenderingContext
HTMLCanvasElement
UC Browser for Android 11.8+
Samsung Internet 4+
IE 9+
Safari 4+
Edge 12+
Opera Mini (limited) all+
Opera 9+
Android Browser 3+
Source: caniuse.com

열심히 구현하여 코드리뷰를 보냄

The screenshot shows a web browser window displaying a Chromium Code Reviews issue page. The browser's address bar shows the URL `https://codereview.chromium.org/179383002`. The page title is "Chromium Code Reviews" and the issue title is "Issue 179383002: Add versions of isPointIn*() that take a Path parameter. (Closed)".

The issue details include:

- Created:** 5 years, 4 months ago by [zino](#)
- Modified:** 5 years, 3 months ago
- Reviewers:** [jgregorio](#), [dshwang](#), [Rik](#), [Justin Novosad](#), [eseidel](#)
- CC:** [blink-reviews](#), [arv+blink](#), [dglazkov+blink](#), [adamk+blink_chromium.org](#), [aandrey+blink_chromium.org](#), [watchdog-blink-watchlist_google.com](#), [Inactive](#)
- Base URL:** `https://chromium.googlesource.com/chromium/blink.git@master`
- Visibility:** Public.
- [More Reviews](#)

The **Description** section contains:

- Description:** Add versions of `isPointInPath`, `isPointInStroke` that take a `Path` parameter.
- Intent to implement:** <https://groups.google.com/a/chromium.org/forum/#!topic/blink-dev/MGxEfzBPw68>
- The spec reference is:**
 - <http://www.w3.org/html/wg/drafts/2dcontext/master/#dom-context-2d-ispointinstroke>
 - <http://www.whatwg.org/specs/web-apps/current-work/multipage/the-canvas-element.html#dom-context-2d-ispointinstroke>
- BUG=**[330506](#)
- Committed:** <https://src.chromium.org/viewvc/blink?view=rev&revision=168437>

The **Patch Set** section lists:

- Patch Set 1:** *Total comments: 3*
- Patch Set 2 : pointer validation check:** *Total comments: 5*
- Patch Set 3 : add validation check and layout test**
- Patch Set 4 : rebase**
- Patch Set 5 : rebase again**

At the bottom, there is a table for patch sets with columns for "Side-by-", "Delta from", and "Patch". The first row shows "Created: 5 years, 3 months ago" and "Download [raw] [tar.bz2]".



*Google*직원이면서
〈*canvas*〉 OWNER

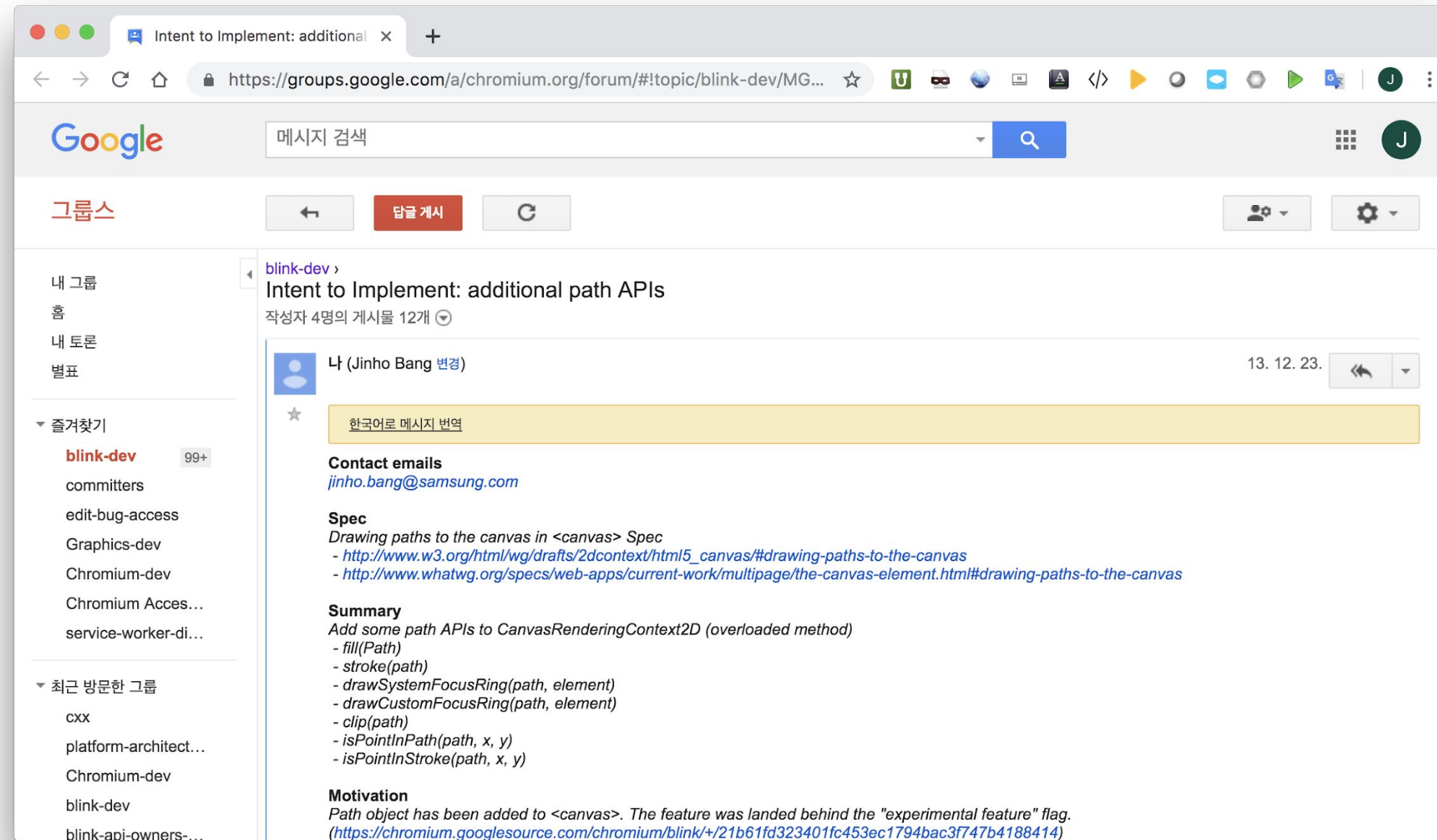
안녕 빵지노

신규 구현을 하려면, **“Intent to implement”**를
모두가 볼 수 있는 Blink 메일링 리스트에 보내야해



안녕 애들아..

나는 이런 저런 <canvas> 기능을 크롬에 구현하려고해
관련 문서(Intent to implement)를 첨부할테니 검토해줘!





안녕 빵지노

너의 코드는 참으로 **깨떡**같지만

내가 시키는테로 잡 고치면 어떻게든 될 것 같아

```

Source/core/html/canvas/Canv x +
https://codereview.chromium.org/179383002/diff/20001/Source/c...
995 void CanvasRenderingContext2D::clip(DOMPath* domPath, const String& windingRuleString)
996 {
997     clipInternal(domPath->path(), windingRuleString);
998 }
999
1000 bool CanvasRenderingContext2D::isPointInPath(const float x, const float y, const String& windingRuleString)
1001 {
1002     return isPointInPathInternal(m_path, x, y, windingRuleString);
1003 }
1004
1005 bool CanvasRenderingContext2D::isPointInPath(DOMPath* domPath, const float x, const float y, const String& windingRuleString)
1006 {
1007     if (!domPath)
1008         return false;
1009     return isPointInPathInternal(domPath->path(), x, y, windingRuleString);
1010 }
1011
1012 bool CanvasRenderingContext2D::isPointInPathInternal(const Path& path, const float x, const float y, const String& windingRuleString)
1013 {
1014     GraphicsContext* c = drawingContext();
1015     if (!c)
1016         return false;
1017     if (!state().m_invertibleCTM)
1018         return false;
1019     FloatPoint point(x, y);
1020     AffineTransform ctm = state().m_transform;
1021     FloatPoint transformedPoint = ctm.inverse().mapPoint(point);
1022     if (!std::isfinite(transformedPoint.x()) || !std::isfinite(transformedPoint.y()))
1023         return false;
1024     WindRule windRule = RULE_NONZERO;
1025     if (!parseWinding(windingRuleString, windRule))
1026         return false;

```

Justin Novosad 2014/02/25 16:45:08
Shouldn't this case throw a type mismatch DOM exception? Also, the layout should cover this case.



근데 쟁라

테스트 좀 작성해줄래?

요청을 반영하여 다시 코드리뷰를 보냄

The screenshot shows a web browser window displaying a Chromium Code Reviews issue page. The browser's address bar shows the URL `https://codereview.chromium.org/179383002`. The page title is "Chromium Code Reviews" and the issue title is "Issue 179383002: Add versions of isPointIn*() that take a Path parameter. (Closed)".

The issue details include:

- Created:** 5 years, 4 months ago by [zino](#)
- Modified:** 5 years, 3 months ago
- Reviewers:** [jgregorio](#), [dshwang](#), [Rik](#), [Justin Novosad](#), [eseidel](#)
- CC:** [blink-reviews](#), [arv+blink](#), [dglazkov+blink](#), [adamk+blink_chromium.org](#), [aandrey+blink_chromium.org](#), [watchdog-blink-watchlist_google.com](#), [Inactive](#)
- Base URL:** `https://chromium.googlesource.com/chromium/blink.git@master`
- Visibility:** Public.
- [More Reviews](#)

The **Description** section contains the following information:

- Description:** Add versions of `isPointInPath`, `isPointInStroke` that take a `Path` parameter.
- Intent to implement:** <https://groups.google.com/a/chromium.org/forum/#!topic/blink-dev/MGxEfzBPw68>
- The spec reference is:**
 - <http://www.w3.org/html/wg/drafts/2dcontext/master/#dom-context-2d-ispointinstroke>
 - <http://www.whatwg.org/specs/web-apps/current-work/multipage/the-canvas-element.html#dom-context-2d-ispointinstroke>
- BUG=** [330506](#)
- Committed:** <https://src.chromium.org/viewvc/blink?view=rev&revision=168437>

The **Patch Set** section lists five sets of changes:

- Patch Set 1:** *Total comments: 3*
- Patch Set 2 : pointer validation check:** *Total comments: 5*
- Patch Set 3 : add validation check and layout test**
- Patch Set 4 : rebase**
- Patch Set 5 : rebase again**

At the bottom of the page, there is a table with columns for "Side-by-", "Delta from", and "Patch". The "Delta from" column shows "State (+216 lines, -15 lines)".

65



LGTM!

“

꿀팁: 오늘날에는 웹 플랫폼 테스트라는게 있다

web-platform-tests dashboard

Latest Run Recent Runs Insights About GitHub Source

wpt.fyi is a work in progress. The reported results do not necessarily reflect the true capabilities of each web browser, so they should not be used evaluate or compare feature support.

Test Results **Interoperability**

wpt /

Search test files, like 'cors/allow-headers.htm', then press <Enter>

For information on the search syntax, [view the search documentation](#)

Showing the latest master test runs for chrome[experimental], edge[experimental], firefox[experimental], safari[experimental] [LINK](#) [EDIT](#)

Path	Tests Passing in X / 4 Browsers				
	0 / 4	1 / 4	2 / 4	3 / 4	4 / 4
2dcontext/	12 / 2278	63 / 2278	245 / 2278	1059 / 2278	899 / 2278
BackgroundSync/	1 / 35	0 / 35	18 / 35	0 / 35	16 / 35
FileAPI/	11 / 900	12 / 900	124 / 900	484 / 900	269 / 900
IndexedDB/	9 / 2243	38 / 2243	306 / 2243	1303 / 2243	587 / 2243
WebCryptoAPI/	810 / 30805	649 / 30805	7479 / 30805	9275 / 30805	12592 / 30805
WebIDL/	2 / 499	15 / 499	13 / 499	270 / 499	199 / 499
accelerometer/	71 / 141	48 / 141	8 / 141	8 / 141	6 / 141
acid/	1 / 103	0 / 103	0 / 103	102 / 103	0 / 103
ambient-light/	14 / 51	22 / 51	3 / 51	11 / 51	1 / 51
animation-worklet/	17 / 134	23 / 134	55 / 134	33 / 134	6 / 134
apng/	0 / 3	0 / 3	0 / 3	1 / 3	2 / 3
appmanifest/	0 / 17	14 / 17	0 / 17	3 / 17	0 / 17
audio-output/	1 / 9	2 / 9	2 / 9	3 / 9	1 / 9
background-fetch/	38 / 250	6 / 250	174 / 250	9 / 250	23 / 250
battery-status/	2 / 38	15 / 38	16 / 38	4 / 38	1 / 38
beacon/	0 / 131	4 / 131	14 / 131	58 / 131	55 / 131
bluetooth/	240 / 519	21 / 519	106 / 519	79 / 519	73 / 519
clear-site-data/	3 / 24	2 / 24	6 / 24	13 / 24	0 / 24
client-hints/	2 / 59	10 / 59	9 / 59	32 / 59	6 / 59
clipboard-apis/	7 / 78	10 / 78	22 / 78	27 / 78	12 / 78
compat/	6 / 32	1 / 32	2 / 32	18 / 32	5 / 32
console/	0 / 82	4 / 82	14 / 82	46 / 82	18 / 82
content-security-policy/	66 / 1645	184 / 1645	388 / 1645	522 / 1645	485 / 1645

“

**꿀팁: 커뮤니티 노출 빈도가 높아지면
구현할 기능을 리뷰어가 던져주기도 한다**



Adobe 직원이면서
〈canvas〉 웹 표준 에디터

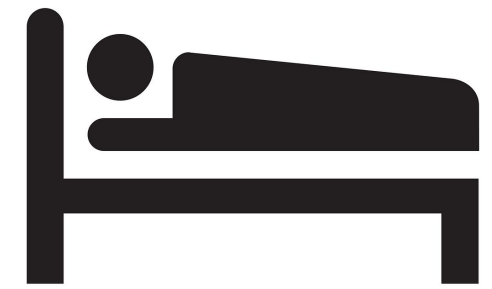
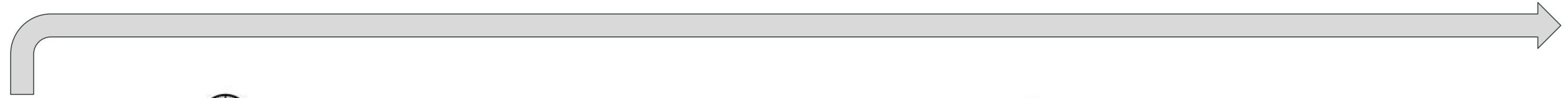
야 빵지노 너 요즘 크롬에 캔버스 겁니 구현하던데
사실 내가 요즘 새로 만든 GeometryInterfaces라는 표준이 있는데
구현할 사람이 없는데 니가 함 해볼래? (사실 회사일임다 너한테 월급은 못줌)

어, 내가 실력은 별로 없는데
그래도 시키는거 하나는 겁니 잘함
내가 할게 콜!



오픈소스 호구
(무임금 노동자)

open source loop

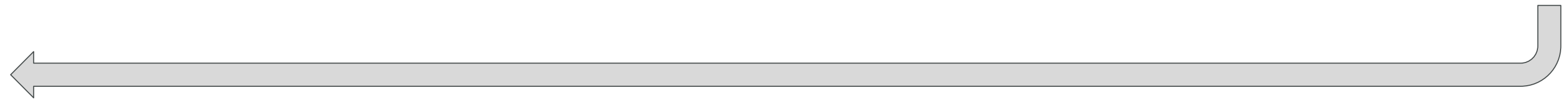


회사에서 일할 때

밥 먹을 때

화장실 갈 때

잠 잘 때도





안녕, 블링크 커미터 친구들아
 뽕지노는 이제 크로미움/블링크 커미터 해도 될 것 같아



내가 하는 일 도와줬으니까
 커미터 시켜줘도 될 것 같아



뽕지노 커미터 가즈아~

On Sat, Jul 5, 2014 at 11:47 PM, Dominic Mazzoni <dmazzoni@chromium.org> wrote:

+1. The code I've reviewed has been solid and he addressed problems and suggestions quickly and competently.

On Wed, Jul 2, 2014 at 9:22 AM, Rik Cabanier <cabanier@adobe.com> wrote:

+1. [Jinho](#) has been writing good code and following up on his reviews.

From: junov@google.com <junov@google.com> on behalf of Justin Novosad <junov@chromium.org>

Sent: Wednesday, July 2, 2014 7:22 AM

To: committees@chromium.org

Subject: Nominating [Jinho](#) Bang for Blink committer

[Jinho](#) Bang (jinho.bang@samsung.com) has made many significant contributions to the Blink code base in the past few months. [Jinho](#) Bang has implemented and shipped web-facing features, and has solved numerous performance issues and rendering bugs.

Landed CLs:

https://codereview.chromium.org/search?closed=2&owner=jinho.bang%40samsung.com&reviewer=&cc=&repo_guid=&base=&private=3&commit=1&created_before=&created_after=&modified_before=&modified_after=&order=&format=html&keys_only=False&with_messages=False&cursor=&limit=30

Blink-dev intent threads:

WORKING - [Intent to Implement: Geometry Interfaces](#)

WORKING - [Intent to Implement: Hit regions \(canvas\)](#)

PENDING - [Intent to Implement: DrawingStyle object for Path2D](#)

PENDING - [Intent to Implement: Path2D APIs regarding combining and text](#)

FINISH - [Intent to ship: drawFocusIfNeeded](#)

FINISH - [Intent to Deprecate and Remove: set/get currentPath in canvas.](#)

FINISH - [Intent to ship: Path2D and additional Path APIs.](#)

FINISH - [Intent to implement: canvas.scrollPathIntoView\(\);](#)

FINISH - [Intent to Implement: additional path APIs](#)

I believe these contributions largely exceed the requirements for becoming a committer. As someone who frequently reviews [Jinho's](#) changes, I can attest to the fact that [Jinho](#) has become familiar with our processes, is very co-operative, and can be trusted with committer privileges.

Thanks,

-Justin

오픈소스에 기여(Contribution)하면서 어려웠던 점들

- 첫째도 영어, 둘째도 영어
- 도전한 패치의 실패
- 싸구려 친절함 없는 일부 리뷰어들
- Issue Tracker의 경쟁자들
- 패치 도둑놈

오픈소스 커미터가 된 후 회사에서 달라진 점들

- 블링크온(BlinkOn)을 비롯한 여러 관련 컨퍼런스에 참석할 수 있는 기회
- **근자감** (~~앤지 모르게 언제든 퇴사할 수 있을거야라는 막연한 생각..~~)
- ~~잠시나마 회사 업무의 50% 정도는 오픈소스에 기여를 할 수 있게됨~~
- 나의 모든 시간이 오픈소스를 중심으로 돌아감

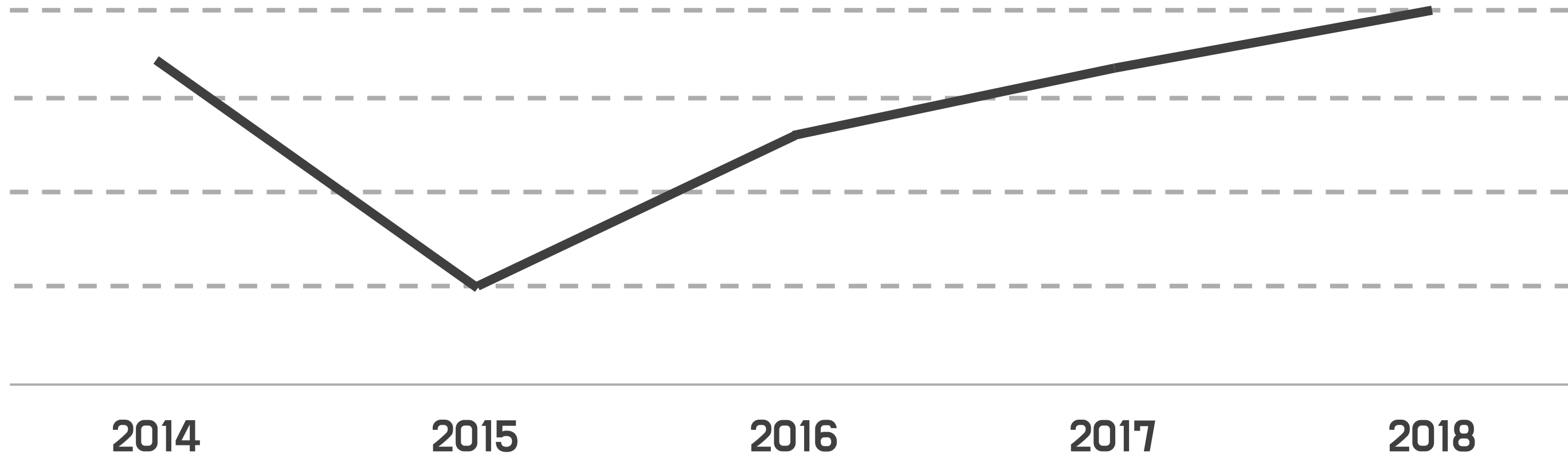
74

IN THE PAST 5 YEARS

“

많은 사람들이 커미터가 **오픈소스의 끝**이라고
생각하는 경향이 있다

76



2014.07
Took a committership

“

커미터는 **오픈소스의 끝이 아니다**

커미터 이후 지난 5년동안 꾸준한 기여를 통해 얻게 된 기회들

- Chromium/Blink Ownership
- W3C Spec Editor
- W3C Web Platform Test Reviewer
- Etc...

Activity

Receive

Pay



A Googler would like to recognize your work on Blink +



helenhu@google.com

수신 방진호 참조 junov@google.com [전체 보기 >](#)

Good evening
Jinho Bang

Prepaid Card - XXXX-0524 ▾

\$472.00

(6/23/2016 2:59:59 AM) ↻

i 외부 수신메일은 발신자를 확인해야 합니다. 일부 외부메일은 발신자를 속이거나 링크 및 첨부파일에 악성코드가 포함되어 있을 수 있습니다.

Dear Jinho-

As you may know, we here in Google's Open Source Programs Office are always interested in learning about new projects and people in the open source community. To that end, we asked our co-workers to help us by nominating people outside of Google that they thought were doing great things in the world of open source.

Justin Novosad (Googler) believes your work on Blink deserves to be recognized. To show our appreciation for this work, we would like to send you a special thank you gift and a MasterCard worth \$250 USD that can be used at merchants and ATMs worldwide.

At your convenience, please fill out our [form](#) [0] with the physical address you would like us to use to ship your gift and MasterCard (it will be shipped via FedEx). If you are located outside of the US it could take a bit longer for your gift to arrive due to customs delays. **You must fill out the form by Wednesday, April 20 to receive your funds.**

Our 3rd party vendor, [Payoneer](#)* will contact you via email to provide more information about the \$250 USD MasterCard.

Again we thank you for your great work in the open source community, we appreciate all that you do. Please contact Stephanie Taylor (sttaylor@google.com) if you have any questions.

[0] <https://docs.google.com/a/google.com/spreadsheet/viewform?formkey=dFVQTXNKaHIOeWhHWEhTVTMTtR2xac2c6MQ>

Best,

Helen Hu, Mary Radomile, Stephanie Taylor, Cat Allman, Chris DiBona and all the rest of us from OSPO

*[Payoneer](#) is a financial services business that allows users to transfer money and receive payments via prepaid MasterCard debit cards. The Google Open Source Programs Office uses Payoneer to pay the over 1300 [Google Summer of Code](#) students each year. We trust that they are the best service to provide payments worldwide. If you have any concerns please contact ospoteam@gmail.com



그보다 더 중요한 점은 개발자로서 크게 성장할 수 있었다는 것

- 남의 코드를 읽는 능력이 크게 향상
- 더불어 코드리뷰 능력이 크게 향상
- 설계 및 구현 능력이 크게 향상(특히 큰 기능을 작은 패치 단위로 잘 설계해서 구현하는 능력이 향상)
- 협업 및 커뮤니케이션 능력 향상
- 개발에 대한 열정과 자신감 향상

“

지속적이고 꾸준한 기여는 **많은 기회를 부여한다**

오픈소스에 장기간 꾸준히 기여하기 위해서 주의해야할 것들

- 오픈소스 만능 주의 (큰 우물에 개구리)
- 회사업무와 병행한다면 언제나 “회사 업무 > 오픈소스”
- 본인의 신체 건강 (각종 디스크류, 기타 등등)
- 본인의 정신 건강 (특히 번아웃증후군)

“

오픈소스가 모두에게 정답은 아닙니다
그러나 **누군가에게 모범답안**일 수 있습니다



Thank you

회사원에서 오픈소스개발자로 거듭나기 :)

두번째 이야기: 나는 뱃속까지 개발자는 아니다

고병권

뽀속까지 일반인

“

나는 앞 발표자와는 다르다


성적에 맞춘 진로 설정

서울신문 2011-01-12 9면


사회 | **대학생 36% “전공 결정, 적성보다 성적”**
고교재학 중 적성 고려한 선택 48% 그쳐

대학생 3명 가운데 1명은 입학원서 작성 등 대학입학 전형이 시작된 뒤에야 자신이 진학할 대학이나 전공과목을 결정하는 것으로 나타났다. 상당수 학생이 자신의 ‘적성’보다는 ‘성적에 맞춰’ 진학하는 셈이다. 때문에 고등학교 진학과 동시에 실효성 있는 진학 지도가 이뤄져야 한다는 지적이 제기되고 있다.

절반에 가까운(48.0%) 학생들이 대학 입학을 코앞에 두고서야 대학이나 학과를 결정한 것이다. ‘대학 등록 때’라는 응답이 예상보다 많은 것은 수시모집 등 응시할 기회가 많아지면서 일단 ‘문지마 식’으로 여러 곳에 원서를 내 합격한 뒤 응시 결과에 선택적으로 진로를 맞추는 현상을 보여 주는 것으로 풀이된다.

■ 대학, 전공 선택 시기 

(단위: %)	대학	전공
고등학교 입학전	7.6	14.7
고등학교 1학년	6.7	11.5
고등학교 2학년	8.9	11.3
고등학교 3학년	28.8	26.0
대학입학원서 작성시	29.0	22.5
실제 대학 등록할 때	19.0	13.9

〈조사대상 수도권 및 지방 주요 9개 신입생 1129명, 기간 2009년 9월 1~2〉 

“

그래도 열심히 공부했다

“

삼성전자 무선사업부 인사

“

신입사원, SCM 업무를 맡다

“

**나는 회사원이다
그래서 나는 괜찮다**

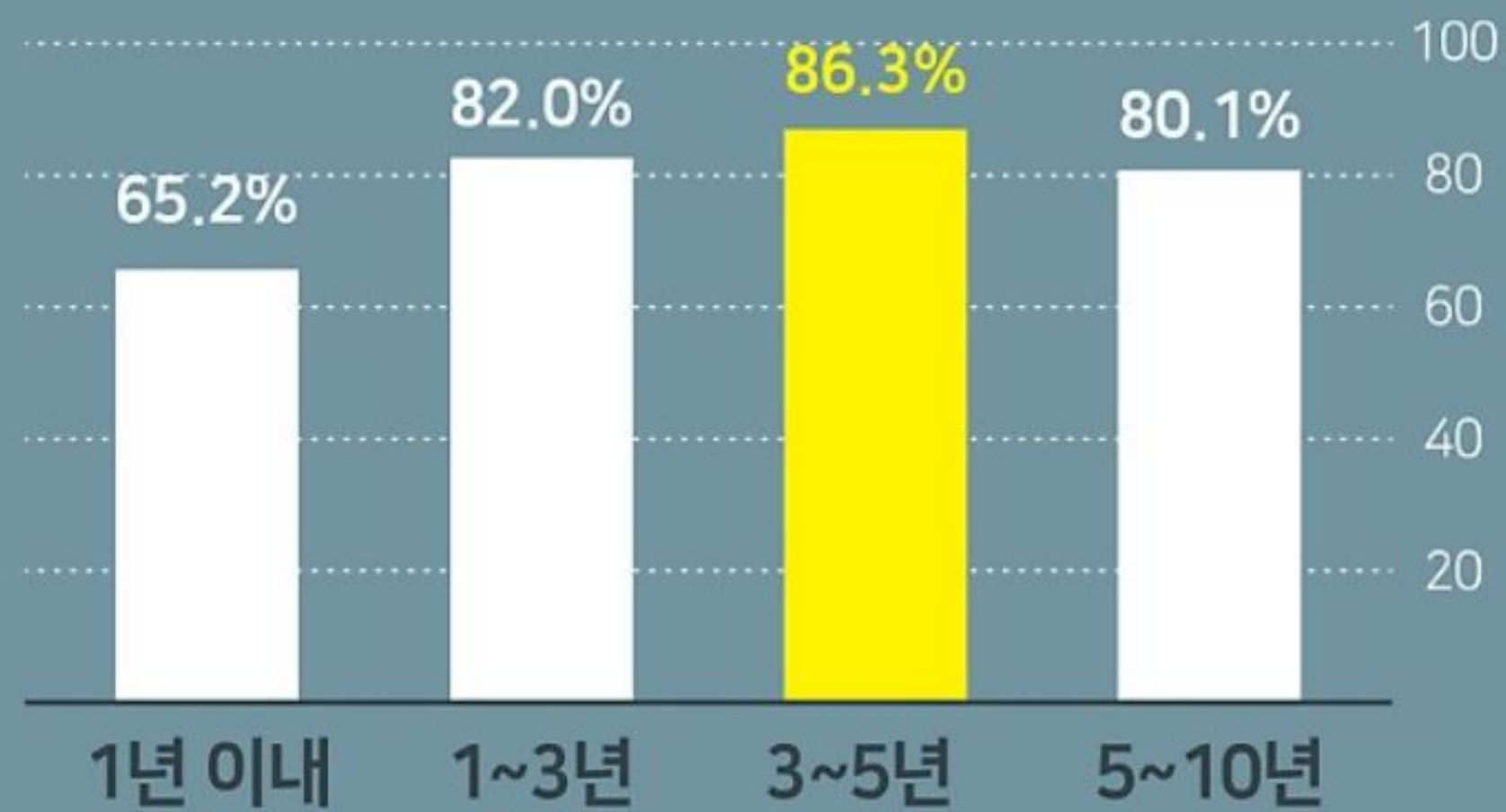
“

입사 4년 후...

퇴사에 대한 직장인 인식조사

- 20-40대 직장인 1000명 대상

■ 연차별 퇴사 고민 비율



꿈이 없었던 내가 직장생활을 하면서
꿈이란 걸 꾸게 되었어.

퇴사라는 꿈을...



“

오픈소스 세계로



행복의 비결은
포기해야 할 것을
포기하는 것이다.

-앤드류 카네기-



“

또 다시 2년이 흐르다...

다른 직군의 스카웃 제의



“

나를 돌아보게 된 시간

“

개발을 하고 있는 회사원

“

회사가원이 아닌 개발자가 되기를 결심하다

회사원 vs 개발자

- 자신의 가치를 스스로 표현 가능
- 저 000 개발해요

회사원, 개발자를 꿈꾸다

“

**개발자로 거듭나기 위해서
무엇을 해야 할까?**

“

다시 오픈소스를 찾다

어떤 오픈소스에 기여할까?

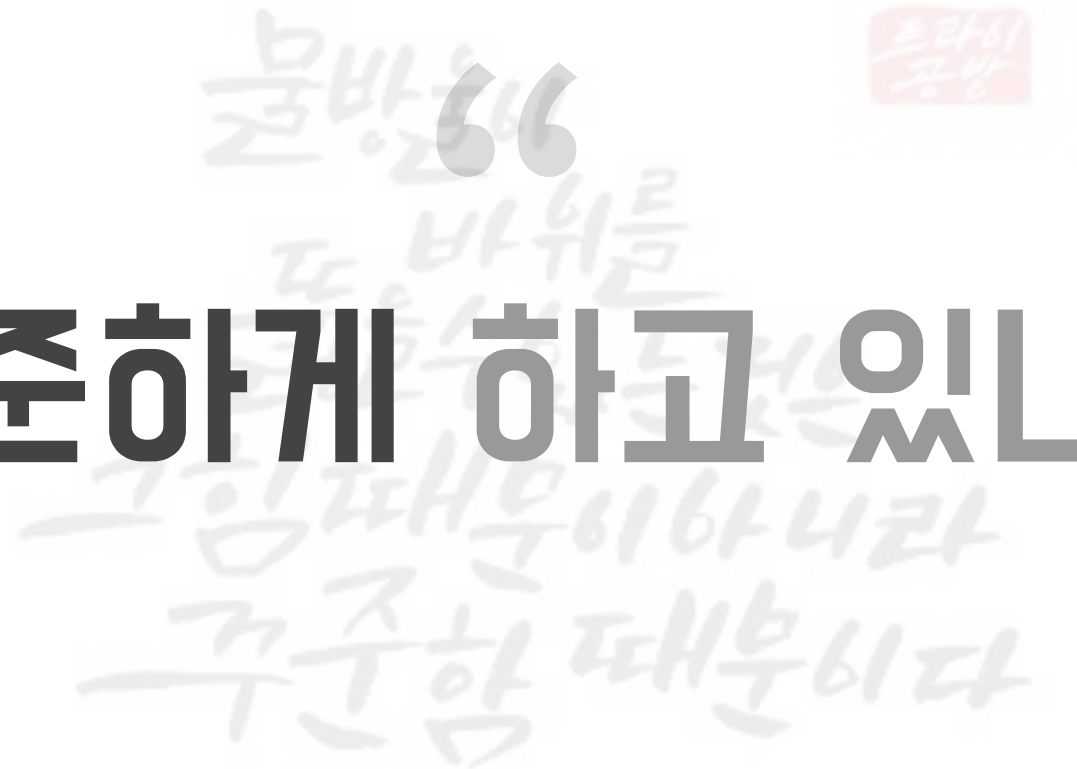
Chromium 오픈소스를 선택한 이유

- ~~옆에서 꼬셔서~~ 경험이 있었다
- ~~구글이 해서~~ 많은 사람들이 사용하는 SW
- 다양한 분야를 경험할 수 있는 기회

“

2년 전에도 오픈소스의 도전은 있었다
이번만은 포기하고 싶지 않았다

“
꾸준하게 하고 있니?”



“

꾸준함을 위한 나의 노력

“

첫번째 : 컨퍼런스 참여

20



“

두번째 : 강제성 (벌금) 도입

“

세번째 : 벼랑 끝으로 Move



Change to Chance



“

첫번째 : 스스로 느끼는 성장

Unified diffs	Side-by-side diffs	Delta from patch set
▶ M android_webview/tools/system_webview_shell/test/data/webexposed/global-interface-listing-expected.txt	View	1 2 3 4 5 6 7 8 9 10 11 12 13
M third_party/WebKit/LayoutTests/SmokeTests	View	1 2 3 4 5 6 7 8 9 10 11 12 13
M third_party/WebKit/LayoutTests/external/wpt/css/geometry-1/DOMMatrix-stringifier-expected.txt	View	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
M third_party/WebKit/LayoutTests/external/wpt/css/geometry-1/WebKitCSSMatrix-expected.txt	View	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15
M third_party/WebKit/LayoutTests/fast/dom/Window/custom-constructors-expected.txt	View	1 2 3 4 5 6 7 8 9 10 11 12 13
M third_party/WebKit/LayoutTests/fast/dom/call-a-constructor-as-a-function-expected.txt	View	1 2 3
M third_party/WebKit/LayoutTests/platform/mac/virtual/stable/webexposed/global-interface-listing-expected.txt	View	1 2 3 4 5 6 7 8 9 10 11 12 13
M third_party/WebKit/LayoutTests/platform/win/virtual/stable/webexposed/global-interface-listing-expected.txt	View	1 2 3 4 5 6 7 8 9 10 11 12 13
M third_party/WebKit/LayoutTests/transforms/3d/general/cssmatrix-3d-zoom-expected.png	View	1 2 3 4 5 6 7 8 9 10 11 12 13
M third_party/WebKit/LayoutTests/transforms/cssmatrix-2d-interface.xhtml	View	1 2 3 4 5 6 7 8 9 10 11
M third_party/WebKit/LayoutTests/transforms/cssmatrix-2d-interface-expected.txt	View	1 2 3 4 5 6 7 8 9 10 11
M third_party/WebKit/LayoutTests/transforms/cssmatrix-3d-interface.xhtml	View	1 2 3 4 5 6 7 8 9 10 11
M third_party/WebKit/LayoutTests/transforms/cssmatrix-3d-interface-expected.txt	View	1 2 3 4 5 6 7 8 9 10 11
D third_party/WebKit/LayoutTests/transforms/cssmatrix-crash.html	View	1 2 3 4 5 6 7 8 9 10 11 12
D third_party/WebKit/LayoutTests/transforms/cssmatrix-crash-expected.txt	View	1 2 3 4 5 6 7 8 9 10 11 12
M third_party/WebKit/LayoutTests/virtual/service-worker-navigation-preload-disabled/webexposed/global-interface-listing-expected.txt	View	1 2 3 4 5 6 7 8 9 10 11 12 13
M third_party/WebKit/LayoutTests/webexposed/global-interface-listing-expected.txt	View	1 2 3 4 5 6 7 8 9 10 11 12 13
M third_party/WebKit/Source/core/core_idl_files.gni	View	1 2 3 4 5 6 7 8 9 10 11 12 13
M third_party/WebKit/Source/core/css/BUILD.gn	View	1 2 3 4 5 6 7 8 9 10 11 12 13
D third_party/WebKit/Source/core/css/CSSMatrix.h	View	1 2 3 4 5 6 7 8
D third_party/WebKit/Source/core/css/CSSMatrix.cpp	View	1 2 3 4 5 6 7 8 9 10 11 12 13
D third_party/WebKit/Source/core/css/WebKitCSSMatrix.idl	View	1 2 3 4 5 6 7
M third_party/WebKit/Source/core/frame/Window.idl	View	1 2 3 4 5 6 7 8 9 10 11 12 13

▼ Messages

Total messages: 134 (83 generated)

[Expand Messages](#) | [Collapse Messages](#) | [Show Generated Messages](#) | [Hide Generated Messages](#)

Byoungkwon Ko PTAL

Byoungkwon Ko @foolip I am making WebkitCSSMatrix an alias of DOMMatrix. After inheriting DOMMatrix, WebkitCSSMatrix will call ...

zino https://codereview.chromium.org/2709763004/diff/1/third_party/WebKit/Source/core/css/CSSMatrix.h File third_party/WebKit/Source/core/css/CSSMatrix.h (right): https://codereview.chromium.org/2709763004/diff/1/third_party/WebKit/Source/core/css/CSSMatrix.h

foolip The idea I had in issue 581955 was that WebKitCSSMatrix would be an alias of ...

zino https://codereview.chromium.org/2709763004/diff/120001/third_party/WebKit/Source/core/frame/Window.idl File third_party/WebKit/Source/core/frame/Window.idl (right): https://codereview.chromium.org/2709763004/diff/120001/third_party/WebKit/Source/core/frame/Window.idl

foolip OK, this CL matches what I think we should do, and it's encouraging that there ...

Byoungkwon Ko @foolip I have been checking below ship intent. <https://groups.google.com/a/chromium.org/forum/#!msg/blink-dev/cAiTOdSGyes/Su7dlx32EQAJ> As I think, it is almost ...

foolip https://codereview.chromium.org/2709763004/diff/120001/third_party/WebKit/Source/core/dom/DOMMatrixReadOnly.cpp File third_party/WebKit/Source/core/dom/DOMMatrixReadOnly.cpp

foolip On 2017/04/26 01:31:35, Byoungkwon Ko wrote: > @foolip > > I have been checking below ...

Byoungkwon Ko On 2017/04/26 07:29:19, foolip OOO until May 2 wrote: > https://codereview.chromium.org/2709763004/diff/120001/third_party/WebKit/Source/core/dom/DOMMatrixReadOnly.cpp

Byoungkwon Ko On 2017/04/26 07:30:51, foolip OOO until May 2 wrote: > On 2017/04/26 01:31:35, Byoungkwon Ko ...

simonp https://codereview.chromium.org/2709763004/diff/140001/third_party/WebKit/Source/core/frame/Window.idl File third_party/WebKit/Source/core/frame/Window.idl (right): https://codereview.chromium.org/2709763004/diff/140001/third_party/WebKit/Source/core/frame/Window.idl

simonp On 2017/05/04 08:35:21, simonp wrote: > The difference is that a readonly attribute has a ...

foolip https://codereview.chromium.org/2709763004/diff/140001/third_party/WebKit/Source/core/frame/Window.idl File third_party/WebKit/Source/core/frame/Window.idl (right): https://codereview.chromium.org/2709763004/diff/140001/third_party/WebKit/Source/core/frame/Window.idl

zino https://codereview.chromium.org/2709763004/diff/140001/third_party/WebKit/Source/core/frame/Window.idl File third_party/WebKit/Source/core/frame/Window.idl (right): https://codereview.chromium.org/2709763004/diff/140001/third_party/WebKit/Source/core/frame/Window.idl

zino gogag@, Could you rebase this CL and then fix some layout test erros (e.g. global-listing-interfaces)? ...

Byoungkwon Ko On 2017/05/05 11:43:21, zino wrote: > https://codereview.chromium.org/2709763004/diff/140001/third_party/WebKit/Source/core/frame/Window.idl > File third_party/WebKit/Source/core/frame/Window.idl

Byoungkwon Ko @zino @fooli @simonp I have question regarding transforms/cssmatrix-crash.html test. Throwing exception is right as following ...

simonp On 2017/05/09 15:31:16, Byoungkwon Ko wrote: > @zino @fooli @simonp > > I have question ...

simonp On 2017/05/05 14:09:00, Byoungkwon Ko wrote: > > We probably should remove [readonly]? > > ...

Byoungkwon Ko On 2017/05/12 11:36:56, simonp wrote: > On 2017/05/09 15:31:16, Byoungkwon Ko wrote: > > @zino ...

Byoungkwon Ko On 2017/05/05 11:43:21, zino wrote: > https://codereview.chromium.org/2709763004/diff/140001/third_party/WebKit/Source/core/frame/Window.idl > File third_party/WebKit/Sourc

Byoungkwon Ko @zino @fooli @simonp I have question regarding transforms/cssmatrix-crash.html test. Throwing exception is right as following ...

simonp On 2017/05/09 15:31:16, Byoungkwon Ko wrote: > @zino @fooli @simonp > > I have question ...

simonp On 2017/05/05 14:09:00, Byoungkwon Ko wrote: > > We probably should remove |readonly|? > > ...

Byoungkwon Ko On 2017/05/12 11:36:56, simonp wrote: > On 2017/05/09 15:31:16, Byoungkwon Ko wrote: > > @zino ...

zino I added fserb@ for this patch. He is working on this feature actively now. :)

zino https://codereview.chromium.org/2709763004/diff/240001/third_party/WebKit/LayoutTests/SmokeTests File third_party/WebKit/LayoutTests/SmokeTests (left): <https://codereview.chromium.org/>

fserb back to this change, at some point this week I might just patch it and ...

Byoungkwon Ko On 2017/05/15 19:30:40, fserb wrote: > back to this change, at some point this week ...

simonp On 2017/05/16 06:44:59, Byoungkwon Ko wrote: > On 2017/05/15 19:30:40, fserb wrote: > > back ...

simonp On 2017/05/12 11:51:27, simonp wrote: > On 2017/05/05 14:09:00, Byoungkwon Ko wrote: > > > ...

fserb On 2017/05/16 at 16:31:08, simonp wrote: > On 2017/05/12 11:51:27, simonp wrote: > > On ...

Byoungkwon Ko On 2017/05/18 15:52:24, fserb wrote: > On 2017/05/16 at 16:31:08, simonp wrote: > > On ...

Byoungkwon Ko Dear Reviewers PTAL :)

fserb lgtm

Byoungkwon Ko @foolip PTAL :)

fserb lgtm

simonp On 2017/06/10 12:08:55, Byoungkwon Ko wrote: > Dear Reviewers > > PTAL :) lgtm

zino lgtm with nits: - Please add intent-to-ship link to CL description. - Shouldn't we enable ...

blink-reviews This should be a different patch. I'll do that after getting back on the intent-to-ship. ...

chromium-reviews This should be a different patch. I'll do that after getting back on the intent-to-ship. ...

foolip fserb@, I'm unsure what "This should be a different patch. I'll do that after getting ...

commit-bot: I haz the power CQ is trying da patch. Follow status at: <https://chromium-cq-status.appspot.com/v2/patch-status/codereview.chromium.org/2709763004/300001>

commit-bot: I haz the power Try jobs failed on following builders: chromium_presubmit on master.tryserver.chromium.linux (JOB_FAILED, <http://build.chromium.org/p/tryserver.chromium.linux/build>)

fserb timvolodine: android_webview/tools/system_webview_shell

timvolodine On 2017/06/14 15:01:32, fserb wrote: > timvolodine: android_webview/tools/system_webview_shell lgtm

fserb lgtm

commit-bot: I haz the power CQ is trying da patch. Follow status at: <https://chromium-cq-status.appspot.com/v2/patch-status/codereview.chromium.org/2709763004/300001>

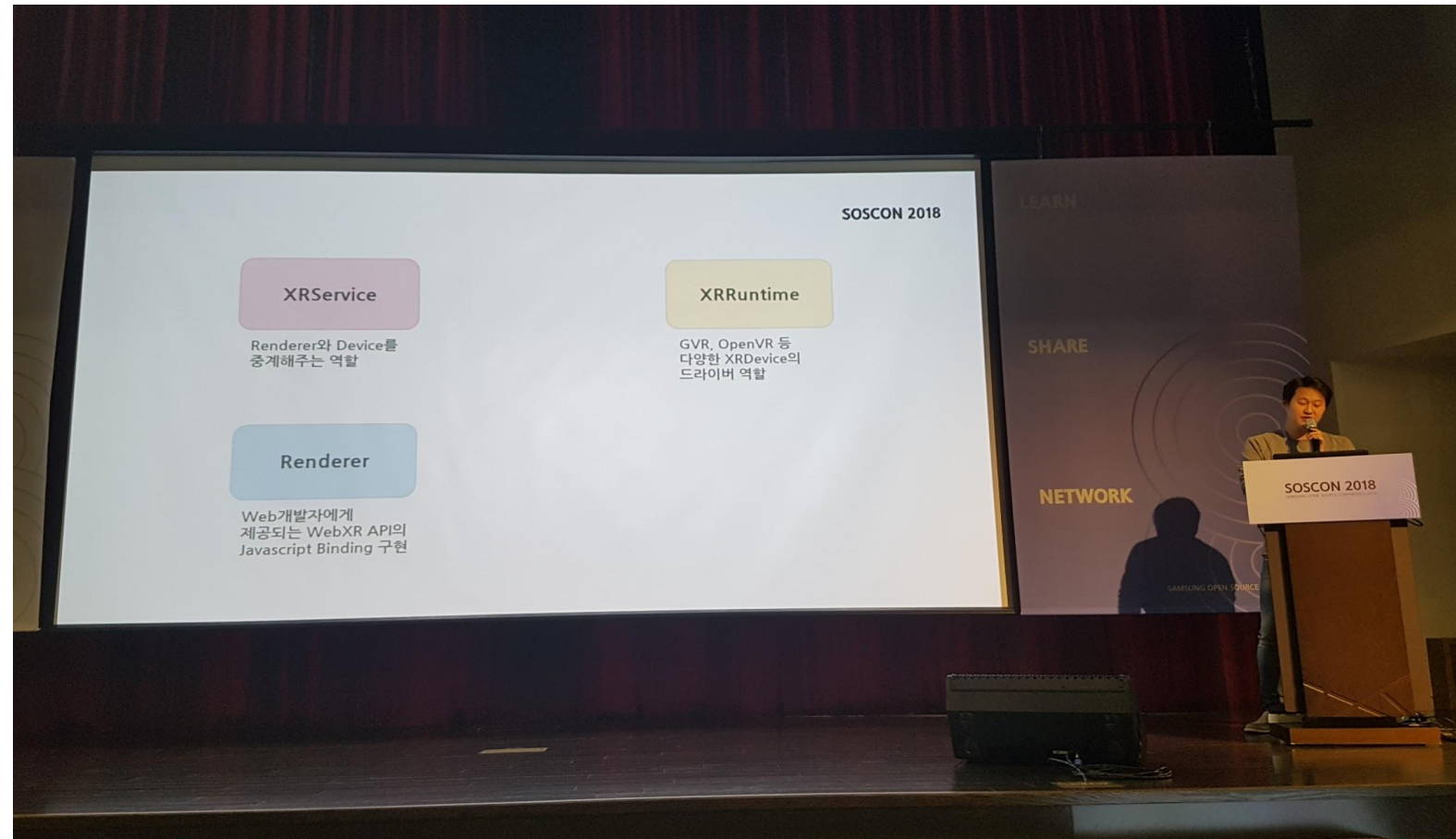
commit-bot: I haz the power Try jobs failed on following builders: chromium_presubmit on master.tryserver.chromium.linux (JOB_FAILED, <http://build.chromium.org/p/tryserver.chromium.linux/build>)

fserb dpranke: third_party/WebKit/LayoutTests/SmokeTests

Dirk Pranke lgtm

“

두번째 : 발표 요청



“

네번째 : 경교한 나

 ARRIVAL CARD 入國申告書 (外國人用)		漢字姓名	
Family Name / 姓 01	Given Name / 名 02		03 <input type="checkbox"/> Male / 男 <input type="checkbox"/> Female / 女
Nationality / 國籍 04	Date of Birth / 生年月日 (YYYY-MM-DD) 05	Passport No. / 旅券番號 06	
Home Address / 本國住所 07		Occupation / 職業 08 Programmer	
Address In Korea / 韓國內 滯留豫定地 (Tel :) 09			
Purpose of visit / 入國目的 10 <input type="checkbox"/> Tour 觀光 <input type="checkbox"/> Business 商用 <input type="checkbox"/> Conference 會議 <input type="checkbox"/> Visit 訪問 <input type="checkbox"/> Employment 就業 <input type="checkbox"/> Study 留學 <input type="checkbox"/> Official 公務 <input type="checkbox"/> Others 其他 ()		Flight(Vessel) No. / 便名船名 11	
		Port of Boarding / 出發地 12	
Signature / 署名 13		Official Only 公用欄 체류 자격 BT B2 체류 기간 015 030 090 03M	

앞으로 나는...

- Speaking English
- 체력 키우기
- 오픈소스 프로젝트 만들기

07

끝으로...

“

현재 오픈소스에 참여 중 이신가요?

“

꾸준하게 기여하세요!

“

꾸준하게 기여하는게 어려우신가요?

“

여러분만의 꾸준함을 키울 방법을 찾아보세요

“

그리고 1년 후...

“

이 자리에서 여러분의 이야기를 나누어주세요

00

“

Thanks