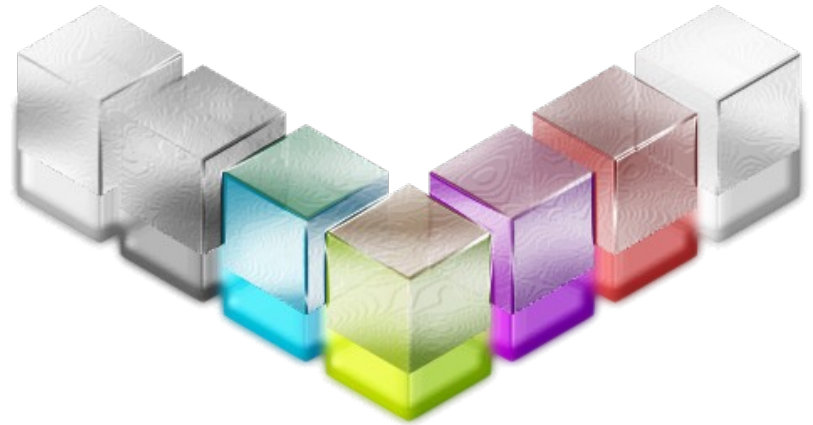# Desktop Customization

## Introduction to Desktop Customization in Linux/BSD.

for Personal Educational Purpose.

**Jakarta, Indonesia**
**11 October, 2020**

# About Epsi



Yet, another underachiever.
But hey, I have my own blog.

# About This Material

After watching this, you will understand:

1) The difference between GUI in linux or BSD.

2) What customization can be done in linux or BSD.

3) Choices to leverage your desktop appealing.

So that you can pick what customization suitable for you for daily basis usage.


This material contain a bunch of terminal screenshots.

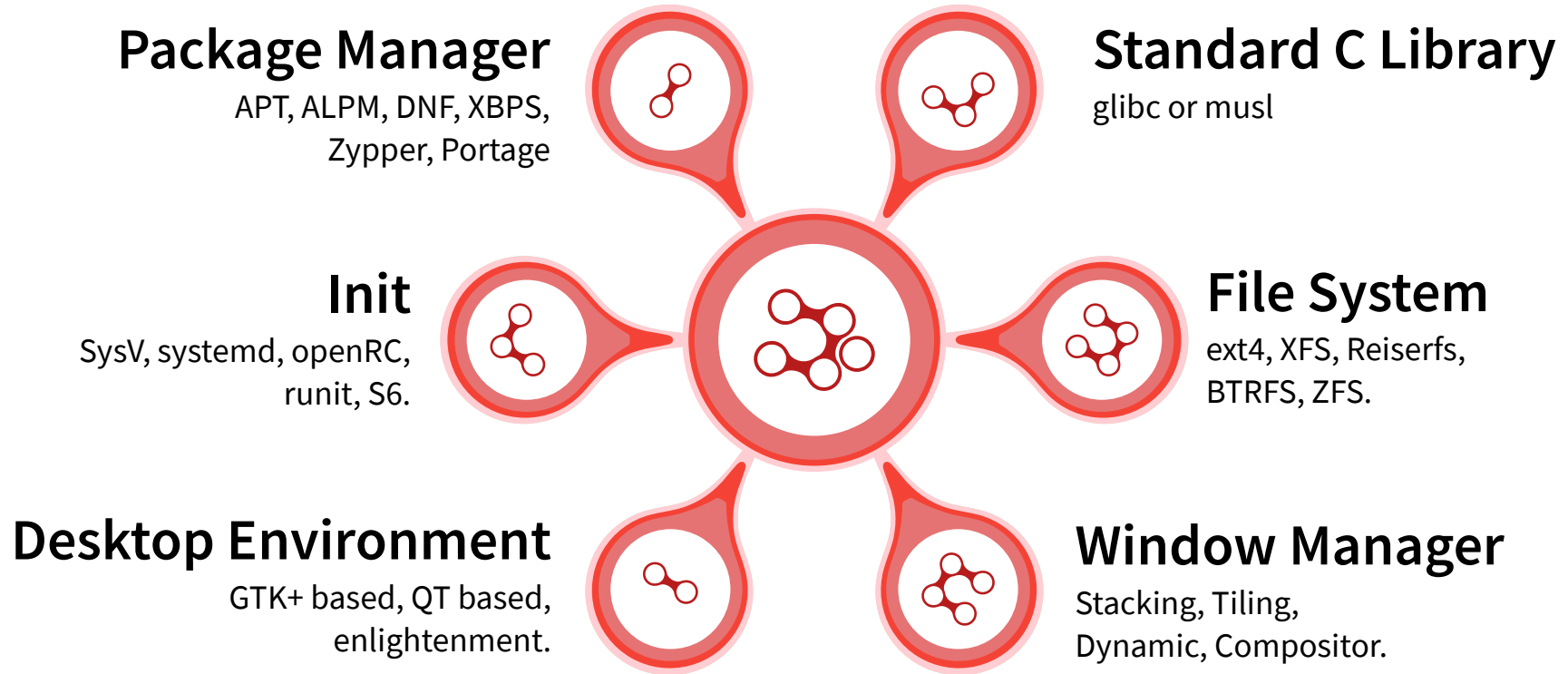It does not mean that your daily desktop is all about terminal.

# Modular Linux

# How Modular is **Linux**?
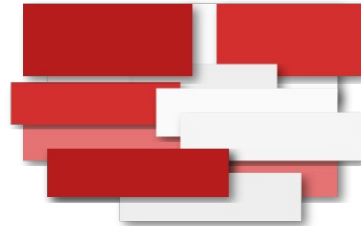
**Package Manager**
APT, ALPM, DNF, XBPS,
Zypper, Portage

**Standard C Library**
glibc or musl

**Init**
SysV, systemd, openRC,
runit, S6.

**File System**
ext4, XFS, Reiserfs,
BTRFS, ZFS.

**Desktop Environment**
GTK+ based, QT based,
enlightenment.

**Window Manager**
Stacking, Tiling,
Dynamic, Compositor.

Do not forget about kernel differences.

# Reference



**Dive into Linux Subsystem
for Personal Educational Purpose.**

[Learning Linux Diversity]
Yet Another Presentation.

# What Customization?

# Desktop Art

## DE/WM Customization

Window manager, panel, notification and the most ingredient called wallpaper.

## Terminal Customization

Shell, prompt, pixel-art, and multiplexer.

Terminal ricing along with CLI application,
are part of desktop ricing.

# The Difference: DE or WM?

### Desktop Environment

Full Experience: Panel, File Manager, Application.

### Stacking Window Manager

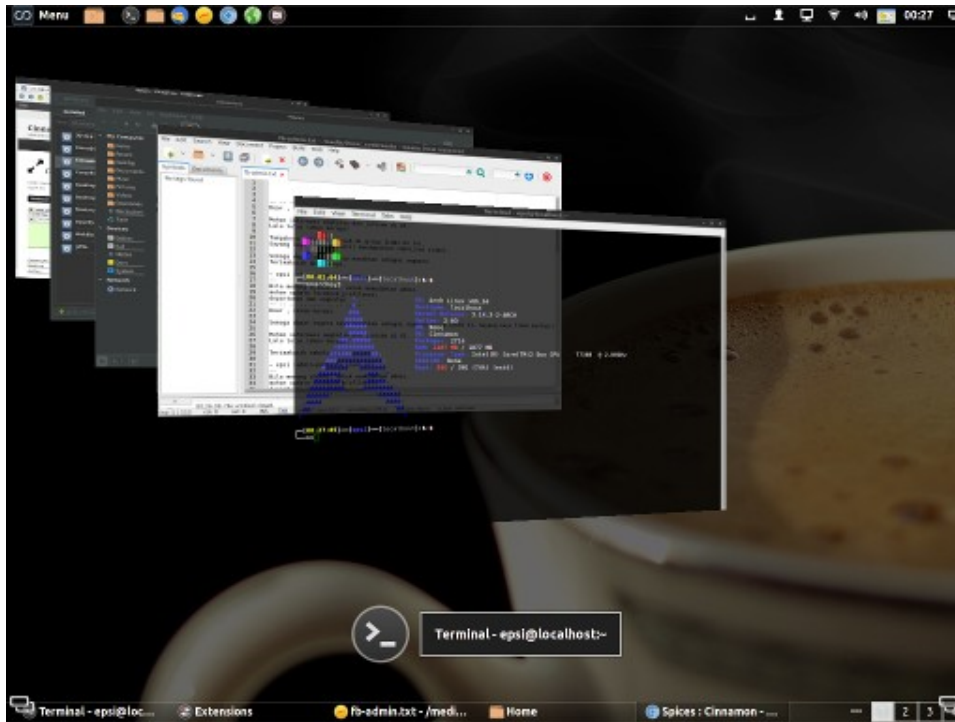Stripped Down Version of Desktop Environment.

### Tiling Window Manager

Non-overlapping screen real estate.

When you customize a Window Manager,
you are basically making your own Desktop Environment.

The good Cinnamon (GTK+3) based.

**Desktop Customization**
epsi-rns.github.io

# DE/WM Categorization

**GTK+ based DE**

XFCE4, Gnome shell, Cinnamon, Mate, Budgie.

**QT based DE**

KDE Plasma, LXQT, Deepin

**DE with Other Library**

Enlightenment, Lumina, or such.

**Compositor**

KWin, Compiz.

**Tiling WM (or dynamic)**

AwesomeWM, XMonad, i3wm (gaps), BSPWM,
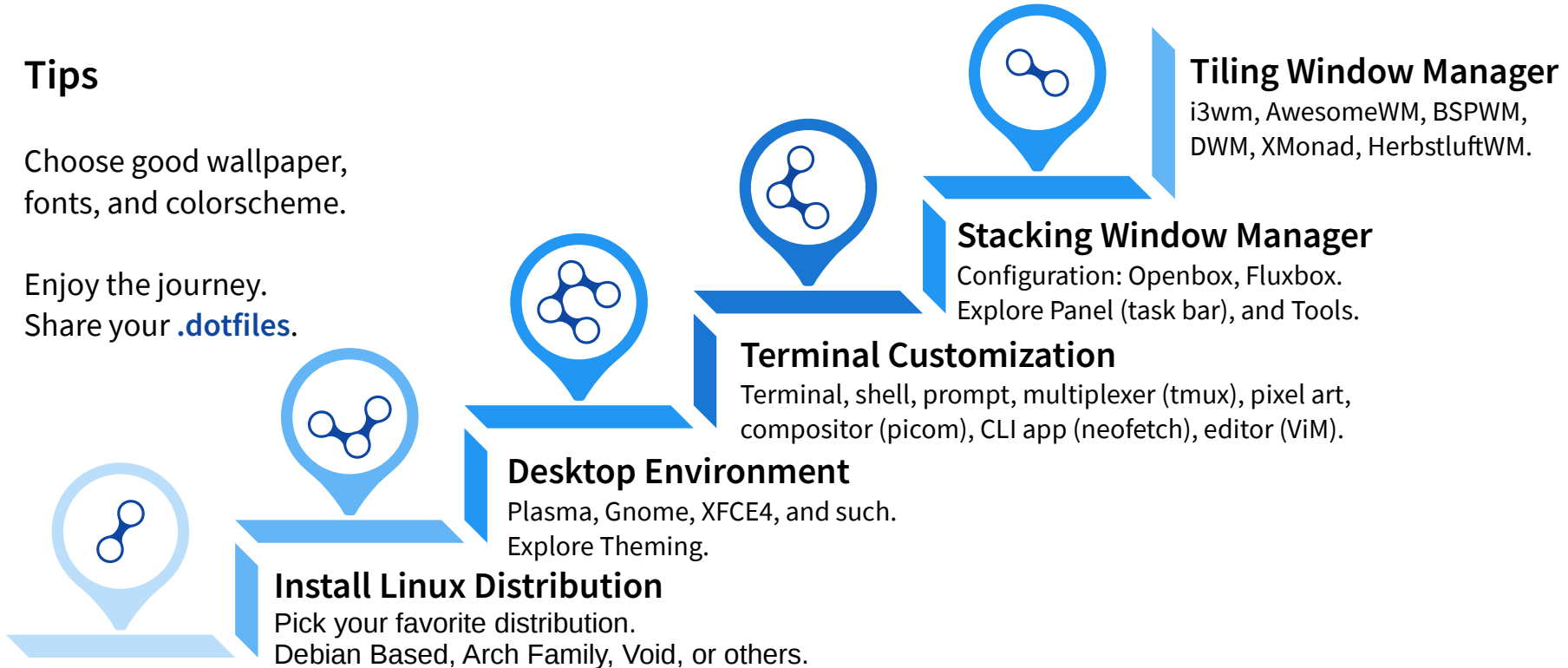HerbsluftWM, DWM, or many others.

**Stacking WM**

Openbox, Fluxbox.

The separation is not very clear, sometimes overlapped.
[The Difference Between DE, Shell, WM and Compositor]

# Desktop **Customization** Step by Step?

## Tips

Choose good wallpaper,
fonts, and colorscheme.

Enjoy the journey.
Share your **.dotfiles**.

### Tiling Window Manager
i3wm, AwesomeWM, BSPWM,
DWM, XMonad, HerbstluftWM.

### Stacking Window Manager
Configuration: Openbox, Fluxbox.
Explore Panel (task bar), and Tools.

### Terminal Customization
Terminal, shell, prompt, multiplexer (tmux), pixel art,
compositor (picom), CLI app (neofetch), editor (ViM).

### Desktop Environment
Plasma, Gnome, XFCE4, and such.
Explore Theming.

### Install Linux Distribution
Pick your favorite distribution.
Debian Based, Arch Family, Void, or others.

Learn how to google, make a screenshot (scrot), read documentation, and english.
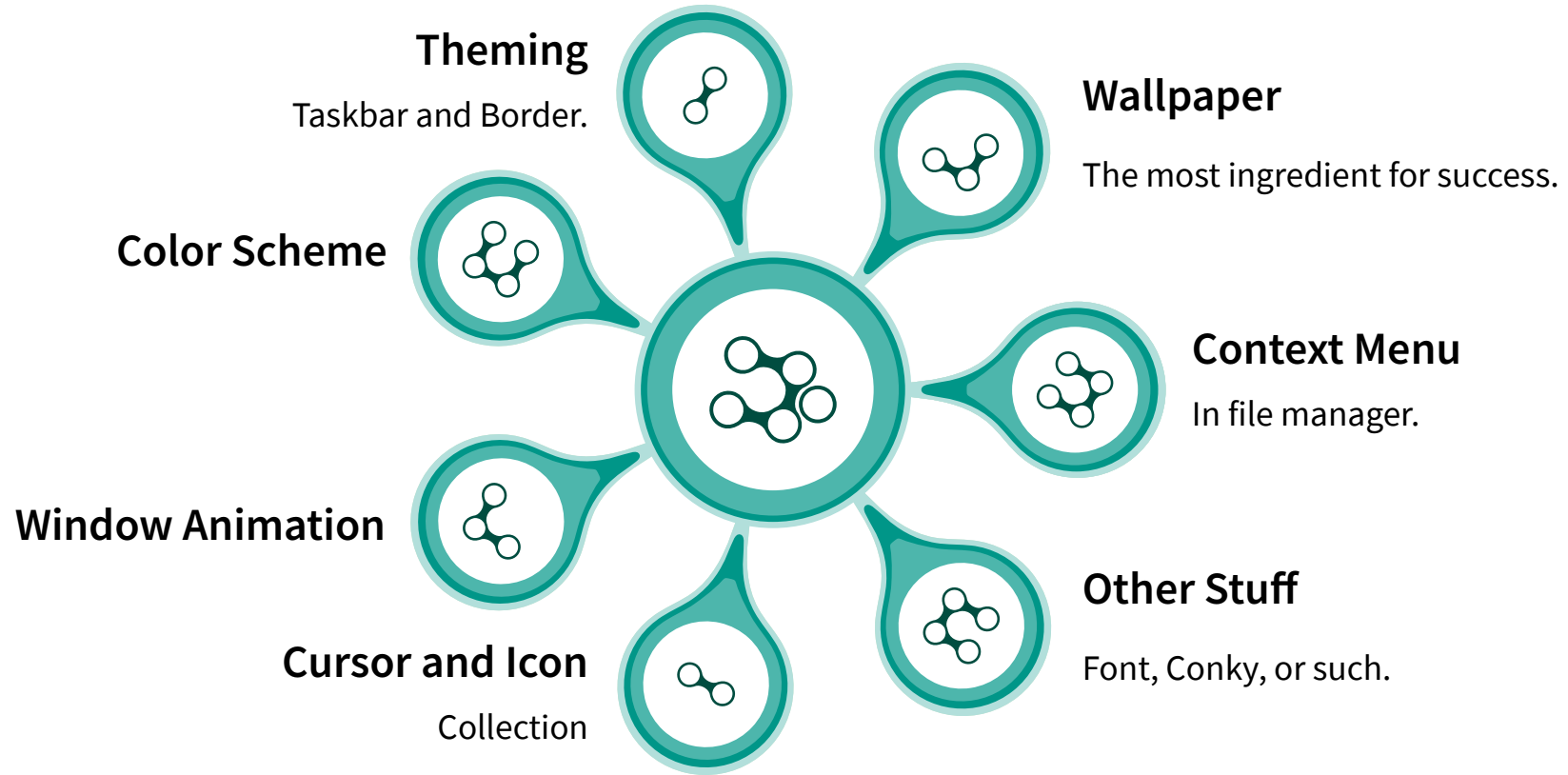
# Desktop Environment Customization

## LXQT with Windowish Looks, No Kidding

[LXQT with Windowish Looks]

You can switch to any looks with parts from internet.

# What can I do with my DE?

**Theming**

Taskbar and Border.

**Wallpaper**

The most ingredient for success.

**Color Scheme**

**Context Menu**

In file manager.

**Window Animation**

**Other Stuff**

Font, Conky, or such.

**Cursor and Icon**

Collection

**Desktop Customization**
epsi-rns.github.io
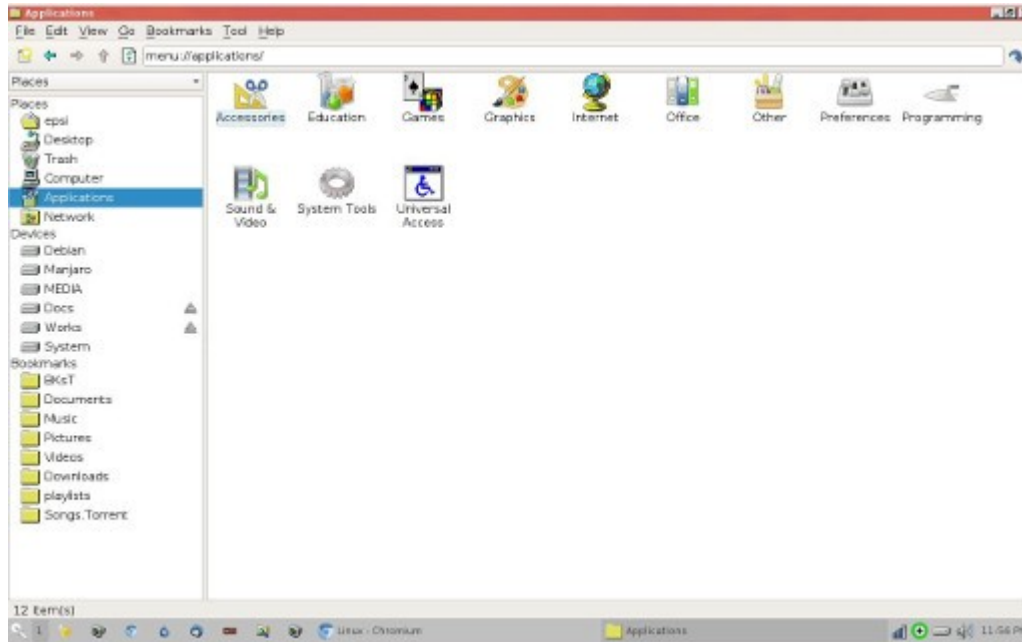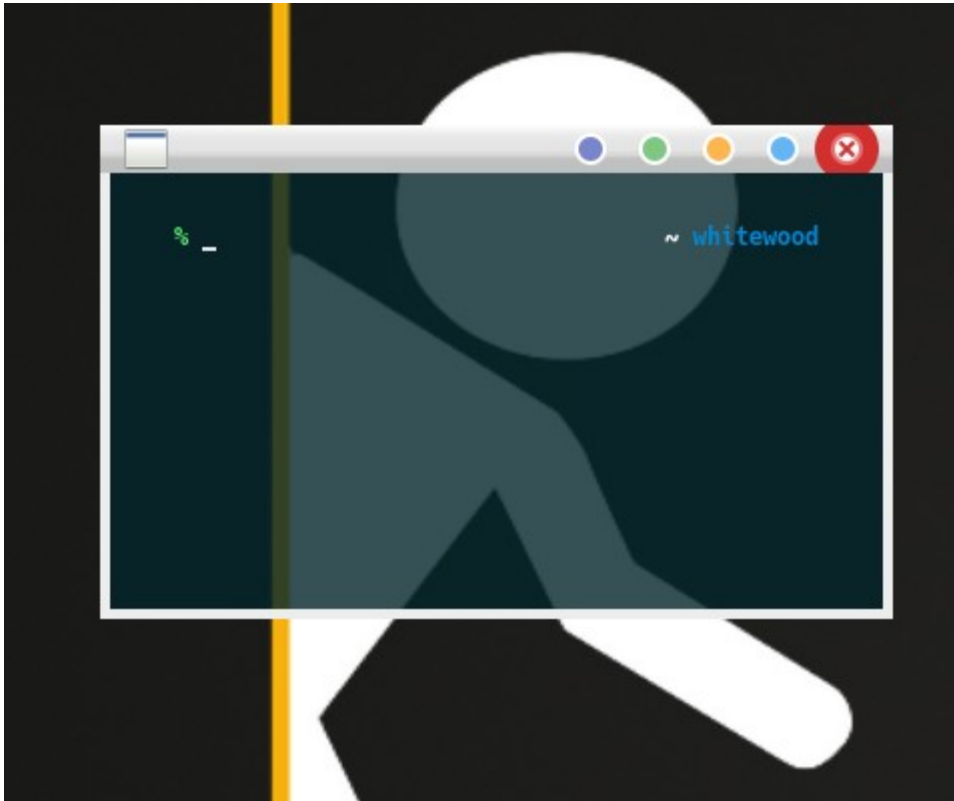
**Custom XFCE4 Theme:**
**PNG Gradient over XPM**

[XFWM4 Theme - Overview]

**Desktop Customization**
epsi-rns.github.io

# Custom XFCE4 Theme:
# SVG Inkscape Source

The previous window icon was designed easily using inskcape.
UI/UGM (User Interface/ Unified Graphic Material)

**Desktop Customization**
epsi-rns.github.io

# Window Layout

Desktop Customization
epsi-rns.github.io
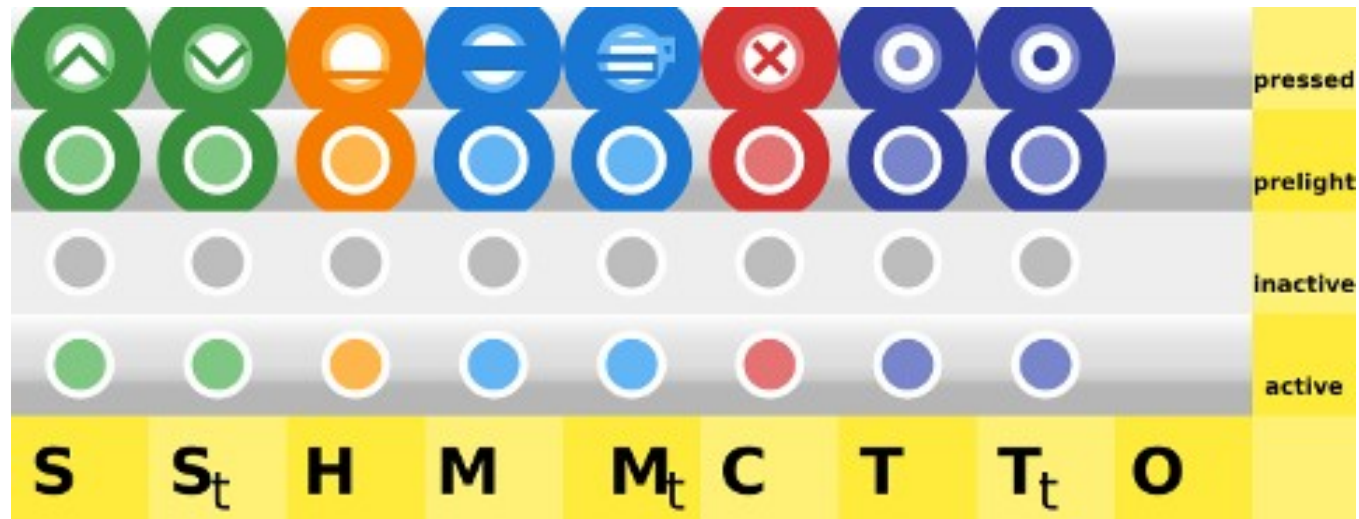
# Window Layout

## Stacking
Suitable for ricing.

**What Layout
is Available
with Your DE/WM?**

## Tiling
For masochist desktoper.
Avoid n00b.

## Floating
Enable stacking in tiling.

[LXQT with Windowish Looks]



**Stacking Layout
Example: LXQT**

**Desktop Customization**
epsi-rns.github.io

# Tiling Layout Example: HerbstluftWM
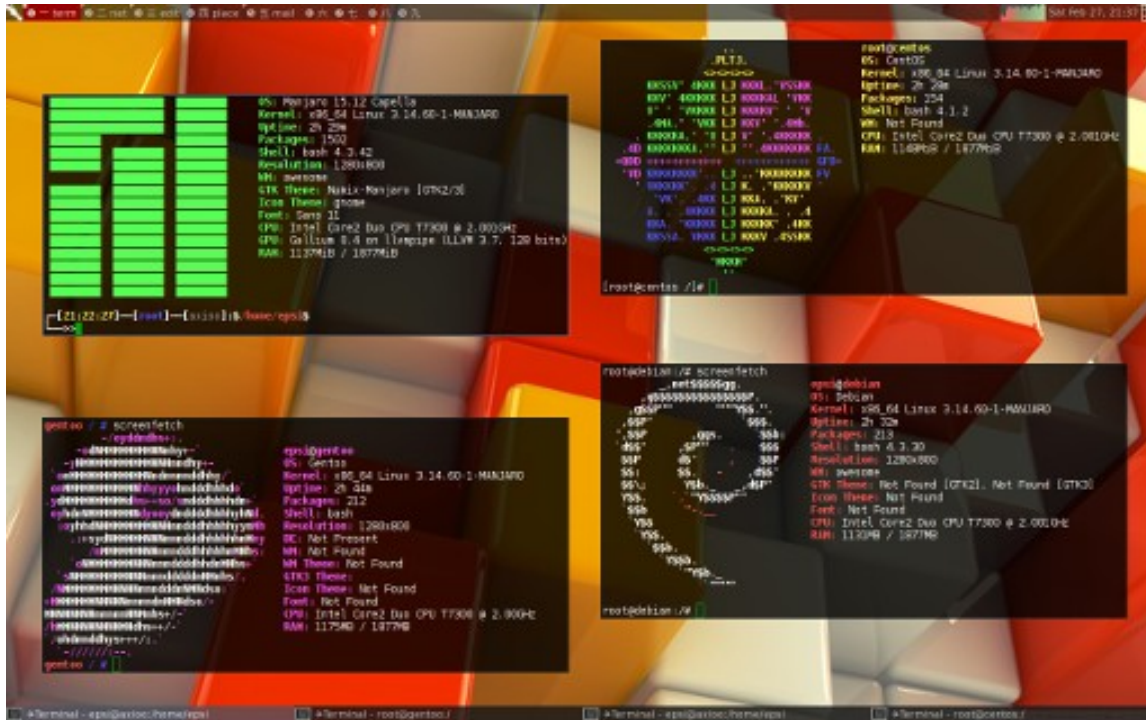
# Floating Layout Example: AwesomeWM

**Desktop Customization**
epsi-rns.github.io

# Ricing

# Ricing Guidance?

## Aesthetic is First class

It is a work of art.

## Technical Difficulty

Basic knowledge is a must.

Technical difficulty is appreciated.

## Personal Character

Yes, there is culture.

Many factions blended in, such as dark mode, or weebs, or flat color vs transparency.

Everyone has their own personal character:

## WM over DE

More customization to avoid hardcoded looks.

Ricing people prefer WM over DE.

## Be creative, be different

Beautiful.

# Is it worth it?

## Socially

you need to show of,
and get some votes.

## Technically

You need a good screenshot
while communicating your issue on social media,
or publishing your work in a blog or other media.

## Learning

A fun case while studying OS,
and also coding.

## Community

Give a fun direction for n00b that showing of
ricing screenshot can be a better life,
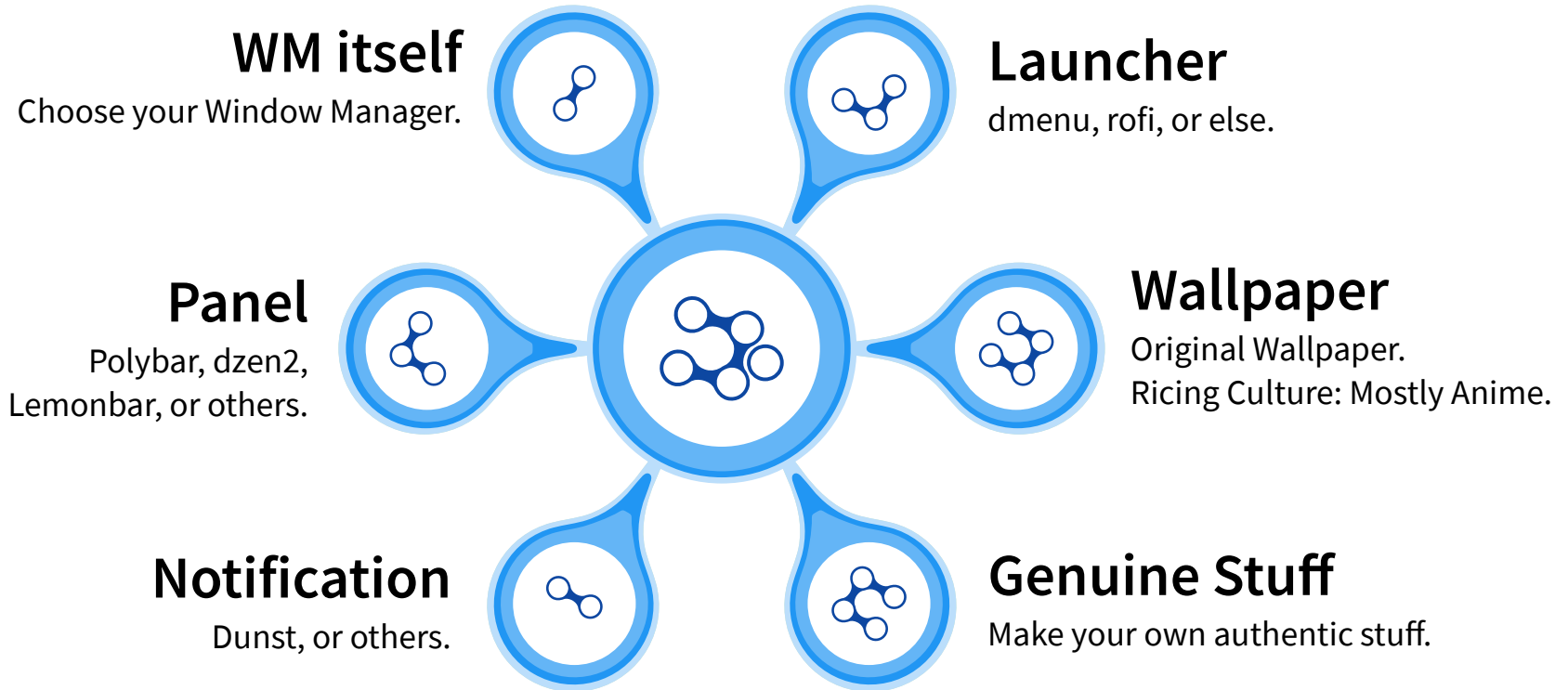instead of just showing of illegal hacking.

# Window Manager Customization

**Desktop Customization**
epsi-rns.github.io

# Window Manager Parts?

**WM itself**
Choose your Window Manager.

**Launcher**
dmenu, rofi, or else.

**Panel**
Polybar, dzen2,
Lemonbar, or others.

**Wallpaper**
Original Wallpaper.
Ricing Culture: Mostly Anime.

**Notification**
Dunst, or others.

**Genuine Stuff**
Make your own authentic stuff.

**Tips: There is no wrong or right. It is all about choices.**

# Custom Standalone Panel
[Standalone Lemonbar Using Conky]

**Desktop Customization**
epsi-rns.github.io
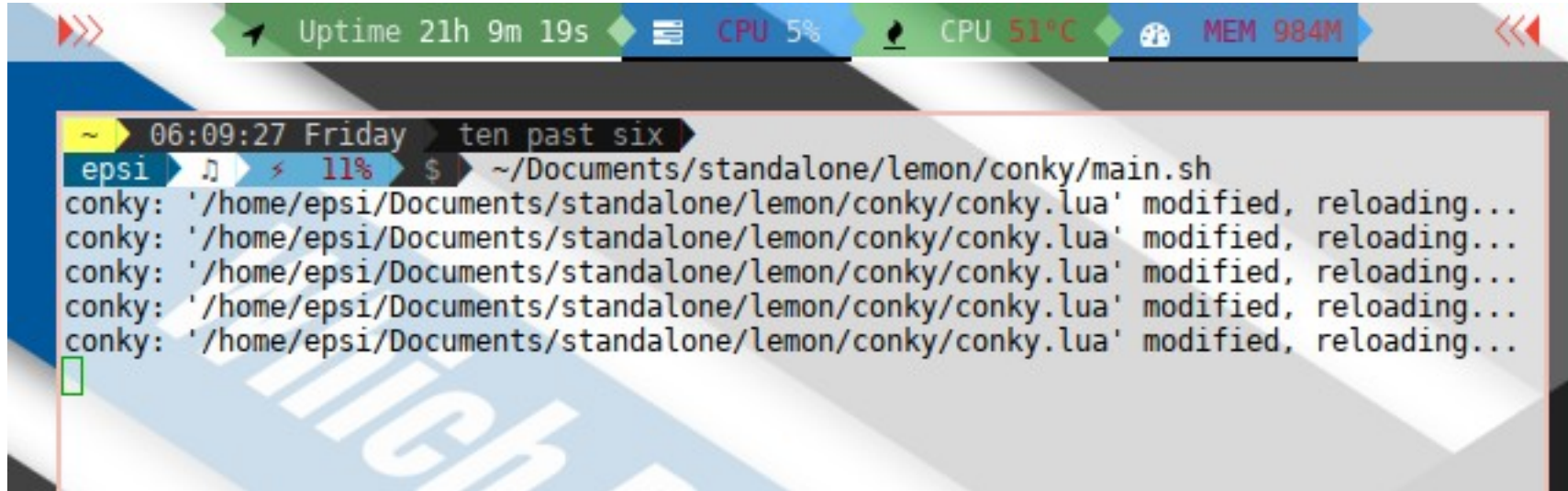
# Optional Tools?

**Compositor Manager**
Picom or compton or xcompmgr.

**Good Font**
FontAwesome, siji, terminus
[Linux - Installing Font]

**Screenshooter**
Scrot or others.

**Logging Out**
OB Menu or others.

**Wallpaper Manager**
Nitrogen or feh
[Openbox Install - Common Utility]

**LXAppearance**
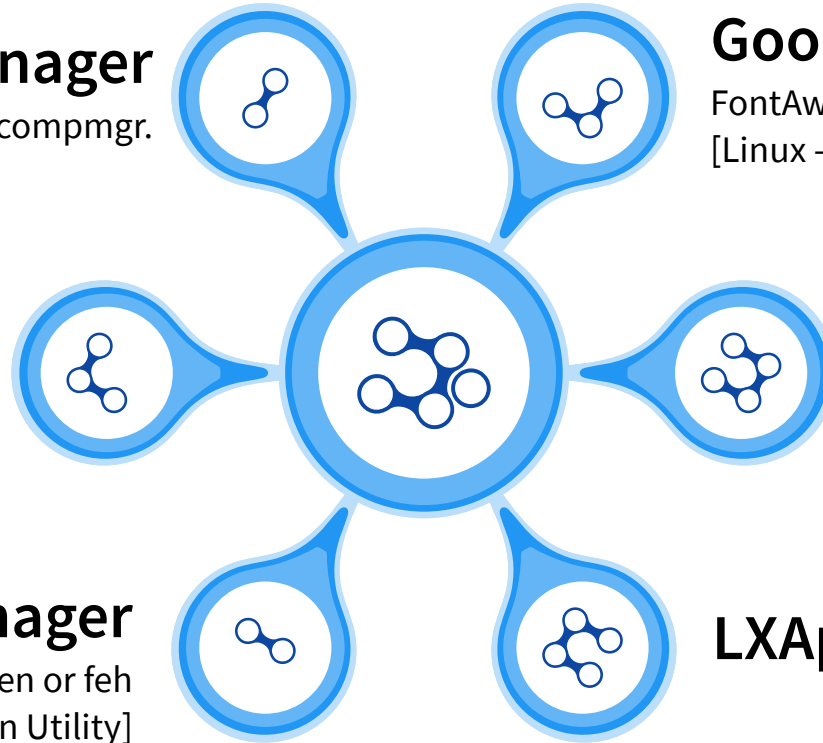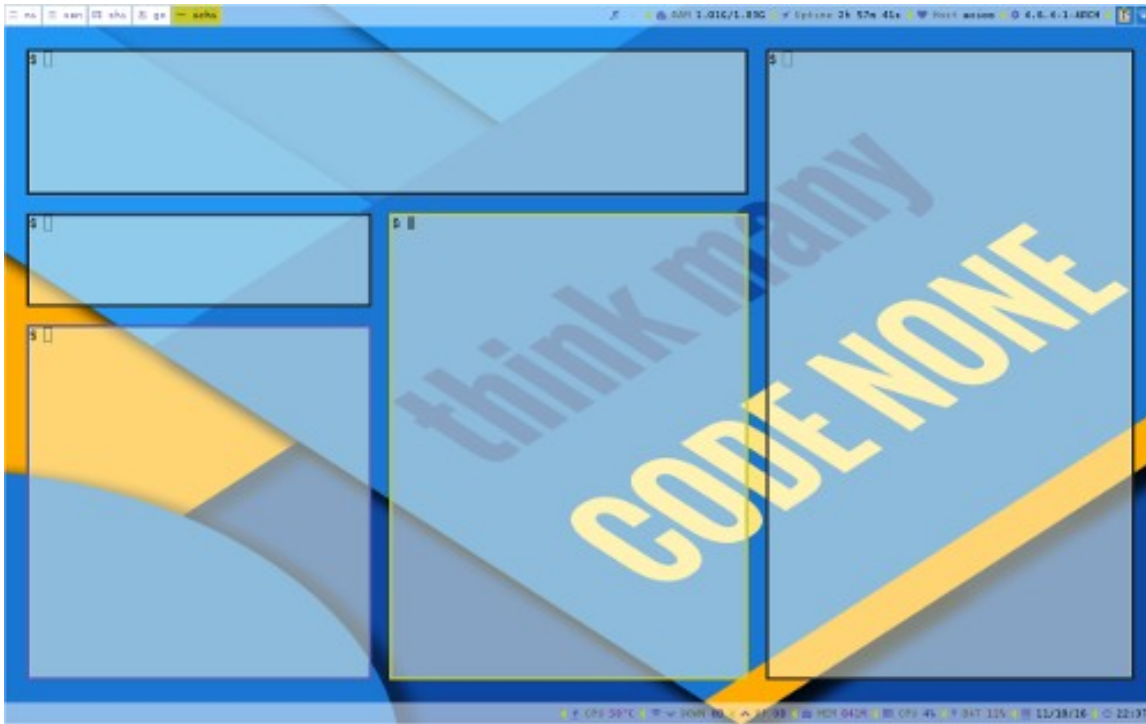
# Example: Custom Material Wallpaper

[More Inkscape Wallpapers]
[Manjaro Logo]

# *Stacking Window Manager*

# Why Stacking Window Manager?
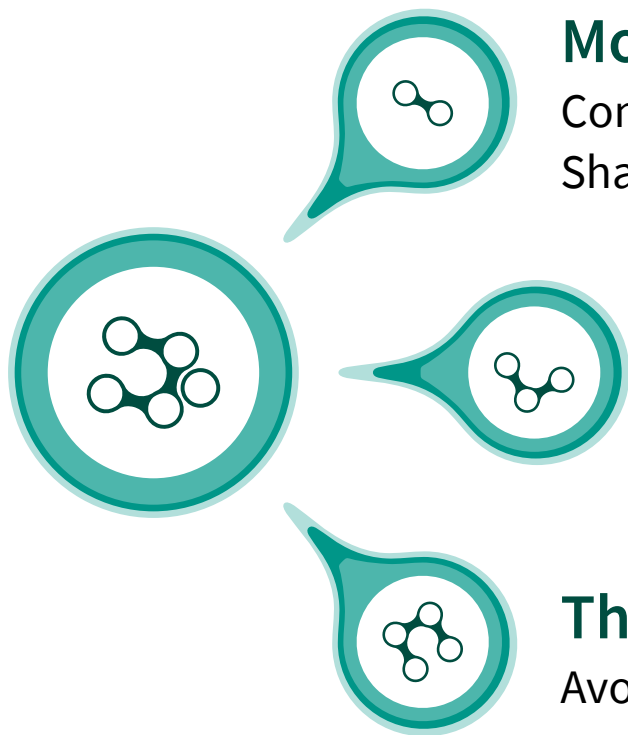
## More on Customization

Configuration in Text Editor (suitable for coder),
Shareable with dotfiles

## Lightweight

Small Memory Footprint.
Install only what I need.

## The Looks

Avoid hardcoded looks or just be simple.

# Oldschool Openbox

## Example: Openbox

[Openbox Standalone]

# More Articles about Stacking WM

[Openbox Configuration]

[Openbox Tint2 Panel]

[Openbox Theme]

[Fluxbox Overview]

# Example: Openbox Theme: Multi Color

[Openbox Theme - Special Trick]

**Desktop Customization**
epsi-rns.github.io
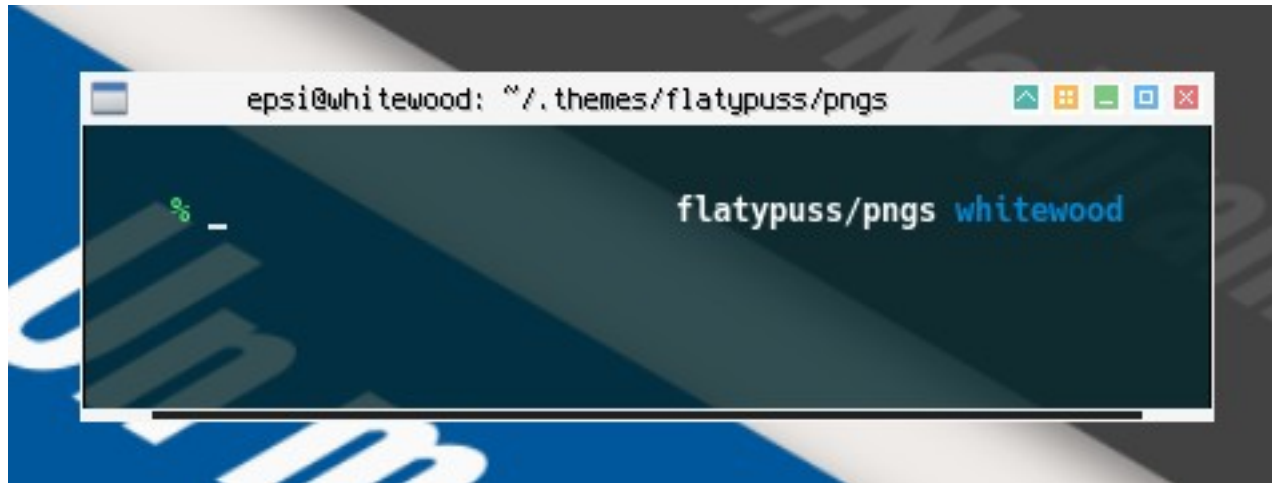
# Example: Theme
[Openbox Theming with Inkscape]
UI/UGM (User Interface/ Unified Graphic Material)

**Desktop Customization**
epsi-rns.github.io
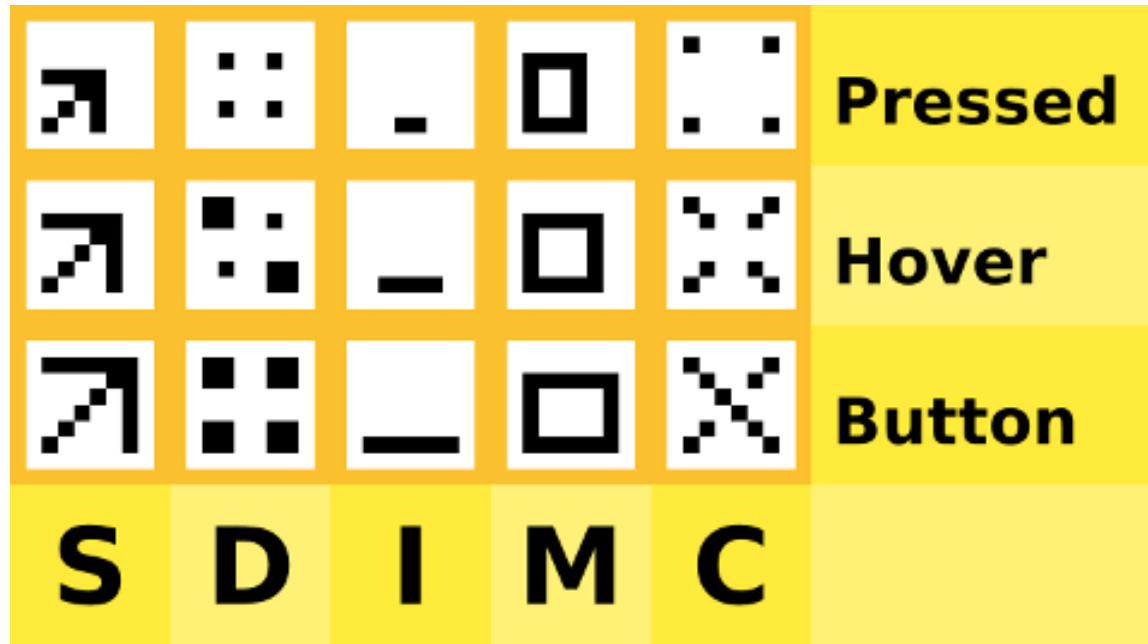
# Oldschool Fluxbox



## Example: Fluxbox

[Fluxbox with Glowing Wallpaper]

# Tiling Window Manager

# Why Tiling Window Manager?

**Efficient**
Non-overlapping screen real estate.

**Scaling**
With Workspace or Tags.

**Lightweight**
Compared to DE.

**Customizable**
Most parts can be automated.

**Keyboard-driven Workflow**
Most parts can be automated.

**Desktop Customization**
epsi-rns.github.io

# Good Watch
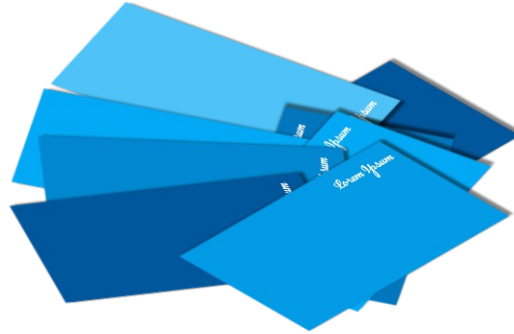
[Aline Abler Presentation on Youtube]

**Explained in systematic fashioned,
easy to follow, and she is pretty too.**

# What **Tiling** Window Manager?

## i3wm
Simple configuration, suitable for beginner.

## HerbstluftWM
Challenging technical difficulties.
The extra frame almost
make me cry for happiness.

## XMonad
I can config, but weird, I still don't understand Haskell.

## BSPWM

**Tips: do not let the blackscreen intimidate you.**

# Dynamic Window Manager?

It is a kind of Tiling WM, with presets layouts.

## Awesome WM

Easy to use for beginner, but very long config.

Built in menu, systray, notification.

## DWM

First install for any minimalist distro.

You have to compile to change the behaviour.

corner ne

# Presets Layout (in animation)

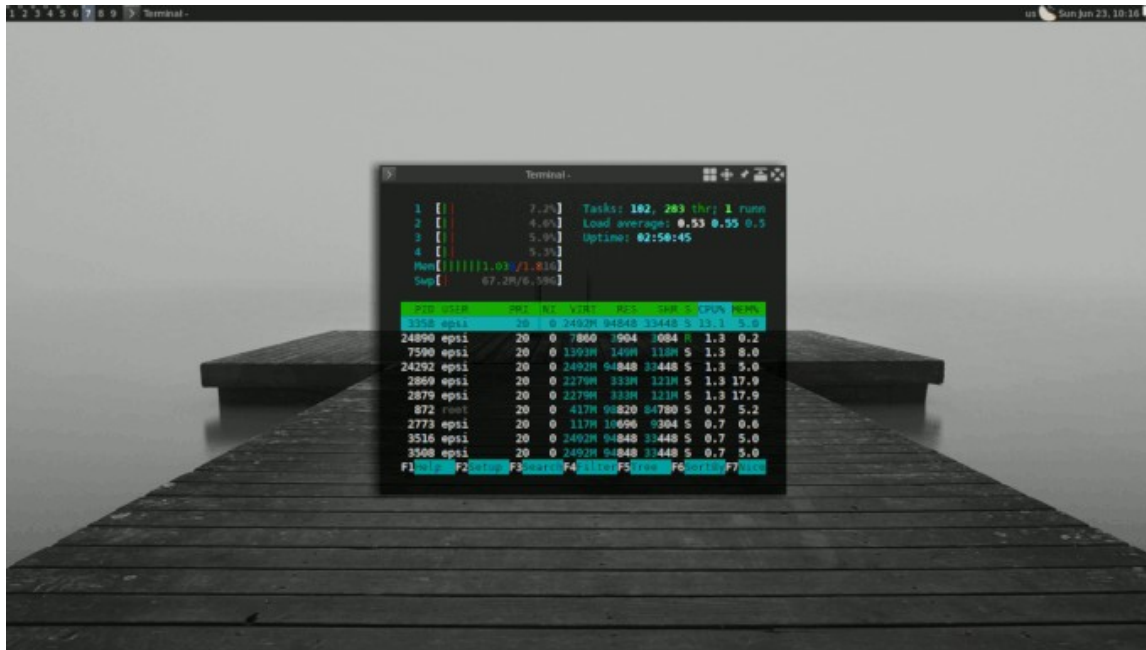**Dynamic Window Manager**

Example of presets layout:
AwesomeWM.

**Desktop Customization**
epsi-rns.github.io

# I3wm with i3status
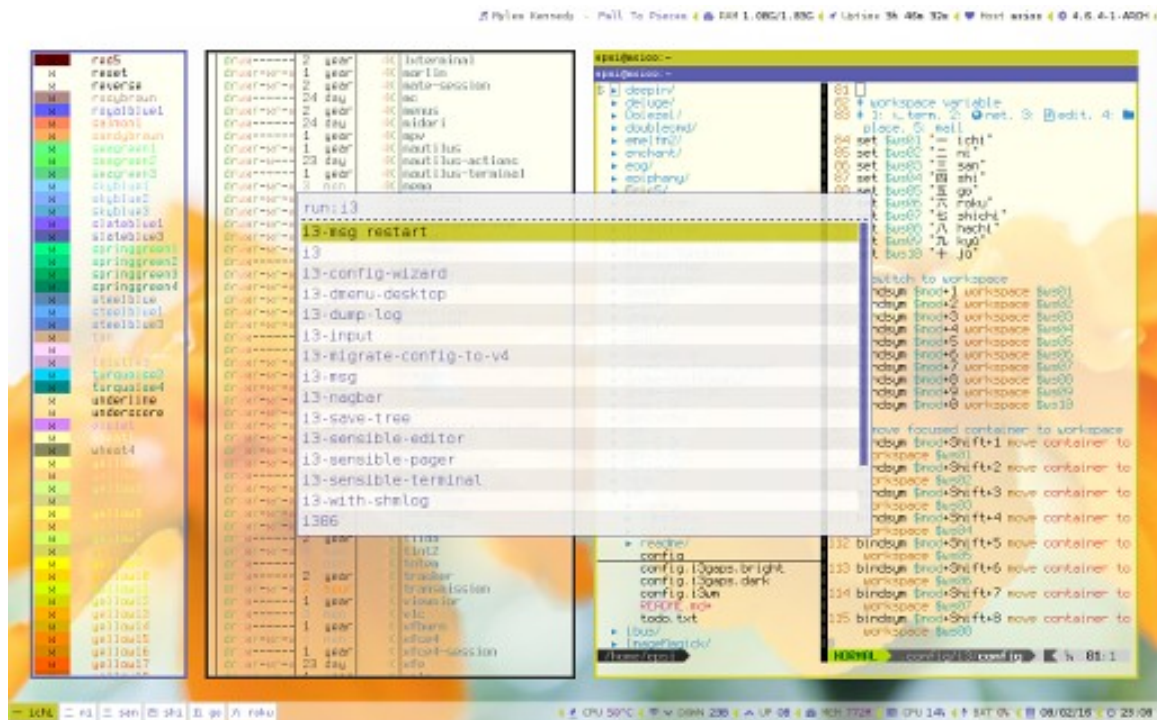


## Example: i3wm (gaps, bright)

[Modularized Conky Configuration]
for i3status

# AwesomeWM
# (in video)



## Example: AwesomeWM

[Awesome WM - Binding Modules]

# More about AwesomeWM

[Article: Awesome WM - Overview]

[Presentation: Awesome WM - Modularized]

[Presentation: Awesome WM - Theming]

[Presentation: Awesome WM - Statusbar]

# HerbstluftWM
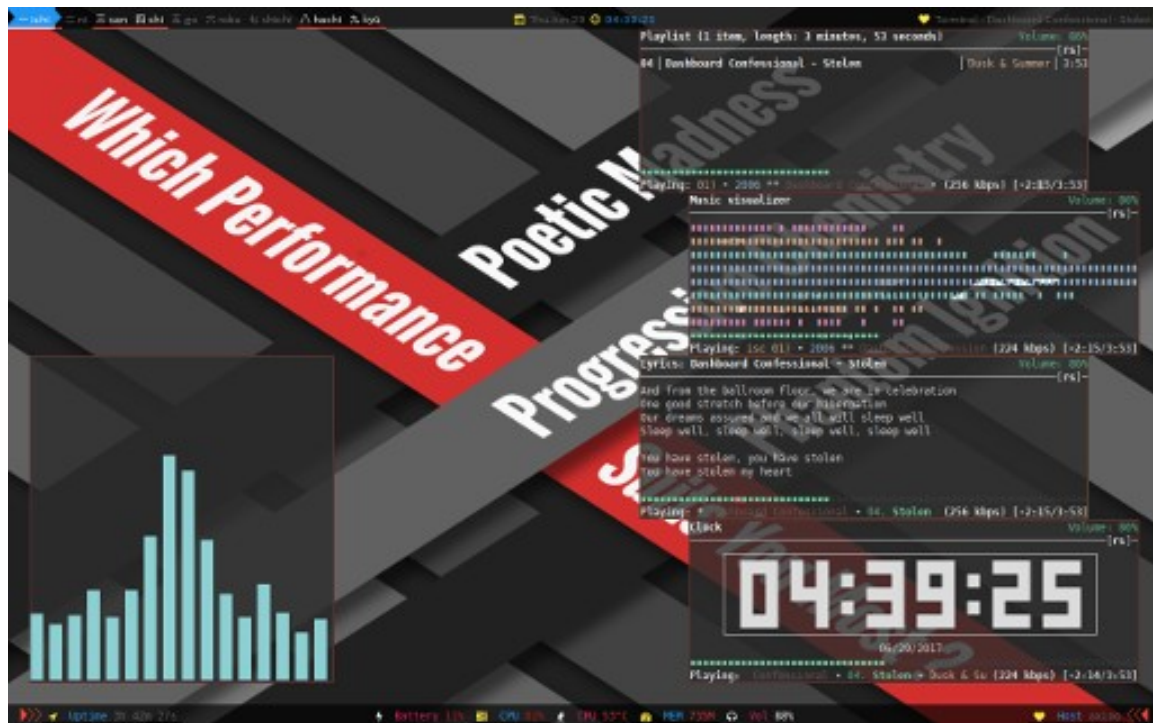


## Example: HerbstluftWM

[HerbstluftWM in Seven Languages]

# Solving HerbstluftWM Technical Difficulties

[Modularized HerbstluftWM Overview]

[HerbstluftWM Tag Status Overview]

[HerbstluftWM Idle Event Overview]

Summary: HerbstluftWM in Seven Languages]

WM customization can be combined
with Specific Panel Bar.

Example: [Dzen2 in XMonad]

**Desktop Customization**
epsi-rns.github.io

# Other DE/WM issue

## Xorg Legacy and Wayland Readiness

# Terminal Customization

[**Linux - Terminal Customization**]

**Desktop Customization**
epsi-rns.github.io

# Terminal Ricing

## Main Parts

### Terminal
urxvt, xfce4-terminal, termite.

### Shell
bash, zsh, fish.
Prompt: powerline, oh-my-bash,
oh-my-zsh, oh-my-fish.

### Multiplexer
tmux, gnu screen.
wrapper: teamocil, byobu.

### Background Decoration
Wallpaper.

## Additional Parts

### Padding Decoration
gtk.css.

### Compositor Decoration
Picom or Compton.

### Example CLI
Application: neofetch, htop, cava.

### Special CLI
Application: ViM Text Editor.

### Pixel Art

# Example: Pixel Art

[ANSI Color]

# CLI /siː ɛl aɪ/

## Example:
## Command Line Interface

[Standalone CLI]
System Monitoring Using Conky

[Customizing Shell Prompt with Powerline]
[Iterate Oh My BASH Theme]

# Dotfiles

**Desktop Customization**
epsi-rns.github.io

# Where to Find Resources?

## Blog

English Blog: [epsi-rns.github.io]
Local Blog: [bandithijo.github.io]
Local Guidance: [Loonix-Newfag]

## dotshare.it

This is not a dead site.

[dotshare.it]

## Dotfiles Examples

[gitlab.com/epsi-rns/dotfiles],
[github.com/addy-dclxvi],
[github.com/okitavera],
[github.com/myugan].

## Facebook Group

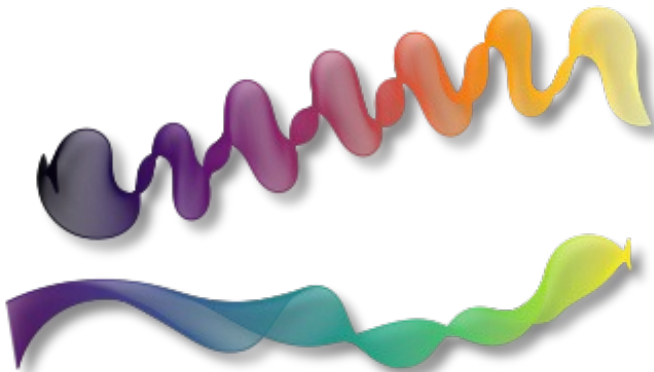Example Community:

[Linuxer Desktop Art]

## Telegram Group

Example Community:
[@dotfiles_id] or,
[@dotfiles_id_channel],
[@window_managers].

## Reddit

# Origin of the Dotfiles Word



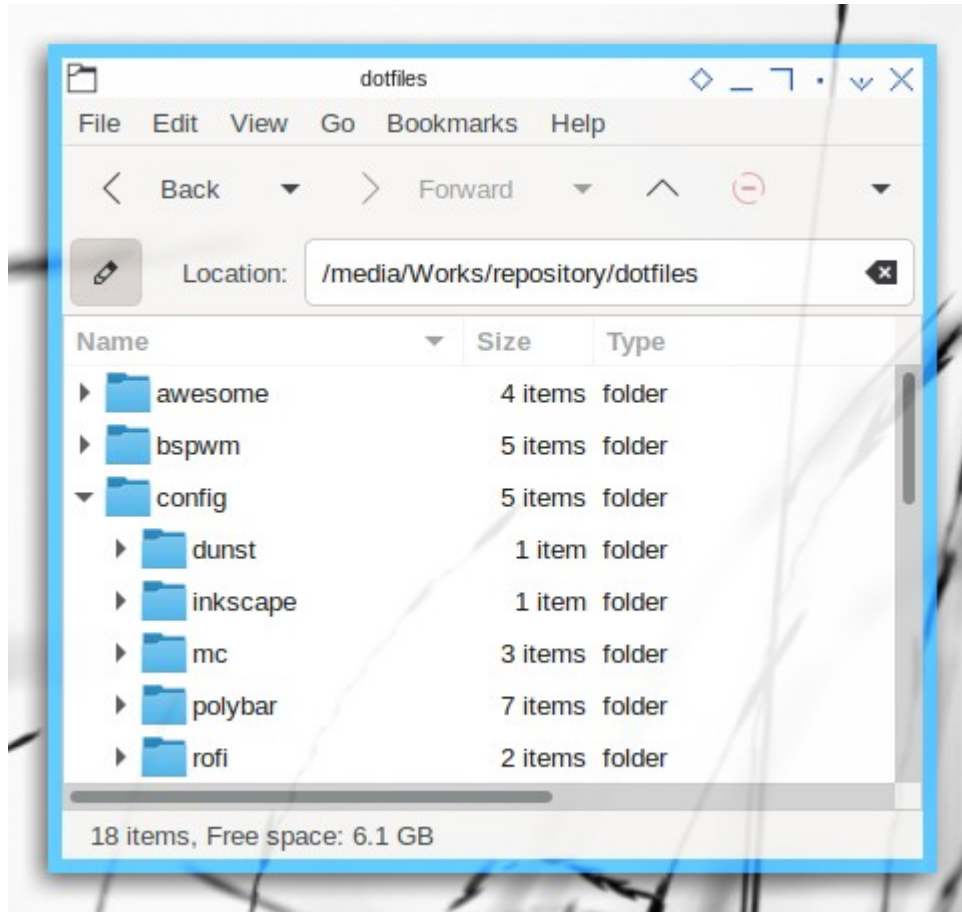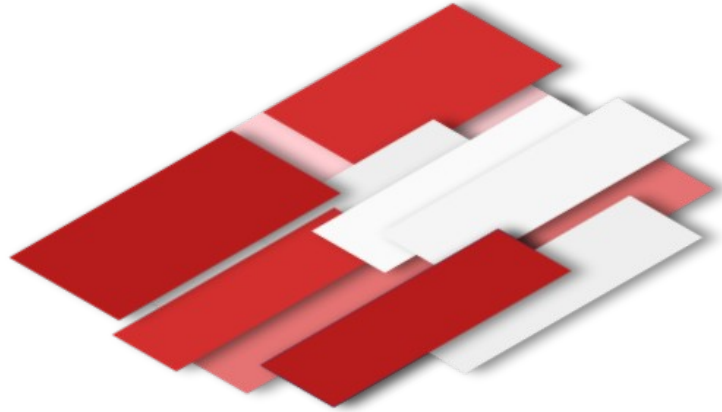Configuration files on linux can be shared between hobbyist.

Configuration mostly lies under .config directory.
Or single files with name started with **dot**.

# Managing Dotfiles
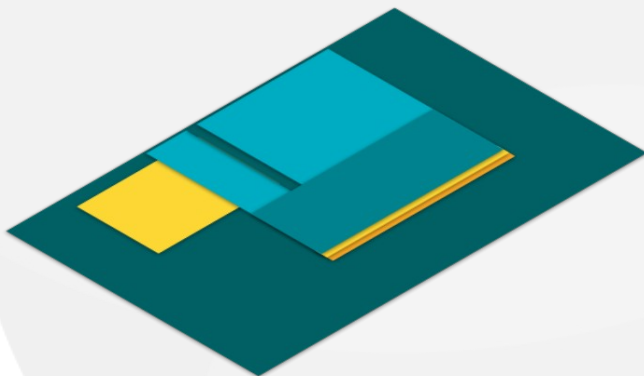
**Sharing Resources require good folder management.**

# I Share Mine



[gitlab.com/epsi-rns/dotfiles]

**Would you do the same with each other?**

# What is Next?

Make your own custom Statusbar Panel!
Make your own custom Window Manager!
Port old tools to a better programming language!

## Leverage Coding Skills!

# Questions?

Don't be shy!

# The End

Thank You for Your Time.