

GNOME™

Desktop for Everyone

Kukuh Syaafat
cho2@di.blankon.in

Parade Software Merdeka, 30 Agustus 2015



Kenalan dulu ...

- **Kukuh Syafaat**

- Pengembang dan pengguna BlankOn (blankon.id)
- *GNU/Linux enthusiast*



Apa itu GNOME™?

- Lingkungan desktop yang berjalan diatas sistem operasi GNU/Linux (**GNOME Shell**)
- Dikembangkan oleh GNOME Projects
- Ditulis dalam bahasa C, C++, Vala, Python dan JavaScript
- Rilis stabil terakhir versi 13.6.3



Kenapa GNOME™?

- Digunakan oleh distribusi GNU/Linux yang populer seperti Debian, Fedora, OpenSUSE dan Arch Linux.
- Sebagian besar distribusi GNU/Linux juga menggunakan GNOME™ sebagai desktop-nya
<http://distrowatch.com/search.php?desktop=GNOME>
- Lisensi GPL, LGPL
- Lokalisasi lebih dari 40 bahasa
- Dukungan komunitas yang luas



Rilis GNOME™

GNOME 2.2: 2003-02-06

GNOME . . .

GNOME 2.24: 2008-09-24

GNOME 2.26: 2009-03-18

GNOME 2.28: 2009-09-23

GNOME 2.30: 2010-03-31

GNOME 2.32: 2010-09-29

GNOME 3.0: 2011-04-06

GNOME 3.2: 2011-09-28

GNOME 3.4: 2012-03-28

GNOME 3.6: 2012-09-26

GNOME 3.8: 2013-03-27

GNOME 3.10: 2013-09-25

GNOME 3.12: 2014-03-26

GNOME 3.14: 2014-09-24

GNOME 3.16: 2015-03-25



<https://www.gnome.org/>

GNOME

GNOME.org

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GNOME 3: Ease, comfort and control

GNOME 3 is an easy and elegant way to use your computer. It is designed to put you in control and bring freedom to everybody. GNOME 3 is developed by the GNOME community, a diverse, international group of contributors that is supported by an independent, non-profit foundation.

[Discover GNOME 3](#) [Get GNOME 3](#)

Make a donation and become a Friend of GNOME!

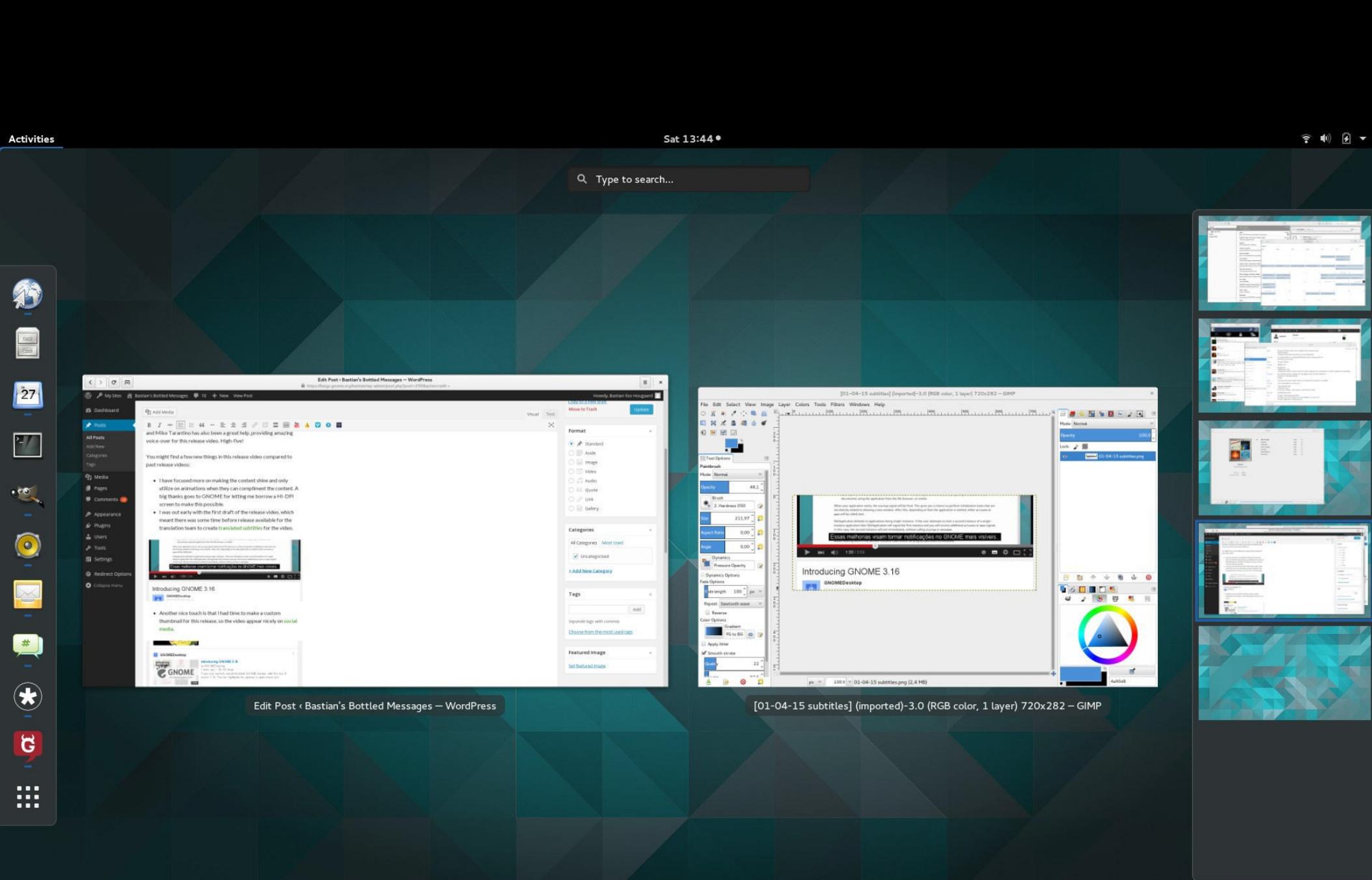
Your donation will ensure that GNOME continues to be a free and open source desktop by providing resources to developers, software and education for end users, and promotion for GNOME worldwide.

Get involved!

The GNOME Project is a diverse international community which involves hundreds of contributors, many of whom are volunteers. Anyone can contribute to the GNOME!

Latest news

March 25, 2015 March 16, 2015 February 16, 2015





rupert could I borrow your car for a while?

[HowDoI/GtkApplication](#) – GNOME Wiki!
http://wiki.gnome.org/HowDoI/GtkApplication

[GtkApplication](#) is the base class of a Gtk Application. Its primary purpose is to separate your program from `main()`.

`main()` is an operating system implementation detail that is really uninteresting to applications. The philosophy of `GtkApplication` is that applications are interested in being told what needs to happen, when it needs to happen, in response to actions from the user. The exact mechanism by which the operating system starts applications is uninteresting.

To this end, `GtkApplication` exposes a set of signals (or virtual functions) that an application should respond to.

- `startup`: sets up the application when it first starts
- `shutdown`: performs shutdown tasks
- `activate`: shows the default first window of the application (like a new document). This corresponds to the application being launched by the desktop environment.
- `open`: opens files and shows them in a new window. This corresponds to someone trying to open a document (or documents) using the application from the file browser, or similar.

When your application starts, the `startup` signal will be fired. This gives you a chance to perform initialisation tasks that are not directly related to showing a new window. After this, depending on how the application is started, either `activate` or `open` will be called next.

`GtkApplication` defaults to applications being single-instance. If the user attempts to start a second instance of a single-instance application then `GtkApplication` will signal the first instance and you will receive additional `activate` or `open` signals. In this case, the second instance will exit immediately, without calling `startup` or `shutdown`.

For this reason, you should do essentially no work at all from `main()`. All startup initialisation should be done in `startup`. This avoids wasting work in the second-instance case where the program just exits immediately.

The application will continue to run for as long as it needs to. This is usually for as long as there are any open windows. You can additionally force the application to stay alive using `g_application_hold()`.

Notifications



rupert



Bastian



13:59

Release Beers March the 28th!

Sunday

February 22 2015

◀ February ▶

S M T W T F S

25 26 27 28 29 30 31

1 2 3 4 5 6 7

8 9 10 11 12 13 14

15 16 17 18 19 20 21

22 23 24 25 26 27 28

1 2 3 4 5 6 7

Add world clocks...

To this end, GtkApplication

- **startup:** sent when the application is being launched
- **shutdown:** sent when the application exits
- **activate:** sent when the application is being activated
- **open:** opened when files or documents are opened

When your application receives a signal that is not directly related to its purpose, `on_activate` or `on_open` will be called.

GtkApplication does not implement `main()`. Instead, it provides an instance application object that you can use to interact with the application. In this case, the

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On shutdown, you receive a `shutdown` signal where you can do any necessary cleanup tasks (such as saving files to disk).

GtkApplication does not implement `main()` for you. You must do so yourself. Your `main()` function should be as small as possible and do almost nothing except creating your GtkApplication and running it. The "real work" should always be done in response to the signals fired by GtkApplication.



rupert

do you have some music recommendations?

14:01

sure, what genre?

could I borrow your car for a while?

[GtkApplication](#) is the base

am from `main()`.

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4*4|

4*4 = 16



g8443



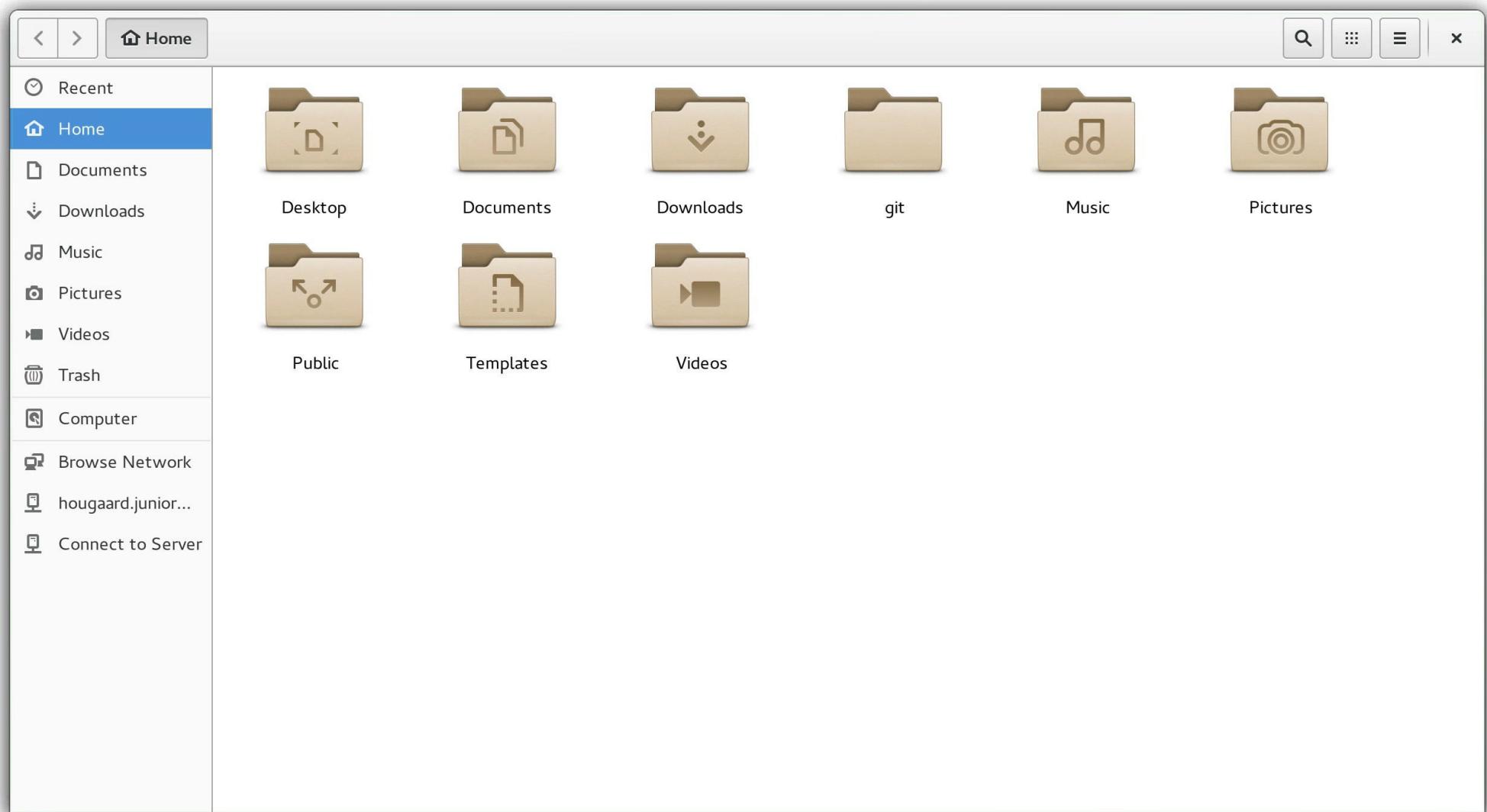
g8054

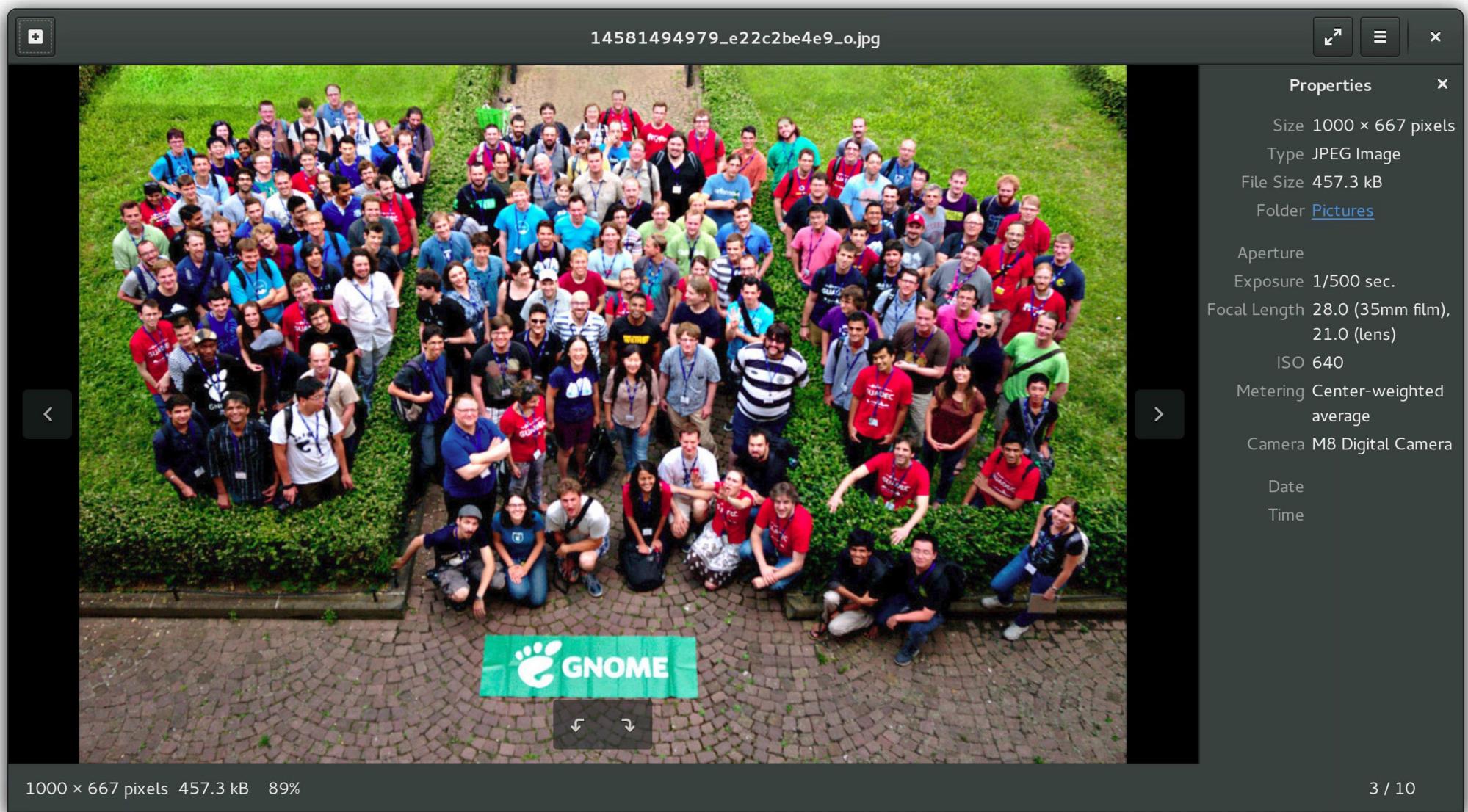


CIS224 Software Projects: Software Engineering and Research Methods



Search the Web for 4*4





Notifications

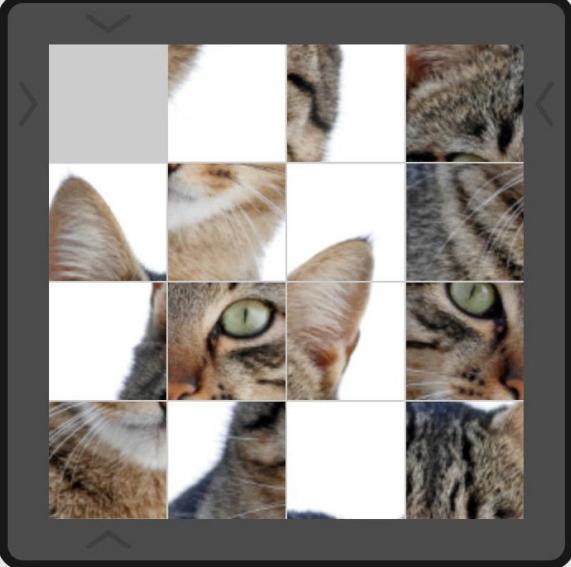
Notification Banners **ON**

Lock Screen Notifications **ON**

Applications

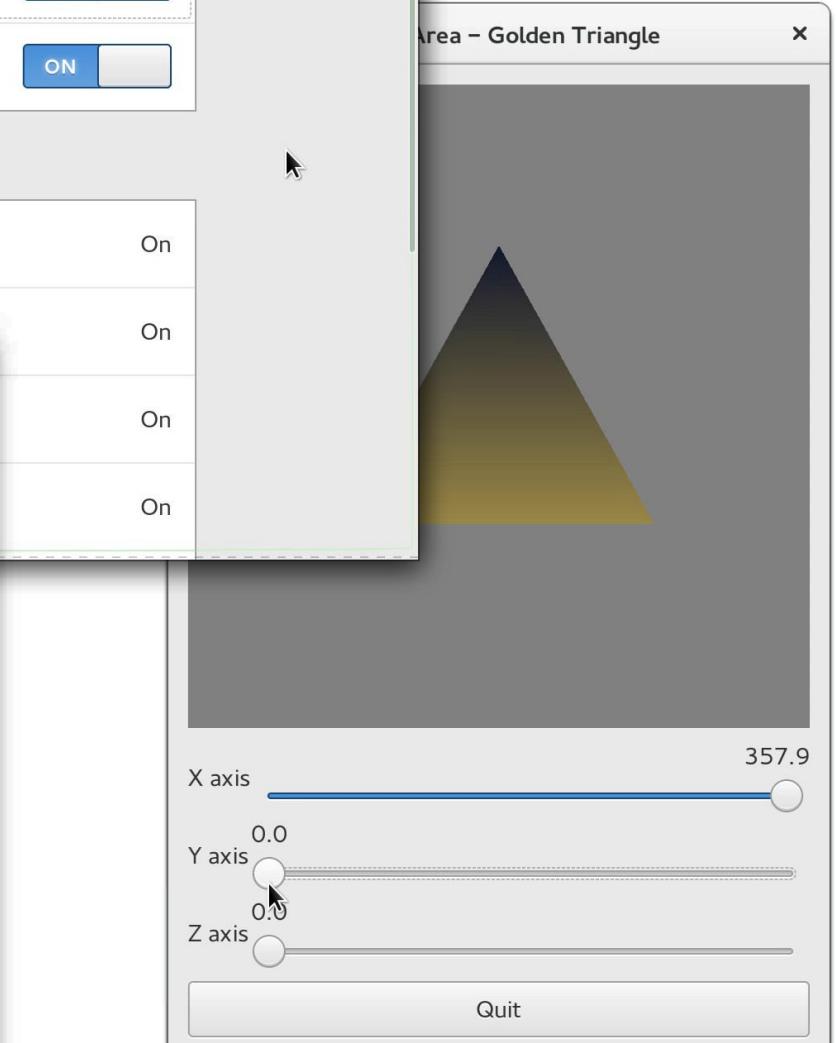
Archive Manager	On
Clock	On
Taquin	On
	On

Taquin



Start Over

Area - Golden Triangle

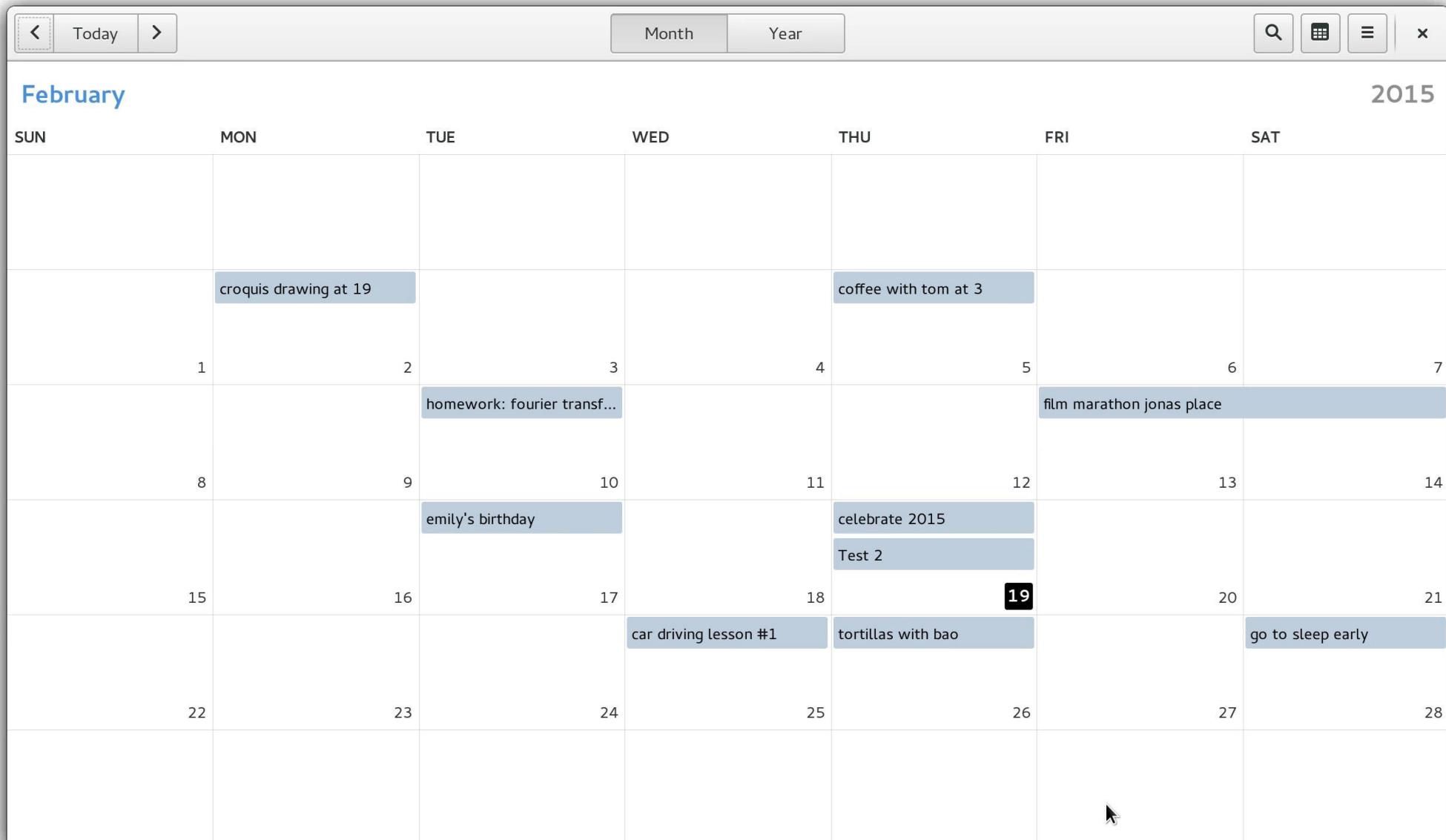


X axis 357.9

Y axis 0.0

Z axis 0.0

Quit

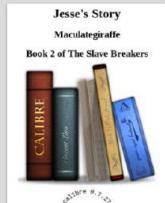


A screenshot of a code editor window titled "grid-packing.c". The window has standard OS X-style controls at the top. The code itself is a C program using the GTK library. It demonstrates how to create a window, set its title, and pack two buttons into a grid container.

```
1 #include <gtk/gtk.h>
2
3
4
5 static void
6 activate (GtkApplication *app,
7           gpointer      user_data)
8 {
9     GtkWidget *window;
10    GtkWidget *grid;
11    GtkWidget *button;
12
13    /* Create a new window, and set its title */
14    window = gtk_application_window_new (app);
15    gtk_window_set_title (GTK_WINDOW (window), "Window");
16    gtk_container_set_border_width (GTK_CONTAINER (window), 10);
17
18    /* Here we construct the container that is going pack our buttons */
19    grid = gtk_grid_new ();
20
21    /* Pack the container in the window */
22    gtk_container_add (GTK_CONTAINER (window), grid);
23
24    button = gtk_button_new_with_label ("Button 1");
25    g_signal_connect (button, "clicked", G_CALLBACK (print_hello), NULL);
26
27    /* Place the first button in the grid cell (0, 0), and make it fill
28     * just 1 cell horizontally and vertically (ie no spanning)
29     */
30    gtk_grid_attach (GTK_GRID (grid), button, 0, 0, 1, 1);
31
32    button = gtk_button_new_with_label ("Button 2");
33    g_signal_connect (button, "clicked", G_CALLBACK (print_hello), NULL);
```

Recent

Collections



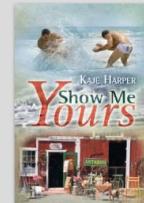
Jesse's Story
Maculategiraffe



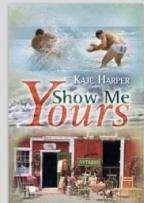
The Social Cancer
JosÈ Rizal



Don't Read in the
Closet: G...l Edition
authors, various



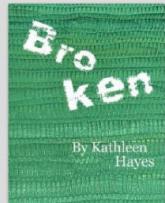
Show Me Yours
Harper, Kaje



Show Me Yours
Harper, Kaje



12090541



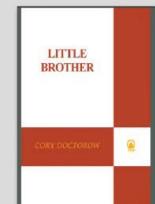
Hayes, Kathleen
Broken
O'Brien, Heather K



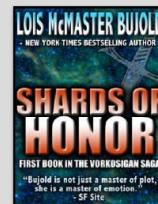
Stuff My Stocking:
M-M Ro...Naughty
Authors, Various



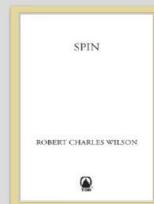
MachineOfDeath_N
orth_1372449942



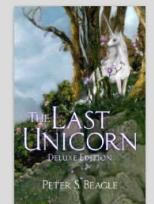
Little Brother
Doctorow, Cory



Shards of Honor
(Vorkosigan Saga)
Lois McMaster Bujold



Spin
Wilson, Robert Charle...



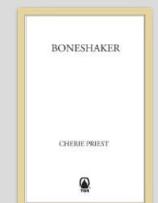
The Last Unicorn
Beagle, Peter S.



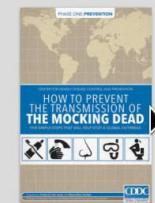
The Poison Eaters
and Other Stories
Holly Black



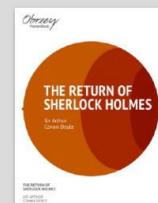
Just a Geek



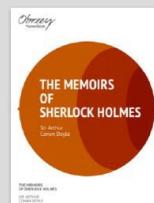
Boneshaker



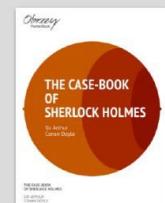
mockingdead_cbz_



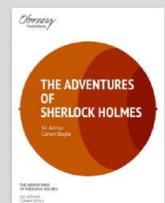
The Return of



The Memoirs of



The Case-Book of



The Adventures of

Aplikasi yang Dikembangkan GNOME™

<https://wiki.gnome.org/Apps>

- Abiword
- Banshee
- Cheese
- Dia
- Evince
- File Roller
- Gedit
- Hot SSH
- lagno
- Klotski
- Logs
- ...



Proyek yang Dikembangkan GNOME™

<https://wiki.gnome.org/Project>

- Cantarell
- GSstreamer
- GTK +
- Jhbuild
- Vala
- ...



GNOME™ Versi Berikutnya

- GNOME 3.17.x Development Series
 - <https://wiki.gnome.org/ThreePointSeventeen>
- GNOME 3.18
 - Rencana 23 September 2015



Tim dan Aktivitas di GNOME™

- <https://wiki.gnome.org/Teams>

- Accessibility - works to make GNOME accessible to anyone, irrespective of their physical abilities.
- Accounts - manages access to GNOME development systems.
- Design - GNOME user interface and UX design.
- Documentation - writes and maintains GNOME user and developer documentation.
- Engagement - GNOME websites, blogging, press, marketing & promotion activities.
- Foundation Board
- Membership & Elections Committee - organizes the annual GNOME Foundation elections.
- Maintainers Team - for App or Project maintainers
- Moderators - stewards of the GNOME mailing lists.
- Outreach - GNOME Outreach
- QA - GNOME QA team
- Bugsquad - maintains and manages the GNOME Bug Tracker.
- Release Team - organizes and manages GNOME development.
- Safety - User safety and privacy working group.
- Sysadmin - maintain and develop GNOME's infrastructure.
- Web Development
- Translation - translates GNOME user interfaces and documentation into different languages.
- User Groups - Regional GNOME user groups.



GNOME™ di Asia

- <https://wiki.gnome.org/GnomeAsia>
- Acara tahunan: GNOME.Asia Summit





GNOME™ Asia Summit

- Beijing, China (2008)
- Ho-Chi-Minh, Vietnam (2009)
- Taipei, Taiwan (2010)
- Bangalore, India (2011)
- Hong Kong (2012)
- Seoul, South Korea (2013)
- Beijing, China (2014)
- **Depok, Indonesia (2015)**



GNOME™ Asia Summit 2015

- <http://2015.gnome.asia/>
- 322 peserta
- 48 pembicara
- 28 diantaranya pembicara lokal



GNOME™ Asia Summit 2015



TERIMA KASIH

