



Alan German & Chris Taylor
Ottawa PC Users' Group

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Virtual machines



What one thing would you like to know more about relating to computers?

Virtual machines



VirtualBox

Share

VirtualBox

- Run virtual machines (VM) on x86 hardware
- Run Linux on the Windows desktop
- Run Windows on a Linux desktop
- Run DOS on either desktop (but, why would you?!)



VirtualBox
Download VirtualBox

https://opcug.ca/qa_recordings/20210120_PowerPoint.pdf



Bluetooth



- How should I manage use of Bluetooth?
- Does it pose security risks such that it should be turned off?
- When no longer using the device the computer is paired with?





Suggestions...

- If you need it, leave it on
- If you don't need it turn it off
- Turning it off saves the battery on portable devices
- Don't accept any invites to pair a Bluetooth device unless you initiated the pairing
- If you actually are considering using Bluetooth but turning it off when it is not actively being used, I recommend you just turn it off
- If you don't trust it when it is not actively being used, you shouldn't trust it when it is in use



Networking to protect children



Ways to set up networks, computers, and phones to protect children from inappropriate content (DNS services, filters, firewalls, etc.)





Use DNS

Share

DNS and security

- Your computer *doesn't know*
 - how to get to a domain name
- Your computer *knows*
 - how to get to an IP address
- Domain Name System
 - translates domain name to IP address



Services that specifically can block porn:

- Canadian Shield

<https://www.cira.ca/en/Canadian-shield/configure/>



- OpenDNS Family Shield

<https://www.opendns.com/home-internet-security/>

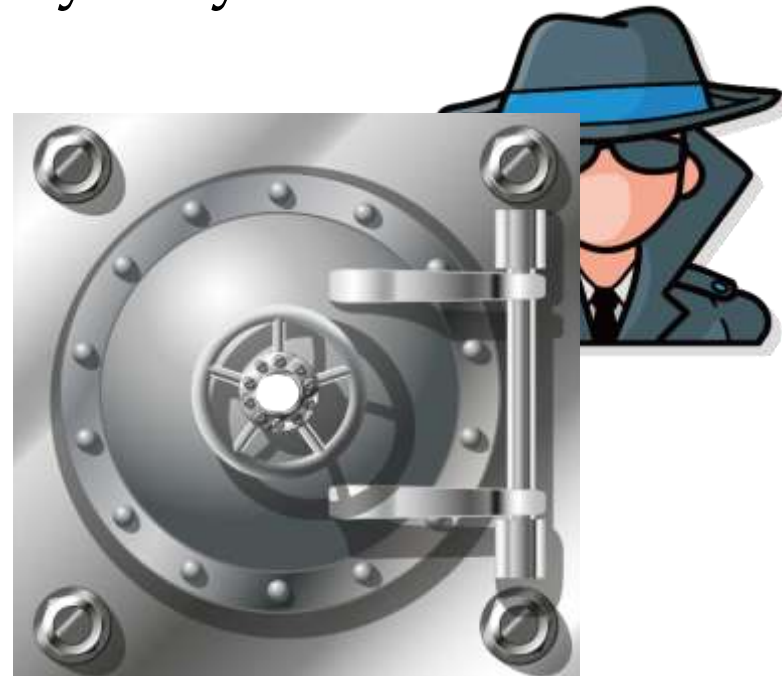
The OpenDNS logo consists of the text "OpenDNS" in white, set against an orange rectangular background.



Safety First



- What are the safe settings that I should use on my Windows 11 laptop?
- What are the optimal privacy settings and practices in Windows and Linux?
- How to achieve anonymity
- Security





OPCUG PRESENTATIONS AT THE OTTAWA PUBLIC LIBRARY

Protecting your PC

Chris Taylor

The average time it takes for an unprotected computer to be compromised after connecting to the Internet is under 15 minutes. Don't let it be yours. Chris Taylor, President of the Ottawa PC Users' Group will show you the simple steps you need to take to keep your PC from being hacked. And best of all, it can be done for free.

Metcalfe village, Thursday May 7, 2026 at 2:00pm

<https://booking.biblioottawalibrary.ca/en/program?text=ottawa+pc>



Virtual Private Networks



What one thing would you like to know more about relating to computers?

VPN's



Recent and Not-so-recent Q&A's

- What is a VPN and why should you care?
https://opcug.ca/qa_recordings/20250924_PowerPoint.pdf
- Tailscale VPN (Windows)
https://opcug.ca/qa_recordings/20250702_PowerPoint.pdf
- VPN & network speed
https://opcug.ca/qa_recordings/20230426_PowerPoint.pdf
- TunnelBear VPN
https://opcug.ca/qa_recordings/20230419_PowerPoint.pdf

- We have talked about VPNs before at Q&A
 - Feb 1, 2023, *Do I need a VPN?*
 - Dec 22, 2021, *More on VPNs*
 - Dec 15, 2021, *Which VPN?*
 - Jul 29, 2020, *Mozilla VPN*
 - Jul 22, 2020, *VPNs and privacy*
 - Aug 5, 2020, *VPNs - SANS Institute*
 - Sep 2, 2020, *Bitdefender Premium VPN*





Looking for answers?

- Maybe we have covered a topic before at Q&A
- After all, since COVID 19 hit, we have had
 - 260 Q&A sessions
 - 1,937 topics
- Browse & search the Q&A index laboriously (& lovingly) maintained by Alan
 - https://opcug.ca/qa_recordings/Q&A-Index.pdf
- Once you find something
 - use the Archives to find links to the presentations
 - <https://opcug.ca/qa-archives/>





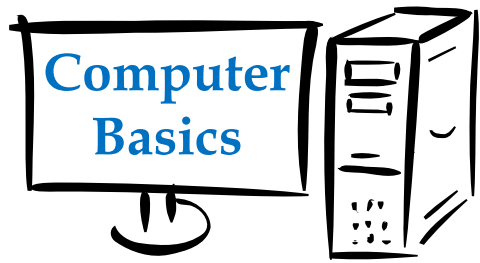
Google Docs



- How do you change ownership of Google Docs?
- What is the best type of ownership to use for a group rather than for personal use?



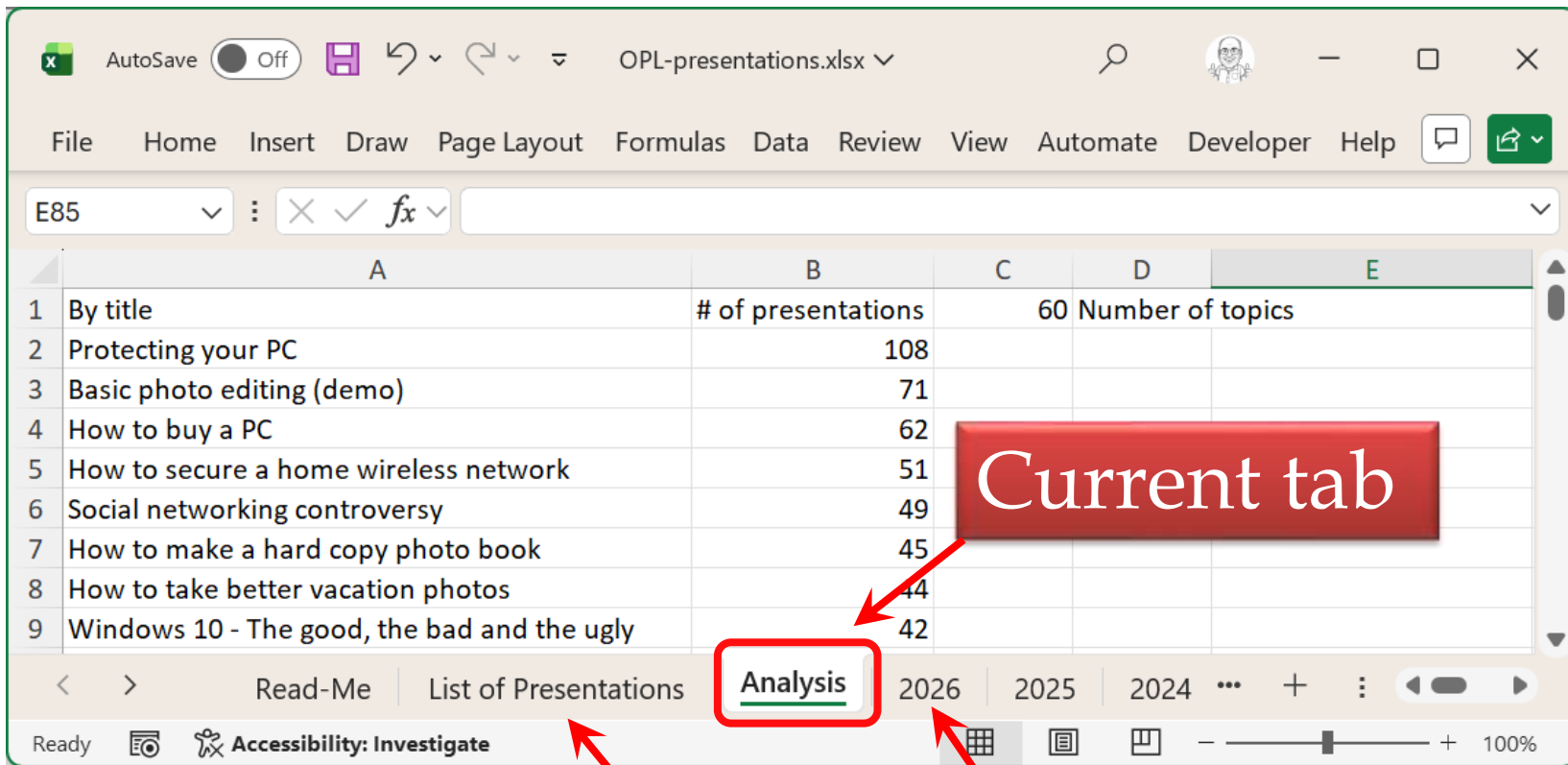
Docs



Keyboard shortcuts #10



- Move between tabs in Excel



Select previous tab

Ctrl

PgUp

Select next tab

Ctrl

PgDn

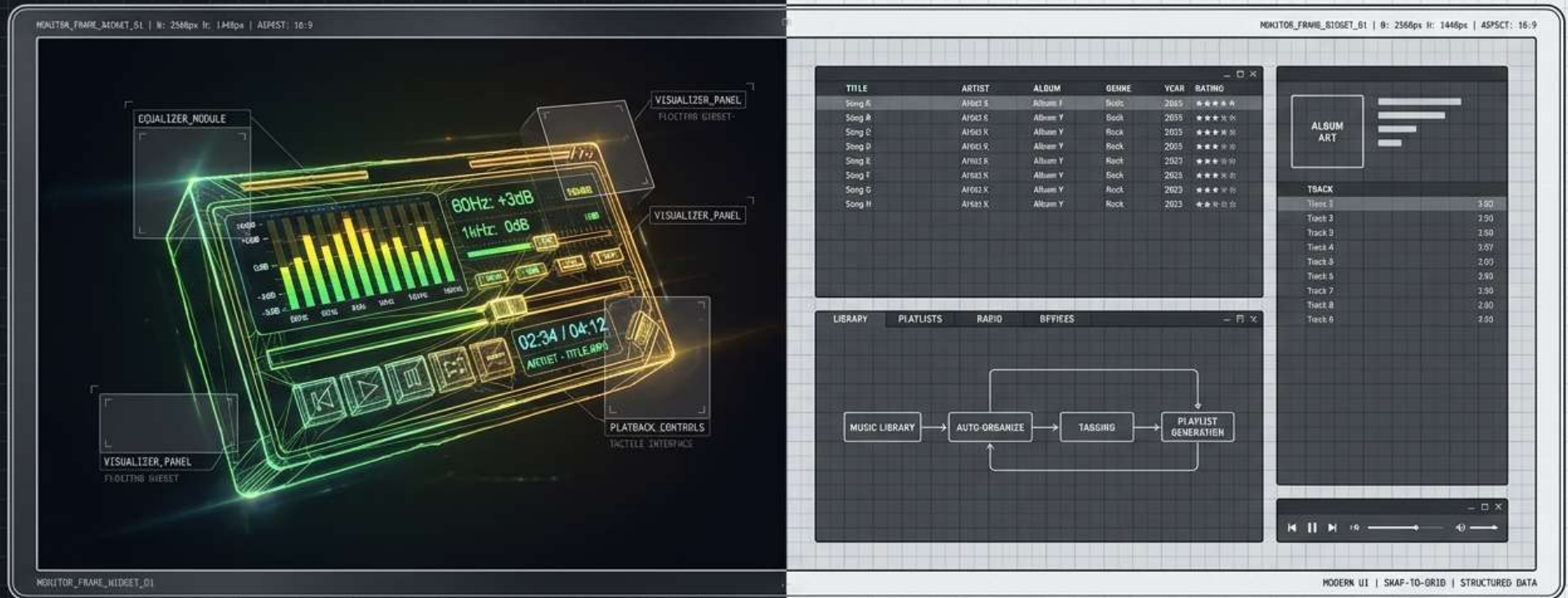


Two-By-Two *Audio Players*



Steve Parker

The Desktop Canvas



An architectural UI analysis of media consumption:
Winamp v5.666 versus MusicBee v3.6.9.

Two Competing Philosophies of Digital Space



Form as Identity

The Chameleon / Gadget

Winamp treats the UI as a physical, stylized object that floats on top of the user's workspace, changing its physical shape to match a vibe.



Function as Identity

The Workstation / Dashboard

MusicBee treats the UI as a comprehensive, modular management system that organizes data blocks to optimize workflow within the OS.

Era 1: The Skeuomorphic Gadget (Winamp v5.666)



Standalone Architecture

Winamp renders largely independently of the OS. It relies on its own supporting DLLs (e.g., gen_ff) rather than deep modern web engine integration, isolating it from modern UI scaling norms.

Pixel-Perfect Docking

The interface is built around rigid pixel dimensions, allowing users to snap the player neatly to the edge of secondary monitors like a physical desk accessory.

The Three Faces of Winamp's Interface



1. Classic Skin

The iconic, rigid, micro-footprint layout.

2. Modern Skin

Freeform UI shapes prioritizing aesthetic transformation over layout convention.

3. Bento Skin

A unified layout bridging the gap toward modern, multi-panel media players.

Era 2: The Data-Rich Workstation (MusicBee v3.6.9)

The screenshot displays the MusicBee v3.6.9 interface, which is designed as a data-rich workstation. It features three main panels:

- Navigator:** A sidebar on the left containing a tree view of the music library, including sections for Library, Music, Podcasts, Playlists, Folders, and Services. A label "Navigator" is overlaid on this panel.
- Main Panel:** A large central table displaying a list of tracks. The table has columns for Track Name, Artist, Album, Genre, Year, Rating, and Duration. A search bar is located at the top right of the table. A label "Main Panel" is overlaid on the table.
- Now Playing:** A panel on the right side showing the currently playing track. It includes a placeholder for the album art (a camera icon), the track's metadata (Artist Name, Album Title, Track Title), a progress bar, and playback controls (play/pause, previous, next, volume).

Track Name	Artist	Album	Genre	Year	Rating	Duration
Track Name 1	Artist Name	Album Title	Genno	2012	☆☆☆☆☆	4:25
Track Name 2	Artist Name	Album Title	Genno	2013	☆☆☆☆☆	4:25
Track Name 3	Artist Name	Album Title	Senno	2013	☆☆☆☆☆	4:25
Track Name 4	Artist Name	Album Title	Genno	2015	☆☆☆☆☆	4:25
Track Name 5	Artist Name	Album Title	Genno	2018	☆☆☆☆☆	4:25
Track Name 6	Artist Name	Album Title	Genno	2019	☆☆☆☆☆	4:25
Track Name 7	Artist Name	Album Title	Genno	2013	☆☆☆☆☆	3:26
Track Name 8	Artist Name	Album Title	Genno	2013	☆☆☆☆☆	3:26
Track Name 9	Artist Name	Album Title	Genno	2013	☆☆☆☆☆	4:20
Track Name 10	Artist Name	Album Title	Genno	2013	☆☆☆☆☆	4:26
Track Name 11	Artist Name	Album Title	Genno	2013	☆☆☆☆☆	4:20
Track Name 12	Artist Name	Album Title	Genno	2013	☆☆☆☆☆	4:26
Track Name 13	Artist Name	Album Title	Genno	2013	☆☆☆☆☆	3:32
Track Name 14	Artist Name	Track Title	Genno	2013	☆☆☆☆☆	3:26
Track Name 15	Artist Name	Track Title	Genno	2013	☆☆☆☆☆	3:37
Track Name 16	Artist Name	Album Title	Genno	2013	☆☆☆☆☆	4:28
Track Name 17	Artist Name	Track Title	Genno	2013	☆☆☆☆☆	3:26
Track Name 18	Artist Name	Track Title	Genno	2013	☆☆☆☆☆	3:26
Track Name 19	Artist Name	Album Title	Genno	2013	☆☆☆☆☆	4:20
Track Name 20	Artist Name	Album Title	Album	2013	☆☆☆☆☆	3:26
Track Name 21	Artist Name	Album Title	Genno	2019	☆☆☆☆☆	4:22
Track Name 22	Artist Name	Track Title	Genno	2019	☆☆☆☆☆	3:23
Track Name 23	Artist Name	Album Title	Genno	2013	☆☆☆☆☆	3:28
Track Name 24	Artist Name	Track Title	Genno	2013	☆☆☆☆☆	3:28
Track Name 25	Artist Name	Track Title	Genno	2019	☆☆☆☆☆	3:26

The Shift to Curation

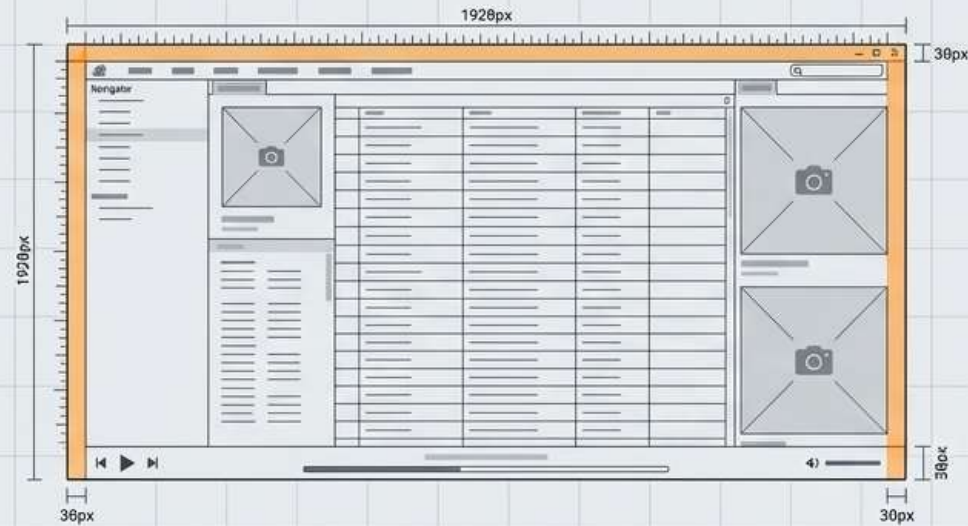
Designed for users managing massive local libraries, demanding high-fidelity output (WASAPI and ASIO support) and complex metadata management.

Dynamic OS Integration

Unlike Winamp's physical floating gadget, MusicBee utilizes standard OS windowing. It relies on web scraping (e.g., Fanart.tv) to dynamically populate high-quality artist pictures and biographies within its rigid panels.

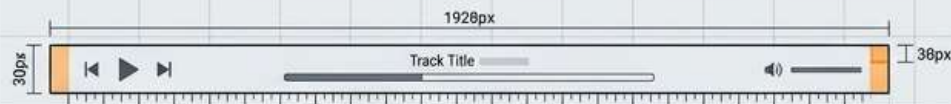
Modular Layout Architecture and Player Modes

Instead of wrapping the engine in a new graphical shell, MusicBee rearranges, hides, or expands rectangular data blocks to adapt to the user's screen space.



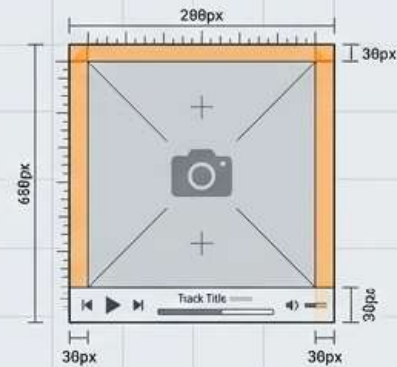
Main Player

Full-screen, multi-panel library view for deep library curation.



Mini Player

A narrow, horizontal strip designed for minimal desktop intrusion.



Compact Player

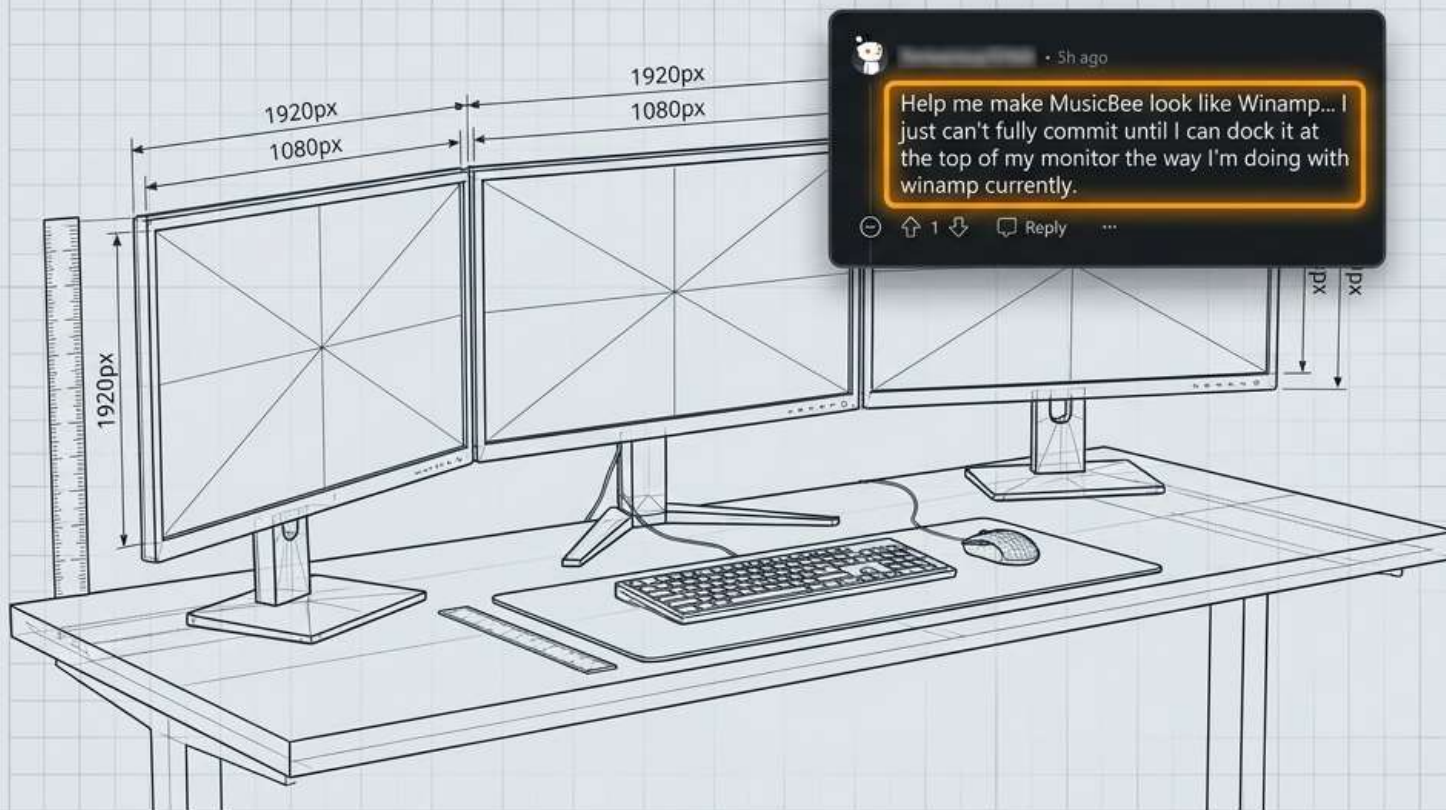
A focused, square window prioritizing currently playing artwork and core controls.



Theater Mode

A full-screen, immersive, "10-foot UI" experience.

The Collision: Forcing a Workstation into a Gadget's Footprint



The Goal

Replicate the exact layout of Winamp on a 3rd monitor.

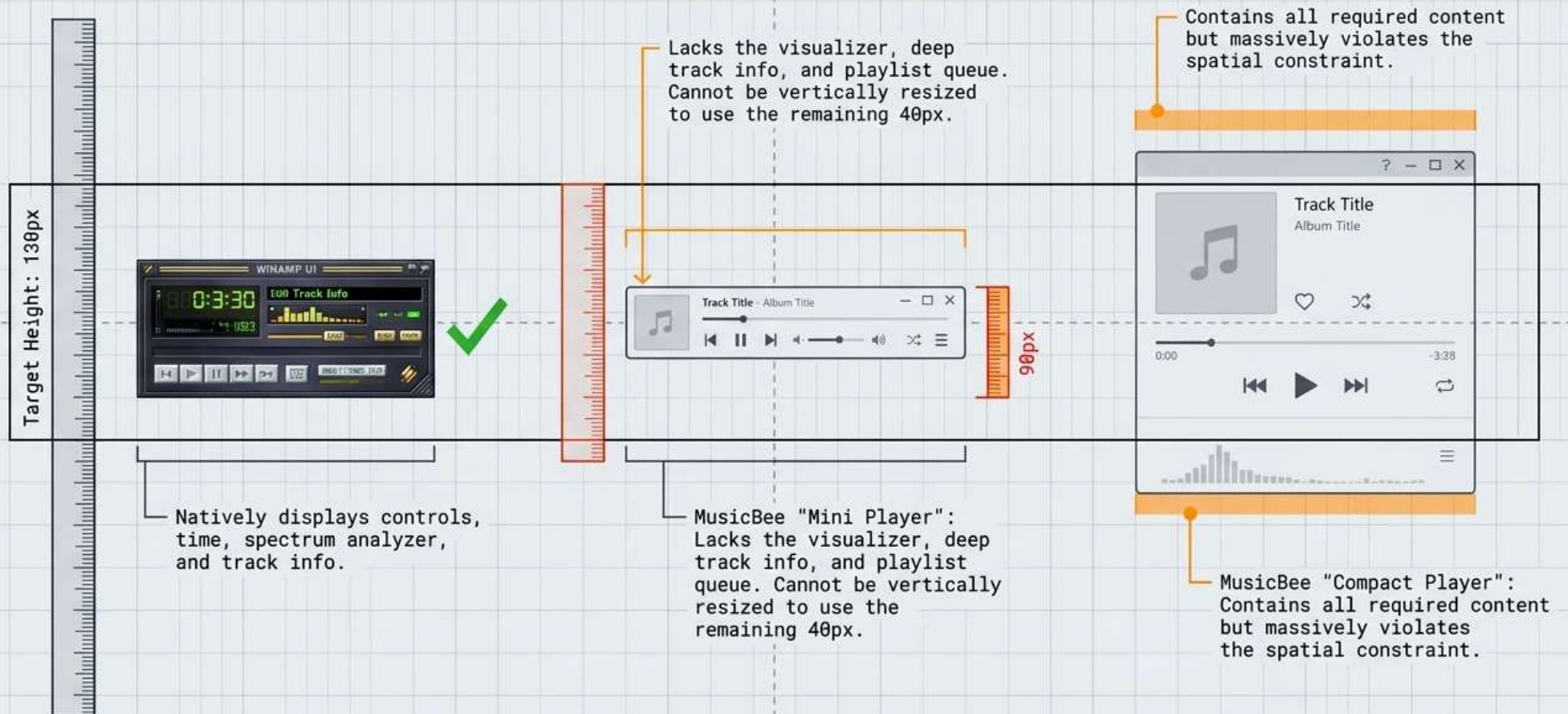
The Requirements

Display controls, progress bar, visualizers, song info, and the current playlist simultaneously.

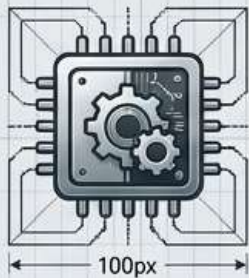
The Constraint

The entire setup must fit natively within a strict 130px (maximum 200px) vertical height.

The Screen Real Estate Diagram

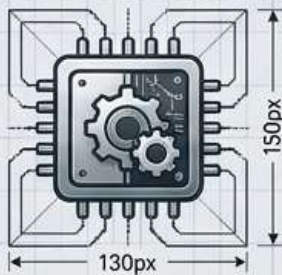


Skinning vs. Paneling: The Customization Ceiling



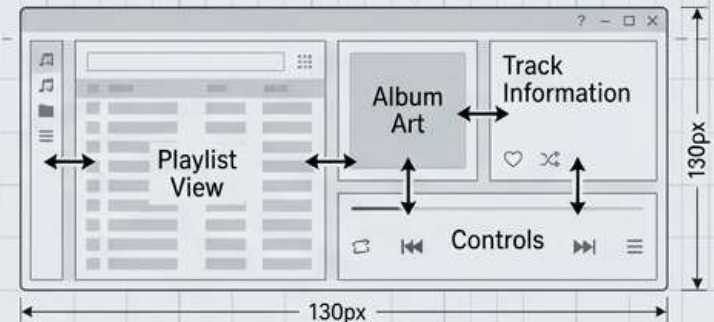
Path A: Skinning

The UI IS the graphic. The engine is injected into a completely custom, irregular graphic shell.



Path B: Paneling







The UI is a CONTAINER for data. Customization involves moving internal boundaries within a standard OS window.



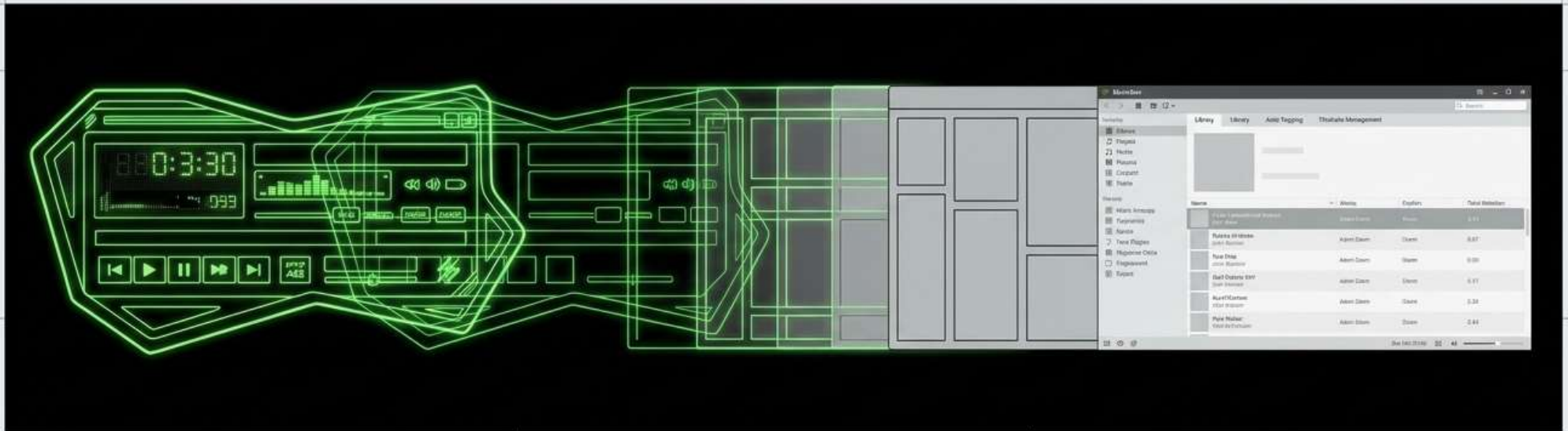
The Theater Mode Struggle: The community suggested building a custom Theater Mode to solve the 130px footprint issue.

The Architectural Limitation: Because MusicBee relies on rendering complex text data and scalable album art within strict OS grid parameters, it cannot seamlessly compress multi-panel visualizations and playlist data into a 130px micro-dashboard. It fundamentally resists micro-scaling.

Comparative Matrix: Handling User States

User State	Winamp v5.666 Approach	MusicBee v3.6.9 Approach
<p>Full Library Management</p>	<p>Opens separate, disconnected windows (Playlist Editor, Media Library) alongside the main player.</p> 	<p>Integrates all library functions (auto-tagging, duplicate management) into a single, tabbed primary window.</p> 
<p>Minimization / Docking</p>	<p>'WindowShade' mode collapses the player into a tiny, pixel-perfect sliver with core controls.</p>  <p>15px height</p>	<p>'Mini Player' utilizes a rigid 90px OS-level widget that truncates advanced data.</p>  <p>90px</p>
<p>Immersion</p>	<p>Leverages 'Milkdrop' for standalone, psychedelic full-screen audio visualization.</p> 	<p>Leverages 'Theater Mode' for large-format album art and scrolling artist biographies.</p> 

The Evolution of Digital Media Spaces



Winamp's Enduring Appeal

Represents a time when desktop space was a canvas for personal identity, and software acted as a stylized, single-purpose physical tool.

MusicBee's Modern Utility

Represents the modern necessity of data curation, where the volume of media requires a workstation capable of deep sorting, tagging, and high-fidelity routing.

The Takeaway

The tension between desktop minimalists and power users remains. While the industry moved to the workstation model, the highly personalized, micro-footprint "gadget" has never fully disappeared.



Two factor authentication apps

- New York Times article: two free 2FA apps recommended
 - after testing 13
- Wondering if anyone is familiar with them & what you think
- Twilio Authy:
 - easy-to-use, cross-platform syncing & secure backups in and customizable app experience
 - must create an account with phone number & email address
 - end-to-end encryption for backup & syncing codes between devices
- Google Authenticator:
 - simple, reliable, streamlined, straightforward authentication app
 - surprising number of useful features
 - when used with Google account, seamlessly syncs data between devices and keeps it backed up to the cloud
 - export your account information securely using just a QR code
 - doesn't use end-to-end encryption to secure backups



New York Times assessment

- Choice depends on what features are important to you
- If put off by the idea of using a 2FA app
 - you'll want something like Google Authenticator that provides a seamless experience
- If concerned about law enforcement or third party accessing your 2FA app backups
 - you'll want something like Authy that encrypts your backups with a key you create
- If want an app with secure backups & doesn't require you to create an account & you can live with some interface quirks
 - consider Duo



New York Times assessment

- 2FA not without drawbacks
 - could be tricked into entering information into a phishing site
 - always check URL bar to make sure that you're entering your passwords and 2FA at a legitimate site
 - never send a 2FA code to someone else
- Passkeys are a new technology intended to replace passwords and 2FA with phishing-resistant, secure credentials that seamlessly log you in
 - Passkeys still very new
 - still need 2FA apps for sites that don't yet support passkeys



What do you use?

- Any thoughts on apps mentioned by New York Times?
 - Twilio Authy
 - Google Authenticator
- Other authenticator apps?
 - what do you like?
 - what don't you like?
- Since any authenticator app should work with any service...
 - what features truly distinguish one from another?

While you are typing into the Chat...

Alan uses the *Authenticator* tool in the *Sophos Intercept X for Mobile* anti-virus app



Accounts

Wordfence
opcug.ca



416187

Share

Vibe Coding - Part 5

Vibe Coding Competition

- The use of vibe coding will be on the honour system
- For those providing entries to the competition, there will be two prizes offered:
 1. The most useful product
 2. The best presentation of the development process *

** The project doesn't have to be successful for this portion of the competition – stories of trials and tribulations, and even abysmal failure will be happily accepted*

October Meeting?



SuggestionBox@opcug.ca

Vibe Coding Example

- The BOD invites you to create a program or a script using only vibe coding
- You don't need to know anything about programming or scripting languages
- You simply tell AI what you want the application to do and issue further prompt(s) to refine the app's operation
- The application can be anything that you want the computer to do
- You will have several months to work on your project as we won't review the results until the fall



Source:

D:\

Target:

U:\

FileName	Size	Date		FileName	Size	Date
\$RECYCLE.BIN		2025-01-04 3:07:36		.Trash-1000		2025-10-28 4:56:38
0_archives		2026-01-04		0_archives		2026-01-04
adb		2025-11-11		adb		2025-11-11
agtemp		2026-01-26		agtemp		2026-01-26
alan		2025-12-30 4:58:12		alan		2025-12-30 5:13:36
alan_and_carol_home_page		2025-12-04 2:49:38		alan_and_carol_home_page		2025-12-04 6:02:52
bats		2026-01-16 5:14:14		bats		2026-01-16 5:14:20
mint		2026-01-28		mint		2026-01-19 2:52:20
nikon		2025-11-26 3:19:38		nikon		2025-11-26 3:20:04
OneDriveFiles		2025-10-28 7:39:26		OneDriveFiles		2025-10-28 4:01:28
original		2026-01-28		original		2026-01-27 6:19:42
receipts		2026-01-22 5:07:26		receipts		2026-01-22 5:12:14
Road Safety Research		2024-09-12 8:20:36		Road Safety Research		2025-01-24 9:12:44
System Volume Information		2023-12-11		System Volume Information		2025-10-27 4:09:52
thunderbird		2026-01-19		thunderbird		2026-01-20 9:00:14
thunderbird_local_folders		2025-12-09		thunderbird_local_folders		2026-01-20 9:00:26
transfer		2026-01-25		transfer		2026-01-25
utils		2022-01-25 9:40:38		utils		2025-01-24 9:14:02
z_pending		2025-09-18		z_pending		2025-09-18
wmatch_prototype.py	3,972	2026-01-28	←			
.sync.ffs_db	484,962	2026-01-25 8:35:40	✗	.sync.ffs_db	533,267	2026-01-25 8:35:40
cross_canada_news_gatherer.htm	2,129	2012-03-12 9:28:02	✓	cross_canada_news_gatherer.htm	2,129	2012-03-12 9:28:02
default.htm	4,220	2025-11-30	✓	default.htm	4,220	2025-11-30
dont-forget.png	64,667	2026-01-21 8:45:08	✓	dont-forget.png	64,667	2026-01-21 8:45:08

Same sizes and times
 Different sizes
 Exact match
 Same sizes but different times

Swap source and target lists



Limitation

- WMatch32 works fine with my 16 GB backup flash drive
- But, if I try to use my 64 GB archival flash drive, the side-by-side windows aren't populated
- No files are available to be transferred
- The 16 GB drive is formatted as FAT32 while the 64 GB drive uses NTFS
- The problem is likely that the old 32-bit WMatch utility can't handle NTFS file permissions and attributes and so simply gives up!

Let's ask ChatGPT for help

Are you aware of the PC Magazine utility Wmatch32?

Yes — I'm familiar with [PC Magazine WMatch](#) (often called **WMatch32** in its Windows versions).

What WMatch32 Was

It was a **file and directory comparison/synchronization utility** originally distributed by [Ziff Davis](#) through [PC Magazine](#) utilities.

- The **first version appeared in 1989 as a DOS utility.** Scribd +1
- Later versions (like **WMatch 3 and 4 / WMatch32**) were **Windows programs** with a graphical interface.
- Its main purpose was to **compare two folders and manage differences.**

Typical Features

WMatch was popular because it made tasks like backup and synchronization very easy:

- Compare two directories (local or network)
- Show files that are **same, newer, older, or different**
- Compare by **name, size, and date**
- Copy, move, or delete files between panes
- Schedule synchronization tasks in later versions Scribd

The interface was typically **two panes**, showing the contents of each directory so you could quickly manage differences.



I would like to create a modern version of this utility program using vibe coding. What language would you suggest should be used for this purpose?

If you want to recreate something like **WMatch32** today, the best language depends mainly on three things:

1. **Cross-platform support** (Windows / Linux / macOS)
2. **Speed when scanning large directories**
3. **Ease of building a GUI**

Since **WMatch** is basically a fast filesystem comparison engine with a two-pane GUI, the filesystem performance matters more than raw graphics power.

Below are the **three best modern choices**, depending on what you value most.

1 **Best Overall Choice: Python (with Qt / PySide6)**

I would strongly recommend **Python + Qt (PySide6)** for a first version.

2 **Best for Performance: Rust**

If you want something **very fast and modern**, **Rust** is an excellent option.

Rust is already used in high-performance file utilities.

3 **Best Windows-style Desktop App: C# (.NET)**

If you want something that feels like a classic Windows utility like **WMatch32**, this is a strong option.

My Recommendation for Your Project

If your goal is quickly recreating a WMatch-style utility, I would choose:

Python + PySide6

It gives you:

- rapid development
- cross-platform support
- a traditional desktop UI

You could have a **working prototype in a few hours**.

Suggested Architecture

A modern WMatch clone could look like this:

```
core/  
  directory_scanner.py  
  file_compare.py  
  sync_engine.py  
  
gui/  
  main_window.py  
  folder_panels.py  
  diff_view.py  
  
utils/  
  hashing.py  
  filters.py
```

One More Important Improvement Over WMatch

A modern version should support:

- multithreaded scanning
- SHA-256 file hashing
- very large directories (100k+ files)

WMatch struggled with these.

✓ If you'd like, I can also show you:

- a modern WMatch architecture
- the core algorithm for directory comparison
- a simple prototype (about 150 lines of code)
- a GUI layout identical to WMatch

which would make this a very fun project.

Please show me the simple prototype

Below is a **very small prototype of a WMatch-style directory comparison tool** written in **Python using Qt (PySide6)**.

It implements the basic idea of the old **WMatch32** utility:

- Two folder panes
- Scan both folders
- Compare by **name, size, and modification date**
- Show which files are **only left, only right, newer, older, or identical**

This is intentionally simple (about ~150 lines) so you can expand it later.

Step 1 — Install the GUI toolkit

`</> Bash`



```
pip install PySide6
```

Step 2 — Prototype Code

Copy code to clipboard

Save as:

wmatch_prototype.py



Step 3 — Run the program

```
python wmatch_prototype.py
```



You will see a window where you can:

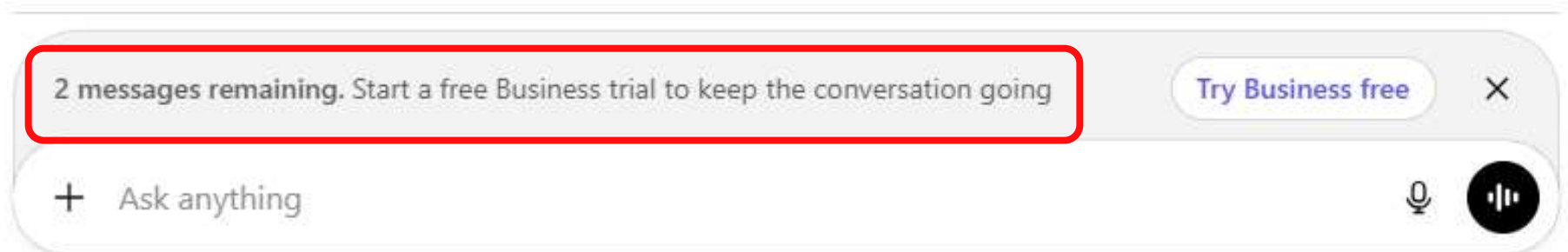
1. Choose **Left Folder**
2. Choose **Right Folder**
3. Click **Compare**

Results appear in the table.

What This Prototype Already Does

- ✓ recursive directory scanning
- ✓ compares **filename, size, modification time**
- ✓ shows **differences in a list**
- ✓ simple GUI

This reproduces the **core concept of WMatch.**



Are these steps for Windows or Linux as the OS?

The steps I showed are **cross-platform** — they work on **both Windows and Linux** with almost no changes. Python and Qt (PySide6) run on all major desktop systems.

Platforms This Will Run On

The exact same program works on:

- Windows 10 / 11
- Linux (Mint, Ubuntu, Fedora, etc.)
- macOS

Qt automatically adapts the GUI to the operating system.

One Tip for Your Project

Since you mentioned `WMatch32`, a good long-term goal would be:

- Develop on **Linux Mint** (excellent Python environment)
- **Package for Windows users using PyInstaller**

Example:

↔ Bash

```
pip install pyinstaller  
pyinstaller --onefile wmatch_prototype.py
```



This produces a **single Windows .exe file** — very similar to classic PC Magazine utilities.

```
DOS
Microsoft Windows [Version 10.0.19045.6937]
(c) Microsoft Corporation. All rights reserved.

C:\Windows\System32>pip install PySide6
Collecting PySide6
  Downloading pyside6-6.10.2-cp39-abi3-win_amd64.whl.metadata (5.5 kB)
Collecting shiboken6==6.10.2 (from PySide6)
  Downloading shiboken6-6.10.2-cp39-abi3-win_amd64.whl.metadata (2.6 kB)
Collecting PySide6_Essentials==6.10.2 (from PySide6)
  Downloading pyside6_essentials-6.10.2-cp39-abi3-win_amd64.whl.metadata (3.8 kB)
Collecting PySide6_Addons==6.10.2 (from PySide6)
  Downloading pyside6_addons-6.10.2-cp39-abi3-win_amd64.whl.metadata (4.2 kB)
Downloading pyside6-6.10.2-cp39-abi3-win_amd64.whl (569 kB)
----- 569.6/569.6 kB 3.9 MB/s eta 0:00:00
Downloading pyside6_addons-6.10.2-cp39-abi3-win_amd64.whl (164.7 MB)
----- 164.7/164.7 MB 8.7 MB/s eta 0:00:00
Downloading pyside6_essentials-6.10.2-cp39-abi3-win_amd64.whl (74.5 MB)
----- 74.5/74.5 MB 8.7 MB/s eta 0:00:00
Downloading shiboken6-6.10.2-cp39-abi3-win_amd64.whl (1.2 MB)
----- 1.2/1.2 MB 10.2 MB/s eta 0:00:00
Installing collected packages: shiboken6, PySide6_Essentials, PySide6_Addons, PySide6
Successfully installed PySide6-6.10.2 PySide6_Addons-6.10.2 PySide6_Essentials-6.10.2 shiboken6-6.10.2

[notice] A new release of pip is available: 25.0.1 -> 26.0.1
[notice] To update, run: python.exe -m pip install --upgrade pip

C:\Windows\System32>
```

DOS - python wmatch_prototype.py

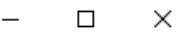


```
C:\Windows\System32>d:
```

```
D:\>cd alan\WmatchClone
```

```
D:\alan\WmatchClone>python wmatch_prototype.py
```

WMatch Prototype



Left Browse Left Right Browse Right

Compare Folders

File	Status
------	--------

WMatch Prototype



Left

Right

Compare Folders

	File	Status
1	\$RECYCLE.BIN\...	LEFT ONLY
2	\$RECYCLE.BIN\...	LEFT ONLY
3	\$RECYCLE.BIN\...	LEFT ONLY
4	\$RECYCLE.BIN\...	LEFT ONLY
5	\$RECYCLE.BIN\...	LEFT ONLY
6	\$RECYCLE.BIN\...	LEFT ONLY
7	\$RECYCLE.BIN\...	LEFT ONLY
8	\$RECYCLE.BIN\...	LEFT ONLY
9	\$RECYCLE.BIN\...	LEFT ONLY
10	\$RECYCLE.BIN\...	LEFT ONLY
11	\$RECYCLE.BIN\...	LEFT ONLY
12	\$RECYCLE.BIN\...	LEFT ONLY
13	\$RECYCLE.BIN\...	LEFT ONLY
14	\$RECYCLE.BIN\...	LEFT ONLY
15	\$RECYCLE.BIN\...	LEFT ONLY
16	\$RECYCLE.BIN\...	LEFT ONLY

If you want, I can also show you

- a much more advanced WMatch architecture (~600 lines)
- how to build a true two-pane interface like the original
- a very fast scanning engine (10–50× faster)
- how to package it as a Windows EXE or Linux Appliance

which would turn this into a real modern replacement for WMatch32.

Modify the python script to display a true two-pane interface like the original

Below is a **modified prototype** that shows a **true two-pane interface** similar to classic directory comparison tools like the old PC Magazine **WMatch32**.

Each pane lists files from a directory, and the program compares them and highlights their **status**.

Key differences from the earlier prototype:

- ✓ Two side-by-side file lists
- ✓ Each pane shows **file, size, date**
- ✓ Status column shows comparison result
- ✓ Rows line up by relative path
- ✓ Much closer to the **classic WMatch layout**

Two-Pane WMatch Prototype

Save as:

wmatch_twopane.py



Python

```
import sys
import os
from pathlib import Path
from datetime import datetime

from PySide6.QtWidgets import (
    QApplication, QWidget, QVBoxLayout, QHBoxLayout,
    QPushButton, QLineEdit, QFileDialog, QTableWidgetItem,
    QTableWidgetItem, QLabel
```



Run

WMatch Two-Pane Prototype

Left Browse Left Right Browse Right

Compare

	File	Size	Modified	Status			File	Size	Modified	Status
1				RIGHT ONLY	^	1	.sync.ffs_db	91801	2026-03-11 11:32	RIGHT ONLY
2				RIGHT ONLY		2	0_archives\Gha...	4750895	2018-06-07 06:34	RIGHT ONLY
3				RIGHT ONLY		3	0_archives\Gha...	1120679	2019-02-12 08:50	RIGHT ONLY
4				RIGHT ONLY		4	0_archives\Gha...	642316	2018-07-19 07:42	RIGHT ONLY
5				RIGHT ONLY		5	0_archives\Gha...	30687	2018-12-31 09:21	RIGHT ONLY
6				RIGHT ONLY		6	0_archives\Gha...	270336	2019-03-12 07:22	RIGHT ONLY
7				RIGHT ONLY		7	0_archives\Gha...	57429	2019-01-29 19:48	RIGHT ONLY
8				RIGHT ONLY		8	0_archives\Mor...	610849	2019-02-10 15:48	RIGHT ONLY
9				RIGHT ONLY		9	0_archives\Mor...	142848	2019-03-23 16:14	RIGHT ONLY
10				RIGHT ONLY		10	0_archives\Mor...	788555	2018-12-29 19:07	RIGHT ONLY
11				RIGHT ONLY		11	0_archives\Mor...	3477490	2019-06-05 09:29	RIGHT ONLY
12				RIGHT ONLY		12	OneDriveFiles\...	11125988	2025-10-27 22:13	RIGHT ONLY
13				RIGHT ONLY		13	OneDriveFiles\T...	19036	2025-08-13 17:20	RIGHT ONLY
14				RIGHT ONLY		14	Road Safety ...	11935	2019-06-20 08:43	RIGHT ONLY
15				RIGHT ONLY		15	Road Safety ...	3870	2020-11-04 15:31	RIGHT ONLY
16				RIGHT ONLY		16	Road Safety ...	10106	2014-12-30 09:30	RIGHT ONLY
17				RIGHT ONLY	▼	17	Road Safety ...	9639	2016-09-16 11:14	RIGHT ONLY

WMatch - Compare directories

File View Action Help

Source: D:\ Target: U:\

FileName	Size	Date		FileName	Size	Date
\$RECYCLE.BIN		2025-01-04 4:07:36		.Trash-1000		2026-02-28 3:41:16
0_archives		2026-03-04 12:31:42		0_archives		2026-03-04 1:12:02
adb		2025-11-11 1:07:54		adb		2025-11-11 1:08:18
agtemp		2026-03-03 1:36:04		agtemp		2026-02-22 4:35:54
alan		2026-03-08 9:17:58		alan		2025-12-30 6:13:36
alan_and_carol_home_page		2025-12-04 3:49:38		alan_and_carol_home_page		2025-12-04 7:02:52
bats		2026-03-07 11:32:08		bats		2026-03-07 11:33:38
nikon		2026-01-29 5:53:40		nikon		2026-01-29 6:56:22
OneDriveFiles		2025-10-28 8:39:26		OneDriveFiles		2025-10-28 5:01:28
original		2026-03-08 3:39:24		original		2026-03-07 9:36:18
receipts		2026-03-07 10:01:38		receipts		2026-03-07 11:33:40
Road Safety Research		2024-09-12 9:20:36		Road Safety Research		2025-01-24 10:12:44
System Volume Information		2023-12-11 11:09:06		System Volume Information		2025-10-27 5:09:52
thunderbird		2026-03-05 3:09:12		thunderbird		2026-03-07 12:02:30
thunderbird_local_folders		2026-03-05 2:59:30		thunderbird_local_folders		2026-03-07 12:02:32
transfer		2026-03-08 3:45:24		transfer		2026-03-07 1:27:38
utils		2022-01-25 10:40:38		utils		2025-01-24 10:14:02
z_pending		2025-09-18 12:33:44		z_pending		2025-09-18 12:34:46
.sync.ifs_db	44,908	2026-03-07 1:27:38	✗	.sync.ifs_db	91,570	2026-03-07 1:27:38
cross_canada_news_gatherer.htm	2,129	2012-03-12 10:28:02	✓	cross_canada_news_gatherer.htm	2,129	2012-03-12 10:28:02
default.htm	4,220	2025-11-30 12:06:34	✓	default.htm	4,220	2025-11-30 12:06:34
dont-forget.png	65,711	2026-03-04 10:08:30	✓	dont-forget.png	65,711	2026-03-04 10:08:30
extract_patchmypc_updates.py	921	2026-01-28 5:46:08	✓	extract_patchmypc_updates.py	921	2026-01-28 5:46:08
index.htm	218	2024-12-20 11:38:44	✓	index.htm	218	2024-12-20 11:38:44

Same sizes and times
 Different sizes
 Exact match
 Same sizes but different times

31 source files (28 equal) 31 target files

Not quite there - yet!

- This is quite a complex ask
- It's a good example of a project that requires multiple prompts
- No doubt, it will also require considerable development time
- If your proposed project is anything similar, it's good that the vibe-coding competition won't be held until October!!!
- So, do you have a project in mind as an entry to the competition?

*Send entries or just expressions of interest to:
SuggestionBox@opcug.ca*





**Any other:
Questions
Comments
Shares?**



OPCUG PRESENTATIONS AT THE OTTAWA PUBLIC LIBRARY

Organizing and showcasing your photos

Lynda Buske

Rosemount, Thursday Apr 30, 2026 at 6:00pm

The Ins and Outs of Electronic Mail

Chris Taylor

Cumberland, Saturday May 2, 2026 at 2:00pm

Armchair Travel: Iceland

Lynda Buske

St-Laurent, Monday May 4, 2026 at 6:00pm

<https://booking.biblioottawalibrary.ca/en/program?text=ottawa+pc>



**Britannia Park
Trolley/Picnic Station**

June 10, 2026



**Register by E-mail to: pizzaparty2026@opcug.ca
Details: <https://opcug.ca/events/annual-pizza-night/>**

May Meeting



Ask The Geeks

Multiple Geeks
OPCUG

May 13, 2026
7:30 pm



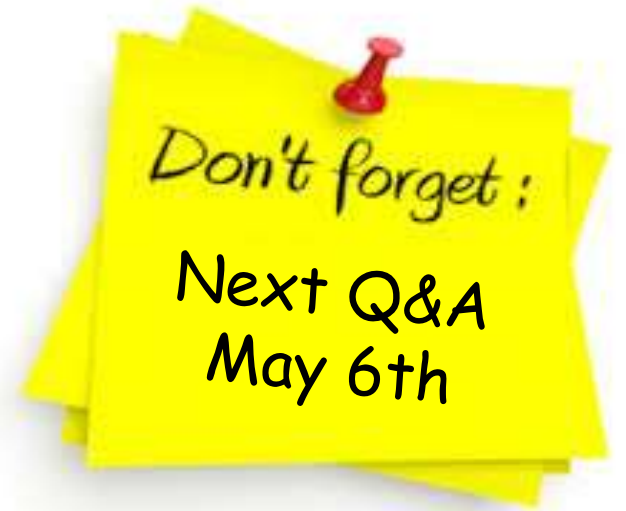
Wanted - Your Questions!



- The geeks are ready to (try to) answer your questions at the May meeting!
- **What is your question?**
- Send your question ahead of the meeting to:

alan.german@opcug.ca

** Alan promises not to look up the answer or share the question with the other geeks!*



**Send your questions,
answers, and topics
you wish to share to:**

SuggestionBox@opcug.ca