## Open Source Enthuastic Hobist

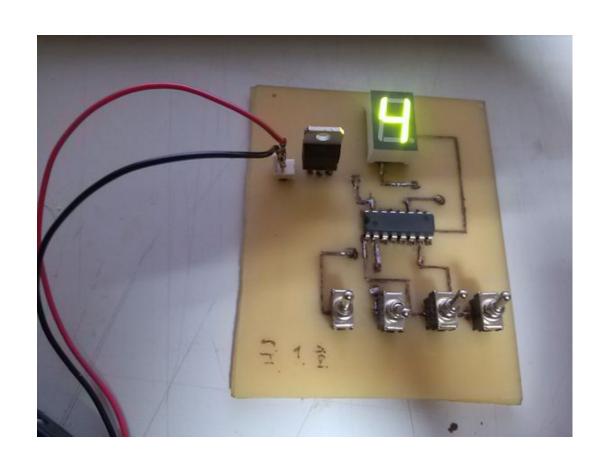
Life of a Chromium Developer

## What's your hobby?

# Getting bored with gaming



## Hardware hacking is expensive



## Get involed in open source! join in the fun

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(L) Joined on Apr 28, 2011

29

85

21

Followers St

Following

dart-lang zations







1538483002 tabs.onUpdate is not be called when using history API		
1550405002 tabs.orio.puate is not be cared when using history Arri	me	
1511103003 Use rvalue reference instead of ExtensionBuilder::pass()	me	danakj (behind on reviews), Antony Sargent
1526233002 Do not install kiosk_only app from non chromeos	me	
1522373002 Remove ScopedVector from /extenisons part#3 (Closed)	me	Devlin
1522853003 Remove ScopedVector from networking private api (Closed)	me	stevenib
1503223004 Remove ScopedVector from/extenisons part#2 (Closed)	me	Devlin
1510233005 extensions::ListBuilder move constructor doesn't transfer to a raw pointer, (Closed)	me	danakj (behind on reviews), Antony Sargent
1497753002 Use rvalue reference instead of extensions::ListBuilder::Pass() (Closed)	me	danakj (behind on reviews), Nico (office move Wed Thu Fri), Antony Sargent
1510913003 WIP	me	
1494833002 Cleanup/ linked_ptr -> scoped_ptr from c/b/ui/webui (Closed)	me	Bernhard Bauer
1486333002 Kill ScopedPtrMap and friends (Closed)	me	danakj (behind on reviews), Ken Rockot, Nico (office move Wed Thu Fri), Reilly Grant (OOO until 2016), Matt Giuca (O
1475403003 Cleanup/ Remove unused code from download_manager_impl.cc (Closed)	me	Paweł Hajdan Jr.
1477393002 ScopedPtrMap => std::map from /component/{content_settings, gcm_driver} (Closed)	me	Nicolas Zea, raymes (OOO until Jan 4)
1459773002 ScopedPtrMap -> std::map from /sync (Closed)	me	Nicolas Zea
1482013002 Improve chrome.tabs.onUpdated for anchor navigate	me	
1469853002 Remove ScopedPtrMap from components/passwordManager and friend (Closed)	me	vabr (Chromium)
1471773002 Remove ScopedPtrMap from /component/mus (Closed)	me	Ben Goodger (Google)
1454773002 Play better with C++11 library features from /chromeos (Closed)	me	hashimoto, oshima, cschuet
1462763002 Remove ScopedPtrMap from /cc (Closed)	me	enne, vmpstr, Matt Giuca (OOO til Jan 4)
1468013002 ScopedPtrMap -> std::map from /component (Closed)	me	raymes (OOO until Jan 4), sdefresne
1403373020 Kill NOTIFICATION_EXTENSION_WILL_BE_INSTALLED_DEPRECATED (Closed)	me	Ken Rockot
1457963002 Use scoped_ptr instead of linked_ptr from /content/renderer (Closed)	me	Avi
1458553006 ScopedPtrMap -> std::map from apps, ash, media, ui (Closed)	me	oshima, Avi, benwells, xhwang
1452793002 Play better with C++ 11 from extension_pref_value_map.h (Closed)	me	Ken Rockot
1456703004 ScopedPtrMap -> std::map from /ui/gfx/image (Closed)	me	danakj (behind on reviews)
1453643003 ScopedPtrMap → std::map from /chrome (Closed)	me	Nico (office move Wed Thu Fri)
1455453002 linked_ptr: Add deprecation notice. (Closed)	me	danakj (behind on reviews)
1431593008 Remove deprecated extension notification from device_local_account_browsertest.cc (Closed)	me	cschuet
1448263002 ScopedPtrMap -> std::map from /contents (Closed)	me	Avi
1445543002 Remove ScopedVector from /extenisons part#1 (Closed)	me	Devlin
1436753002 Remove ScopedPtrMap from extensions code (Closed)	me	Devlin, Nico (office move Wed Thu Fri)
1423843008 Receive RGB style color from extension	me	
1413123007 Remove deprecated extension notification from extension_disabled_ui.h/cc (Closed)	me	Ken Rockot
1429173004 Remove deprecated extension notification from extension_service_test_with_install.h (Closed)	me	Marc Treib, Ken Rockot
1427743007 Fix ExtensionWindowCreateTest.AcceptState flakiness on Mac (Closed)	me	benwells
1430643004 chrome.windows.update; fullscreen with toolbar become without toolbar	me	Devlin, spqchan
1434503002 WIP	me	
1407913008 Resubmit/ Remove deprecated extension notification from app_browsertest.cc (Closed)	me	Marc Treib, benwells
1401023002 cleanup/ Remove deprecated extension notification from app_browsertest.cc (Closed)	me	benwells
1409353009 WIP	me	
1426013002 cleanup/Remove deprecated notification from enterprise_platform_keys_apitest_nss.cc (Closed)	me	benwells
1412823004 chrome.browserAction.setBadgeBackgroundColor accepts hsl CSS color strings (Closed)	me	Devlin
1414033008 Remove extension notification observer.h/cc (Closed)	me	Lei Zhana. Ken Rockot

#### Overview

How does one get involved in Chromium development? Usually, you do some variant on the following work flow:

- 1. Get a machine that can build Chromium
- 2. Get the code
- 3. Modify and build the code
- 4. Upload and review code
- 5. Commit patch and waiting game

## Chromium is a large project!

- ~20000 build objects
- ~100 library objects
- 1 massive linked executable (~1.5GB on Linux Debug)

Even if you're building a 32-bit executable, you need a 64-bit machine since linking requires >4GB virtual memory.

#### General requirements:

- Lots of cores
- Lots of RAM
- Second hard drive for source code and building
- SSD(recommended)

#### Windows:

- Windows 7
- Visual Studio 2013 release 4 (무료다운로드가능!)
- Follow Windows instructions: http://dev.chromium.org/developers/how-tos/build-instructions-windows

#### Windows 버전

Windows 7 Professional K

Copyright © 2009 Microsoft Corporation. All rights reserved.

Service Pack 1

새로운 Windows 7 버전의 추가 기능 가져오기



#### 시스템

등급: **5.9** Windows 체험 지수

프로세서: Intel(R) Core(TM) i7-4770 CPU @ 3.40GHz 3.40 GHz

설치된 메모리(RAM): 16.0GB

시스템 종류: 64비트 운영 체제

펜 및 터치: 이 디스플레이에 사용할 수 있는 펜 및 터치식 입력이 없습니다.

#### Mac OS X\*:

- Mac{Book Pro, Pro}
- A Mac running 10.9+.
- Xcode 5 or newer
- The OSX 10.10 SDK\*
- Follow Mac OS X instructions

https://chromium.googlesource.com/chromium/src/+/master/docs/mac\_build\_instructions.md

#### Linux\*:

- 64-bit Ubuntu Precise or newer
- Follow Linux instructions

https://code.google.com/p/chromium/wiki/LinuxBuildInstructions

결론:

컴퓨터를 업그레이드하고

Chromium은 Windows, Mac, Linux, Android, ios를 지원함

처음 하시는분은 Linux나 Mac 을 추천 (개발환 경셋팅이 쉬움)

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## 2. Getting the Code

It takes long time to get the whole code!

#### The Source Tree

A Chromium checkout is actually a forest of source trees over multiple version control systems.

So, we're using 'depot tools'.

## Getting the code - Basic steps

#### There are 2 steps:

- 1. Install Depot Tools
- 2. Run fetch chromium to get all the code and generate the build files

#### Detailed instructions can be found at:

http://dev.chromium.org/developers/how-tos/get-the-code

#### And you're ready to build!

#### 1. Install Depot Tools (프로젝트관리를 위한 유틸리티모임)

git clone https://chromium.googlesource.com/chromium/tools/depot\_tools.git export PATH=`pwd`/depot tools:"\$PATH" (윈도우 사용시 Path설정)

#### 2. Download the code

fetch chromium

#### And you're ready to build!

```
openlab0 ~/chromium/src (master)
 ls
android webview codereview.settings
                                                                  remoting
                                       jingle
                                                                  rlz
                                       LICENSE
                 components
apps
                                       LICENSE.chromium os
                                                                  sandbox
ash
                 content
AUTHORS
                                       mandoline
                                                                  sdch
                 courgette
                                       mash
                                                                  skia
base
                 crypto
blimp
                                       media
                 dbus
                                                                  sql
blink
                 DEPS
                                       moio
                                                                  storage
                                       native client
                 device
                                                                  stylequide
breakpad
build
                                       native client sdk
                 docs
                                                                  sync
BUILD.gn
                 extensions
                                                                  testing
                                        net
build overrides
                                                                  third party
                 gin
                                       out
buildtools
                                                                  tools
                 google apis
                                       OWNERS
                 google update
                                                                  ui
CC
                                        pdf
chrome
                                                                  url
                                        ppapi
                 gpu
chromecast
                 headless
                                                                  v8
                                       PRESUBMIT.py
                                                                  WATCHLISTS
chrome elf
                 infra
                                        PRESUBMIT test mocks.py
chromeos
                                        PRESUBMIT test.py
                                                                  win8
                 ios
cloud print
                                        printing
                 ipc
 openlab0 ~/chromium/src (master)
```

## 3. Modifying and Building

## Development Environment (IDE, etc.)

There is no single supported platform or IDE. Use what you're comfortable with!

#### Common Setups:

Linux: vim\*/emacs

• Mac: ?

• Windows: ?

For code completion: <u>Chromium Code Search</u>:)

## Building Code: ninja

This should work on any OS (Linux, Mac, Windows)

#### In the **src/** directory:

\$ ninja -C out/Debug chrome

Builds to src/out/ directory, e.g. src/out/Debug/chrome

```
# openlab0 ~/chromium/src (master)
> ninja -C out/Debug chrome
ninja: Entering directory `out/Debug'
[5931/5931] LINK chrome
# openlab0 ~/chromium/src (master)
> ls -al out/Debug/chrome
-rwxrwxr-x 1 sungguklim sungguklim 1697862048 Dec 20 20:31 out/Debug/chrome
```

#### 빌드에러?

크로미움 코드가 잘못됐을 확률 < 1%

1. 환경

Window: Visual Studio, Microsoft SDK

MAC: OSX SDK 10.10

Linux: Run build/install-build-deps.sh?

- 2. 검색.. 하드디스크 용량 확인 ..
  - http://dev.chromium.org/developers/how-tos/build-instructionswindows
  - https://chromium.googlesource.
     com/chromium/src/+/master/docs/mac\_build\_instructions.md
  - https://code.google.com/p/chromium/wiki/LinuxBuildInstructions

#### Common Build Problems

Random C++ errors from a fresh copy of source

Check waterfall to see if the tree is red. If so, try updating the code when the tree is green and build again.

Confusing link errors on a checkout that used to work Try deleting your output directory to force a clean build. If using Visual Studio, make sure you quit before syncing.

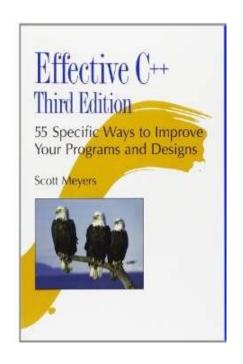
## Making Good Changes

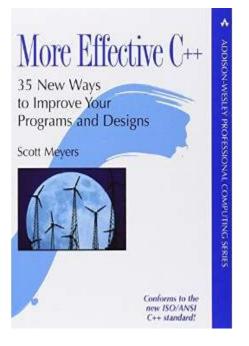
이슈를 수정하거나 필요한 기능을 추가하는 소 스수정을 함

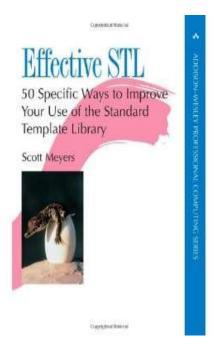
Chromium design docs 를 참고하여 개발

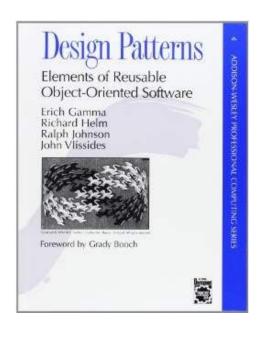
Follow the Chromium code style guide!

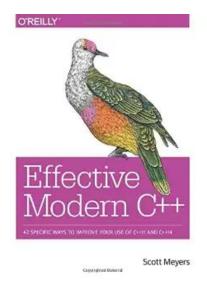
#### Study

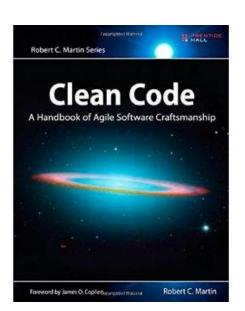














python, javascript, html, java

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## 4. Uploading for review

## Google CLA

https://cla.developers.google.com/about/google-individual



#### Google Individual Contributor License Agreement

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#### Add yourself to /AUTHOR

Issue <u>1415683010</u>: cleanup/Remove deprecated notification from extension functional browserte

Publish+Mail Comments ('m')
Itart Review

Preated:
 month, 2 weeks ago by sooho1000

Modified:
 month, 1 week ago

Reviewers:
 (en Rockot, me

C:
 hromium-reviews, chromium-apps-eviews\_chromium.org, extensions-eviews\_chromium.org

#### Base URL:

an't Edit

https://chromium.googlesource.com/chromium/src.git@

```
▼ Description
```

cleanup/Remove deprecated notification from extension\_functional\_browse
BUG=411568
Committed: https://crrev.com/5109c32e94dc20alab6f03c94dlcfbc22f114cd8
Cr-Commit-Position: refs/heads/master0{#358559}

- ▶ Patch Set 1
- ▼ Patch Set 2:

```
      Created: 1 month, 1 week ago

      Unified diffs
      Side-by-si

      ▶ M AUTHORS
      View

      M chrome/browser/extensions/extension_functional_browsertest.cc
      View

      Trybot results: win8 chromium ng win chromium compile dbg ng win chromium x
```

9 10	# See python fnmatch module documentation for more inform	ation. 9 # See python fnmatch module documentation for more info	
(skipping 522 matching lines) Expand 10 before   Expand all   Expand 10 after			
533	Shouqun Liu <liushouqun@xiaomi.com></liushouqun@xiaomi.com>	533 Shouqun Liu <liushouqun@xiaomi.com></liushouqun@xiaomi.com>	
534	Shouqun Liu <shouqun.liu@intel.com></shouqun.liu@intel.com>	534 Shouqun Liu <shouqun.liu@intel.com></shouqun.liu@intel.com>	
535	Shreeram Kushwaha <shreeram.k@samsung.com></shreeram.k@samsung.com>	535 Shreeram Kushwaha <shreeram.k@samsung.com></shreeram.k@samsung.com>	
536	Shreyas Gopal <shreyas.g@samsung.com></shreyas.g@samsung.com>	536 Shreyas Gopal <shreyas.g@samsung.com></shreyas.g@samsung.com>	
537	Shreyas VA <v.a.shreyas@gmail.com></v.a.shreyas@gmail.com>	537 Shreyas VA <v.a.shreyas@gmail.com></v.a.shreyas@gmail.com>	
538	Siba Samal <siba.samal@samsung.com></siba.samal@samsung.com>	538 Siba Samal <siba.samal@samsung.com></siba.samal@samsung.com>	
539	Simon Arlott <simon.arlott@gmail.com></simon.arlott@gmail.com>	539 Simon Arlott <simon.arlott@gmail.com></simon.arlott@gmail.com>	
540	Siva Kumar Gunturi <siva.gunturi@samsung.com></siva.gunturi@samsung.com>	540 Siva Kumar Gunturi <siva.gunturi@samsung.com></siva.gunturi@samsung.com>	
541	Sohan Jyoti Ghosh <sohan.jyoti@samsung.com></sohan.jyoti@samsung.com>	541 Sohan Jyoti Ghosh <sohan.jyoti@samsung.com></sohan.jyoti@samsung.com>	
542	Song YeWen <ffmpeg@gmail.com></ffmpeg@gmail.com>	542 Song YeWen <ffmpeg@gmail.com></ffmpeg@gmail.com>	
		543 Sooho Park <sooho1000@gmail.com></sooho1000@gmail.com>	
543	Soren Dreijer <dreijerbit@gmail.com></dreijerbit@gmail.com>	544 Soren Dreijer <dreijerbit@gmail.com></dreijerbit@gmail.com>	
544	Srirama Chandra Sekhar Mogali <srirama.m@samsung.com></srirama.m@samsung.com>	545 Srirama Chandra Sekhar Mogali <srirama.m@samsung.com></srirama.m@samsung.com>	
545	Stephen Searles <stephen.searles@gmail.com></stephen.searles@gmail.com>	546 Stephen Searles <stephen.searles@gmail.com></stephen.searles@gmail.com>	
546	Steven Pennington <pre><spenn@engr.uvic.ca></spenn@engr.uvic.ca></pre>	547 Steven Pennington <pre><spenn@engr.uvic.ca></spenn@engr.uvic.ca></pre>	

## Why code reviews?

Chromium has a large, complicated code base with many layers of abstractions that paper over tricky IPC, threading, and resource management semantics.

Reviews are done by uploading your change to Chromium's Rietveld instance at <a href="http://codereview.chromium.org">http://codereview.chromium.org</a>

All code should be reviewed prior to checkin.

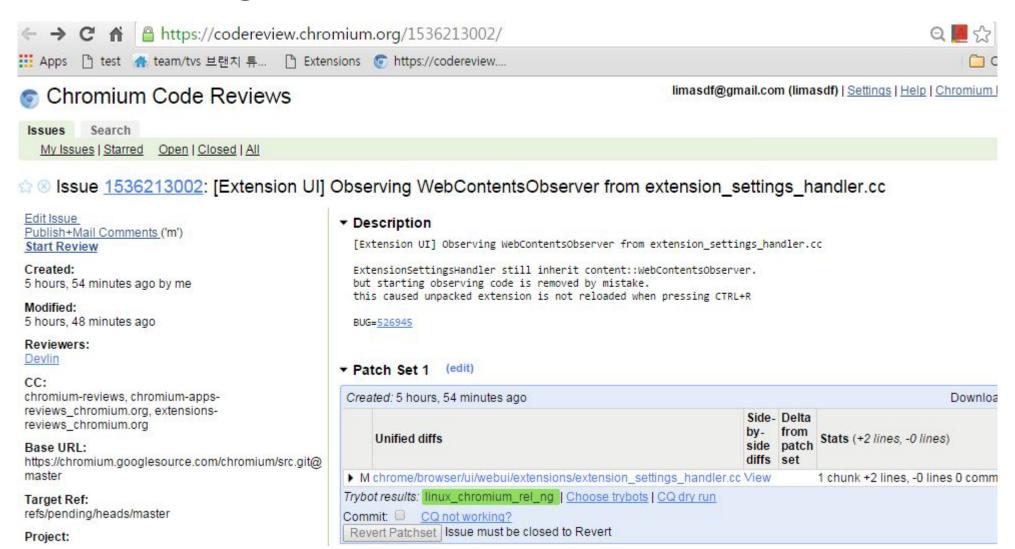
```
git branch -b mybranch;
<코드 수정...>
git commit -am"My change";
git cl upload
```

```
1 # Enter a description of the change.$
 2 # This will be displayed on the codereview site.$
 3 # The first line will also be used as the subject of the review.$
 4 #------This line is 72 characters long------$
 5 [Extension UI] Observing WebContentsObserver from extension_settings_handler.cc$
 6 $
 7 ExtensionSettingsHandler still inherit content::WebContentsObserver.$
 8 but starting observing code is removed by mistake.$
 9 this caused unpacked extension is not reloaded when pressing CTRL+R$
 10 $
 11 BUG=526945$
<lders/a3/z 7vcbrn7nv0dhzhnat5t8bm0000an/T/cl descriptionONUDvH" 11L, 505C written 9.10</pre>
```

```
> git cl upload
Using 50% similarity for rename/copy detection. Override with --similarity.
Running presubmit upload checks ...
Done processing /Users/limsungguk/program_store/chromium/src/chrome/browser/ui/views/toolbar/chevron_menu_button.cc
** Presubmit Messages **
Missing OWNER reviewers for these files:
    chrome/browser/ui/views/toolbar/chevron_menu_button.cc
Suggested OWNERS: (Use "git-cl owners" to interactively select owners.)
    rdevlin.cronin@chromium.org
Presubmit checks passed.
 chrome/browser/ui/views/toolbar/chevron_menu_button.cc | 4 ++--
 1 file changed, 2 insertions(+), 2 deletions(-)
<lders/q3/z_7ycbrn7nv0dhzhnqt5t8bm0000gn/T/cl_description0NUDyH" 11L, 505C written</pre>
Upload server: https://codereview.chromium.org (change with -s/--server)
Issue created. URL: https://codereview.chromium.org/1541663002
Uploading base file for chrome/browser/ui/webui/extensions/extension_settings_handler.cc
# LIMSUNGs-MacBook-Pro ~/program_store/chromium/src (bug_fix)
```

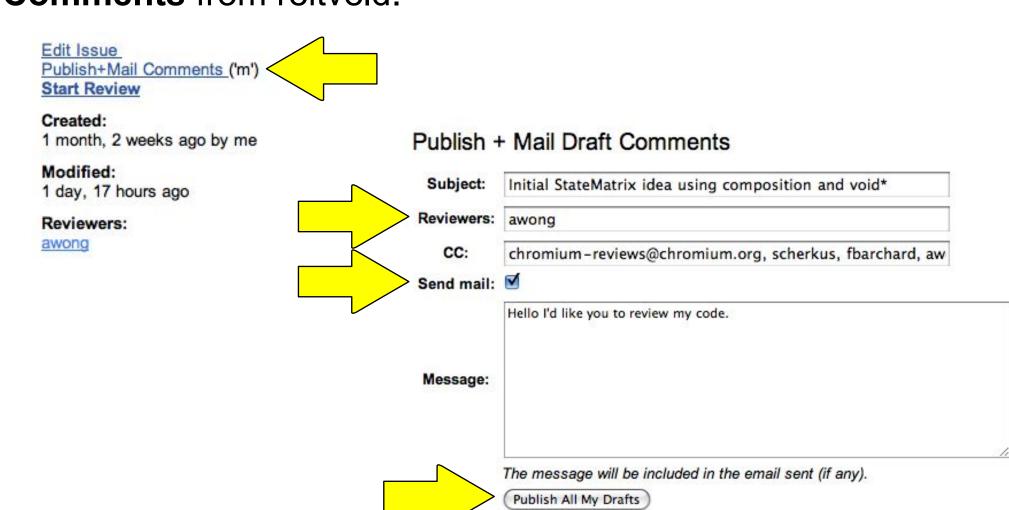
생성된 코드리뷰 주소를 얻을수 있음

https://codereview.chromium.org/1536213002/



## Sending out review

No one will notice your code review until you **Publish+Mail Comments** from reitveld.



#### Code review

« extensions/common/extension builder.h ('K') | « extensions/common/extension builder.h ('K') | extensions/common/test util.h » ('j') | no next file with comments » Toggle Intra-line Diffs ('i') | Expand Comments ('e') | Collapse Comments ('c') | Hide Comments ('s')

```
OLD
                                                                                                                NEW
 1 // Copyright 2013 The Chromium Authors. All rights reserved.
                                                                             1 // Copyright 2013 The Chromium Authors. All rights reserved.
 2 // Use of this source code is governed by a BSD-style license that can be 2 // Use of this source code is governed by a BSD-style license that can be
 3 // found in the LICENSE file.
                                                                              3 // found in the LICENSE file.
 5 #include "extensions/common/extension builder.h"
                                                                             5 #include "extensions/common/extension_builder.h"
 7 #include "extensions/common/extension.h"
                                                                             7 #include "extensions/common/extension.h"
 9 namespace extensions {
                                                                             9 namespace extensions {
10
11 ExtensionBuilder::ExtensionBuilder()
                                                                            11 ExtensionBuilder::ExtensionBuilder()
      : location (Manifest::UNPACKED),
                                                                                   : location (Manifest::UNPACKED),
13
        flags_(Extension::NO_FLAGS) {
                                                                            13
                                                                                     flags_(Extension::NO_FLAGS) {
14 }
15 ExtensionBuilder::~ExtensionBuilder() {}
                                                                            15 ExtensionBuilder::~ExtensionBuilder() {}
                                                                            17 ExtensionBuilder::ExtensionBuilder(ExtensionBuilder&& other)
                                                                            18 : path_(other.path_),
                                                                            danaki (behind on reviews) 2015/12/09 18:46:44
                                                                            move the string instead of copying it?
                                                                            Reply Done Ack
                                                                            me 2015/12/16 09:34:54 Done.
                                                                                      location (other.location ),
                                                                                     manifest_(other.manifest_.release()),
                                                                            danaki (behind on reviews) 2015/12/09 18:46:44
                                                                            why isn't this manifest (std::move(other.manifest ))?
                                                                            Reply Done Ack
                                                                            me 2015/12/16 09:34:54 Done.
                                                                                     flags_(other.flags_),
                                                                                     id_(other.id_) {}
                                                                            danaki (behind on reviews) 2015/12/09 18:46:44
                                                                            move the string dont copy?
                                                                            Reply Done Ack
                                                                            me 2015/12/16 09:34:54 Done.
                                                                            24 scoped refptr(Extension) ExtensionBuilder::Build() {
17 scoped refptr(Extension> ExtensionBuilder::Build() {
18 std::string error;
                                                                            25 std::string error;
19 scoped refptr<Extension> extension = Extension::Create(
                                                                            26 scoped refptr<Extension> extension = Extension::Create(
```

#### Uploading code

리뷰를 받은후 코드수정을 해준다.

```
git branch b mybranch;
<코드 수정...>
git commit -am"My change";
git cl upload
```

and then Sending out review again.

## LGTM (Looks good to me)

Total comments: 5 mium/src.git@ ▼ Patch Set 4 : review (returning rvalue) Total comments: 3 Created: 3 days, 9 hours ago Download [raw] [tar.bz2] Side- Delta by- from Unified diffs Stats (+48 lines, -27 lines) Pε side patch diffs set M chrome/browser/extensions/api/file system/file system api unittest.cc View 1 4 chunks +6 lines, -4 lines 0 comments Dc M chrome/browser/extensions/permission messages unittest.cc View 2 chunks +2 lines, -2 lines 0 comments Dc Dc M chrome/browser/ui/webui/media router/media router ui unittest.cc View 1 1 chunk +1 line, -1 line 0 comments M chrome/common/extensions/api/common extension api unittest.cc View 2 chunks +5 lines, -5 lines 0 comments Dc M extensions/common/extension builder.h View 1 2 chunks +6 lines -4 lines 0 comments Dc M extensions/common/extension builder.cc View 1 2 chunks +18 lines, -0 lines 0 comments Dc M extensions/common/test\_util.h View 123 1 chunk +2 lines, -2 lines 0 comments Dc M extensions/common/test\_util.cc View 123 2 chunks +8 lines, -9 lines 3 comments (1 by me) Dc Trybot results: mac chromium rel ng win chromium rel ng linux chromium chromeos rel ng linux chromium rel ng Patch Set 5 : nit change(dana review) ▼ Messages Total messages: 34 (20 generated) Expand Messages | Collapse Messages | Show Generated Messages | Hide Generated Messages me Dana, Could you take a first look at extensions/common/extension builder. (h,cc)? It's pretty simila 1 week, 4 days ago (2015-12-09 15:20:18 danakj (behind on reviews) https://codereview.chromium.org/1511103003/diff/20001/extensions/com 1 week, 3 days ago (2015-12-09 18:46:44 me Dana, Could you share your wisdom? It failed only from Windows. Here's Backtrace on my ... 4 days, 5 hours ago (2015-12-16 09:34:54 U danakj (behind on reviews) https://codereview.chromium.org/1511103003/diff/190001/extensions// 3 days, 20 hours ago (2015-12-16 18:57:49 U danakj (behind on reviews) https://codereview.chromium.org/1511103003/diff/190001/extensions/ 3 days, 20 hours ago (2015-12-16 19:06:04 U me adding Antony, the owner of extension, btw, I'm wondering why \*only Windows trybot has failed . 3 days, 9 hours ago (2015-12-17 06:19:46 U 2 days, 17 hours ago (2015-12-17 22:09:08 U asargent (away until Dec 29) lgtm danakj (behind on reviews) On Wed, Dec 16, 2015 at 10:19 PM, limasdf@gmail.com> wrote: > ac 2 days, 17 hours ago (2015-12-17 22:21:19 U danakj (behind on reviews) LGTM https://codereview.chromium.org/1511103003/diff/230001/exter 2 days, 17 hours ago (2015-12-17 22:22:02 U me https://codereview.chromium.org/1511103003/diff/230001/extensions/common/test\_util.cc File + 2 days, 14 hours ago (2015-12-18 00:31:58 U commit-bot: I haz the power CQ is trying da patch. Follow status at https://chromium-cq-status.app! 2 days, 14 hours ago (2015-12-18 00:34:13 U

danaki (behind on reviews) https://codereview.chromium.org/1511103003/diff/230001/extensions/ 2 days, 14 hours ago (2015-12-18 00:38:49 U

https://codereview.chromium.org/1511103003/

## Tips

#### Follow the style guide!!!

Write a descriptive, easy to understand, change description.

Always try to include tests when possible.

Keep your changes small. It's much easier for reviewers to understand and review your change. Split up unrelated changes.

Before attempting a big change, email your reviewers and discuss to make sure your approach is good.

Read contributing code for more information.

#### Overview

How does one get involved in Chromium development? Usually, you do some variant on the following work flow:

- 1. Get a machine that can build Chromium
- 2. Get the code
- 3. Modify and build the code
- 4. Upload and review code
- 5. Commit patch and waiting game

## Troubleshooting

In open source, no one can hear you scream

## Feeling lost? Need help?

#### First, do your research:

- Search mail archives & change history
- If applicable, see what older revisions, or other browsers do

#### Then:

- Ask on IRC freenode.net? #chromium
- Chromium-dev Google Groups
- GDG Korea : <a href="https://gdgkr.herokuapp.com/">https://gdgkr.herokuapp.com/</a>

## THE END

Start writing code!

#### 따라하기

처음할때는 절대 큰 패치보다는 작은 패치로

#### 실전 도전해보기!

## https://crbug.com/554289

#### 기존:

STL Container에 smart pointer를 쓰는 대신에 raw pointer를 STL Container에 쓰고 destructor에서 raw pointer들을 delete를 해주었음

#### 변경:

하지만 C++11에서 move-only 를 갖는 클레스를 지원하므로 STL container도 smart pointer를 쓸수있음

s/ ScopedVector<T> / std::vector<scoped\_ptr<T>> / g

```
LIMSUNGs-MacBook-Pro ~/program_store/chromium/src (master)
> git checkout -b mypatch
                                                                                  1. 브랜치를 생성하고
       chrome/browser/ui/views/toolbar/chevron_menu_button.cc
Switched to a new branch 'mypatch'
# LIMSUNGs-MacBook-Pro ~/program_store/chromium/src (mypatch)
 git diff
diff --git a/chrome/browser/ui/views/toolbar/chevron_menu_button.cc b/chrome/browser/ui/views/toolbar/chevron_menu_button.cc
index 2e87277..bcea312 100644
                                                                                        2. 파일을 수정하고
--- a/chrome/browser/ui/views/toolbar/chevron_menu_button.cc
+++ b/chrome/browser/ui/views/toolbar/chevron_menu_button.cc
ee -144.7 +144.7 ee class ChevronMenuButton::MenuController : public views::MenuDelegate {
   // The vector keeps all icon updaters associated with menu item views in the
   // controller. The icon updater will update the menu item view's icon when
   // the browser action view's icon has been updated.
   std::vector<scoped_ptr<IconUpdater>> icon_updaters_;
  DISALLOW_COPY_AND_ASSIGN(MenuController);
-179,7 +179,7 @ ChevronMenuButton::MenuController::MenuController(
        view->view_controller()->GetTooltip(view->GetCurrentWebContents()),
        command_id):
     icon_updaters_.push_back(new IconUpdater(menu_item, view))
     icon_updaters_.push_back(make_scoped_ptr(new IconUpdater(menu_item, view)));
     ++command_id;
                                                                                     3. 빌드를한다
# LIMSUNGs-MacBook-Pro ~/program_store/chromium/src (mypatch)
> ninja -C out/Debug chrome
ninja: Entering directory 'out/Debug'
[12/12] STAMP Chromium.app
# LIMSUNGs-MacBook-Pro ~/program_store/chromium/src (mypatch)
```

```
# LIMSUNGs-MacBook-Pro ~/program_store/chromium/src (mypatch)
> git commit -am "My first patch"
[mypatch 9a4950b] My first patch
 1 file changed, 2 insertions(+), 2 deletions(-)
# LIMSUNGs-MacBook-Pro ~/program_store/chromium/src (mypatch)
> git cl upload
> git cl upload
Using 50% similarity for rename/copy detection. Override with --similarity.
Running presubmit upload checks ...
Done processing /Users/limsungguk/program_store/chromium/src/chrome/browser/ui/views/toolbar/chevron_menu_button.cc
** Presubmit Messages **
Missing OWNER reviewers for these files:
   chrome/browser/ui/views/toolbar/chevron_menu_button.cc
Suggested OWNERS: (Use "git-cl owners" to interactively select owners.)
   rdevlin.cronin@chromium.org
Presubmit checks passed.
 chrome/browser/ui/views/toolbar/chevron_menu_button.cc | 4 ++--
 1 file changed, 2 insertions(+), 2 deletions(-)
 1 # Enter a description of the change.$
 2 # This will be displayed on the codereview site.$
  3 # The first line will also be used as the subject of the review.$
  5 Remove ScopedVector$
  6 $
 7 BUG=554289$
```

#### https://codereview.chromium.org/1537263002

#### ⊗ Issue <u>1537263002</u>: Remove ScopedVector

dit Issue ublish+Mail Comments ('m') tart Review

reated:

hours, 32 minutes ago by me

lodified:

4 minutes ago

eviewers:

C:

nromium-reviews, tfarina

ase URL:

ttps://chromium.googlesource.com/chromium/src.git@ iaster

arget Ref:

sfs/pending/heads/master

roject:

nromium

isibility:

▼ Description

Remove ScopedVector

BUG=554289

▼ Patch Set 1 (edit)



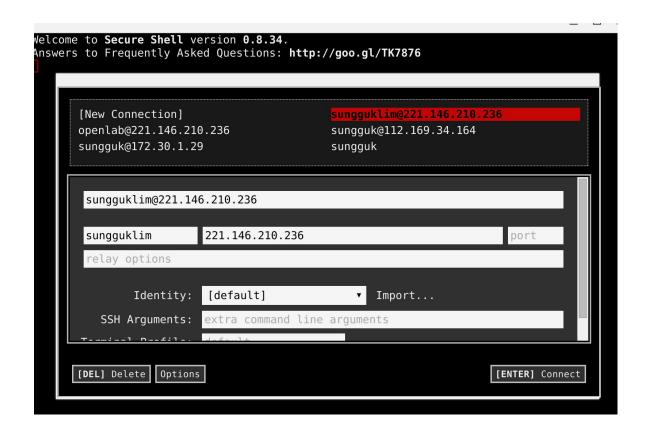
## Q & A

## Q. Too busy, no time to contribute to open source.

A. sungguk's When to contribute to opensource contributor flow chart (PATENT PENDING)

```
출근할때 코드리뷰 핸드폰으로 확인 (AM 07:00)
    LGTM?
  Yes
           No
Commit. Happy! 시간이 허락할때 solution을 생각함 -----
    퇴근이후에 여유가 있는가?
       Yes
               No
               주말에 여유가 있는가?
                        No
              Yes
  코드 올리고 코드리뷰기다림 (AM 2:00)
```

# Q. Too busy, no time to contribute to open source.



A. 집에 SSH서 버를 돌려 원 격으로 접속 하여 어디에 서나 접속하 여 개발 및 빌 Q. 오픈소스 활동으로 얻는 것?

Fun; It's a kind of SNS 개발 프로세스(Agile, unittest, design doc ...) Communication skills English skills 무료 코딩 과외\* 단점: 회사일이 싫어짐

#### **GDG** Korea

https://gdgkr.herokuapp.com/

The End