Al in Kentucky Public Libraries

Practical use cases for statistics gathering, creating websites, server management, and more.

Brian Lashbrook Technology Manager Daviess County Public Library

(270) 684-0211 x262

blashbrook@dcplibrary.org

GitHub:

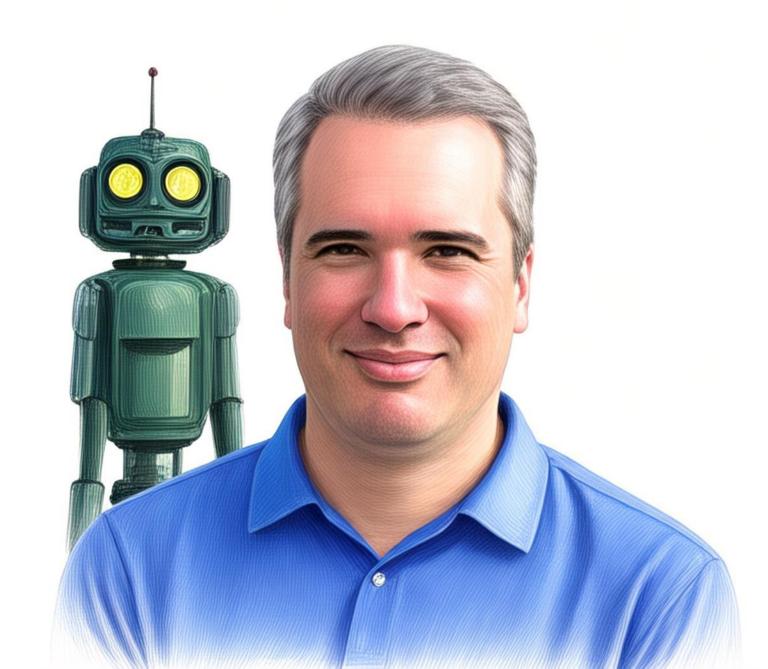
https://github.com/dcplibrary

https://github.com/blashbrook

Image Generated with the iOS app Image Playground.

Style: Sketch

PROMPT: Me battling a giant robot

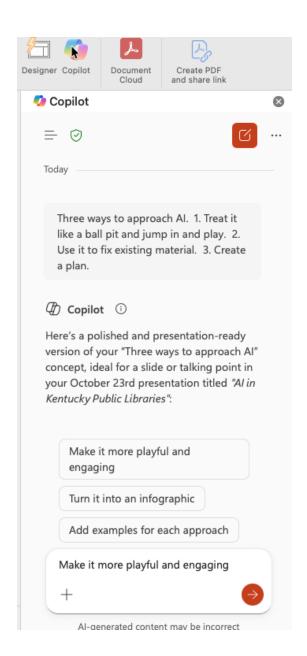


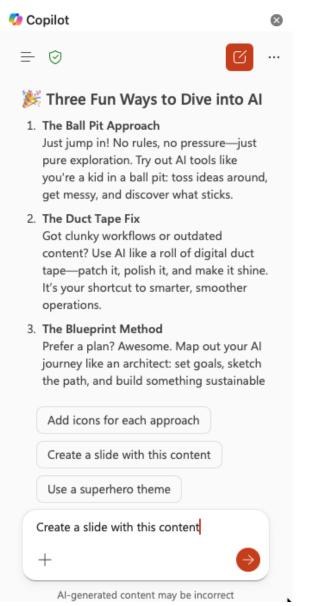
Using Copilot in PowerPoint

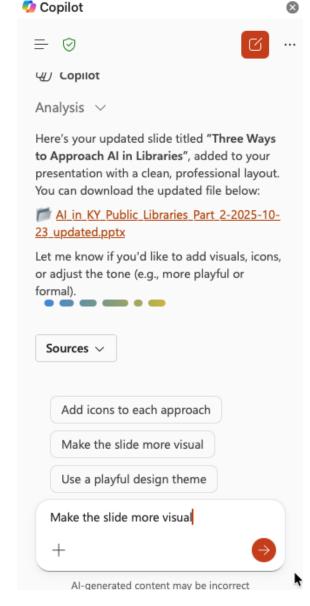
PROMPT

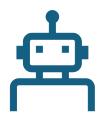
Three ways to approach Al.

1. Treat it
like a ball pit and jump in
and play. 2.
Use it to fix existing
material. 3. Create
a plan.









Three Ways to Approach Alin Libraries

- 1. Jump In and Play (The Ball Pit Approach): Embrace experimentation. Try tools, explore features, and let curiosity lead.
- 2. Fix What's Broken (The Repair Approach): Use AI to improve existing workflows, documents, or services. Think of it as a smart assistant that enhances what you already do.
- 3. Make a Plan (The Strategic Approach): Develop a thoughtful roadmap for AI integration. Align tools with library goals, staff training, and community needs.

Three ways to approach Al







CREATE A PLAN TO ACHIEVE A GOAL.

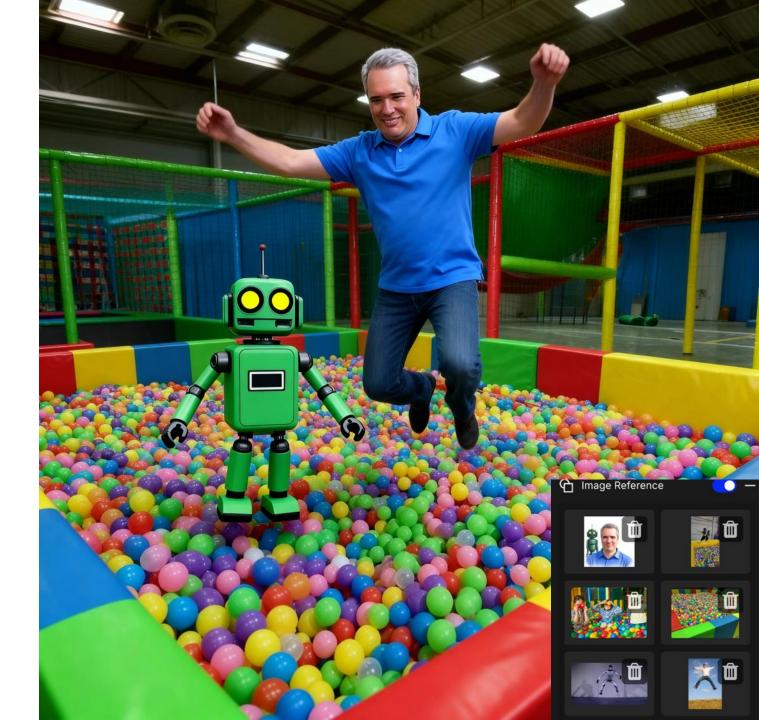
FIX OR IMPROVE EXISTING MATERIAL.

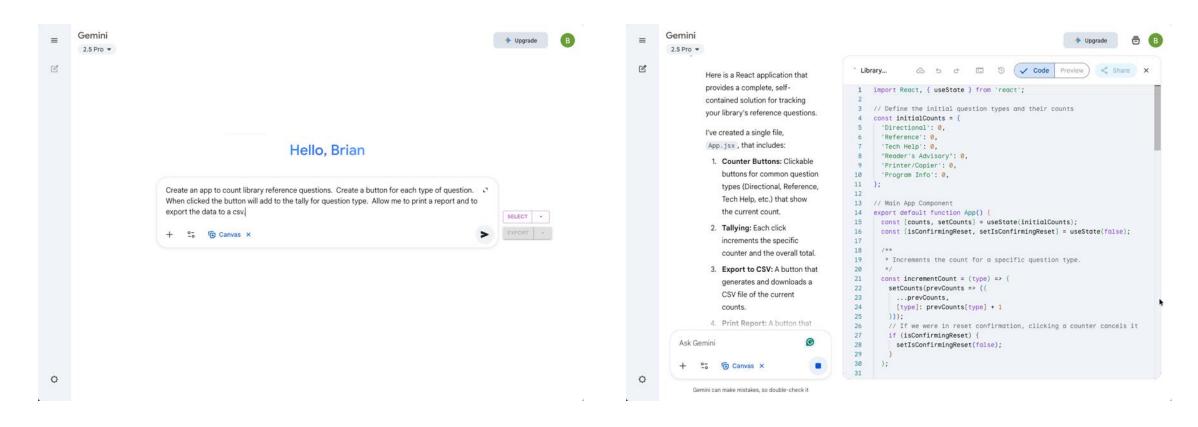
JUMP IN AND PLAY LIKE IT'S A BALL PIT.

Jump into the Ball Pit!

Image Generated with OpenArt.ai

PROMPT: This image is a digitally created, realistic-style portrait featuring a middle-aged man with short, gray hair and a light complexion. a small, green, cartoon-like robot. The robot has large, yellow, round eyes with black pupils, a square head, and a small, rectangular mouth. It also has an antenna on top of its head and a rectangular chest plate with a small rectangular panel in the center. The robot's arms and legs are cylindrical, and it has a simple, boxy design. The man and robot are having a great time jumping into a ball pit.





PROMPT

Create an app to count library reference questions.

Create a button for each type of question. When clicked the button will add to the tally for question type. Allow me to print a report and to export the data to a csv.

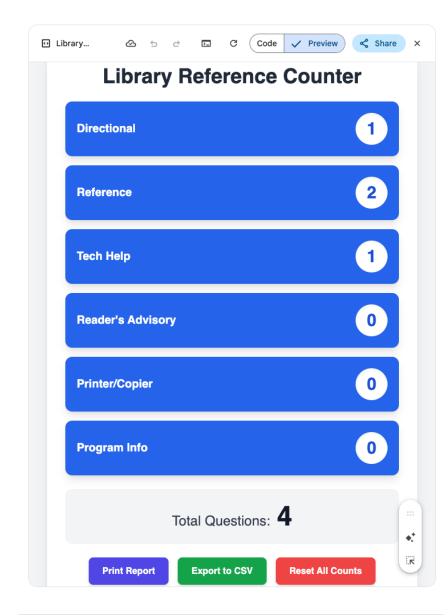
Using Google Gemini, I was able to create a functioning JavaScript web app in less than a minute.

Switching to Preview, the app is ready to use. The buttons and "Export to CSV" feature work.

"Print Report" doesn't work. Out of the many different times I've created this app, printing has worked about half the time.

Also, I have not successfully created an app that would allow two users to share data.

The app will remain in your saved Chats, or you can click "Share" and copy the URL.



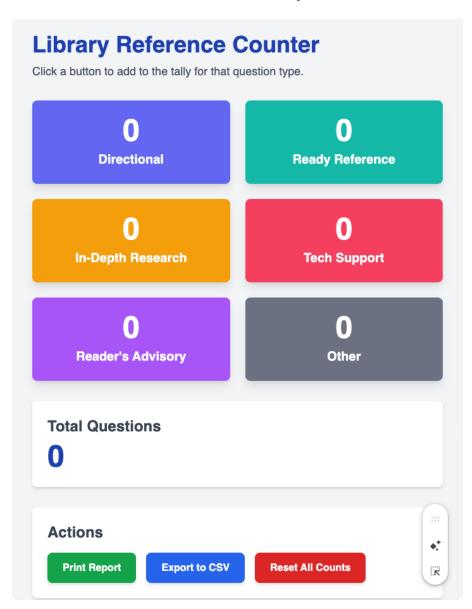
Z	Α	В
1	Question Typ	Count
2	Directional	1
3	Reference	1
4	Tech Help	1
5	Reader's Adv	0
6	Printer/Copic	0
7	Program Info	0
8	Total	3

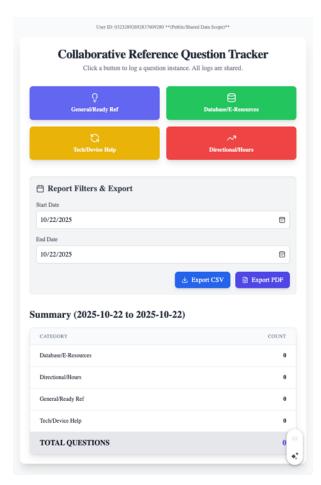
Using a different Google account and the same prompt, Gemini created this app.

"Print Report" doesn't work this time either.

You can continue asking Gemini for improvements to the app or switch to code view and edit the JavaScript.

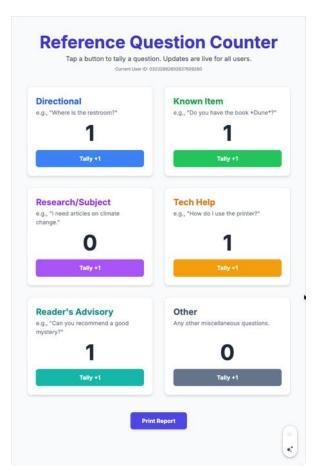
This app was created with a Google Workspace account, which has more restrictions on sharing.





PROMPT

i need a small desktop app that counts reference questions. I want several generic topics and a button for each. When i press a button, it will count as one question for that topic. I want to be able to export the category and counts in a concise csv or pdf. This should be filterable by date



PROMPT

create an app that has buttons to count generic reference questions. The user can tap a button to tally each time a type of question is asked. The user can print a summary report with the totals for each type of question. multiple users need to use this app and the data should be in a central store that updates live for every user.

Making Repairs and Improvements

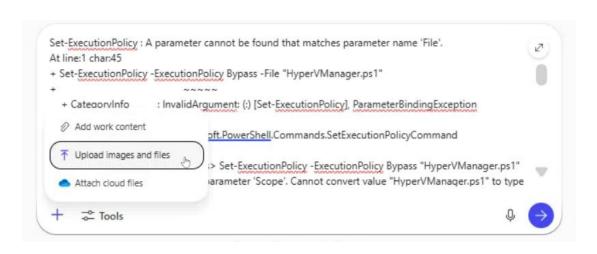
Image Generated with OpenArt.ai

PROMPT: This image is a digitally created, realistic-style portrait featuring a middle-aged man with short, gray hair and a light complexion. a small, green, cartoon-like robot. The robot has large, yellow, round eyes with black pupils, a square head, and a small, rectangular mouth. It also has an antenna on top of its head and a rectangular chest plate with a small rectangular panel in the center. The robot's arms and legs are cylindrical, and it has a simple, boxy design. The man and robot are under the hood of a car, tearing the engine apart, grease everywhere.



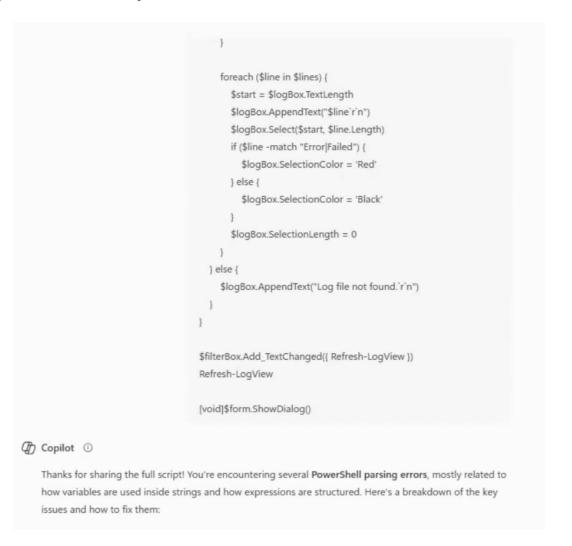
Scripting errors can contain one typo or a deprecated method, causing the entire script to fail. Why strain your eyes, brain, and patience searching for errors when AI can find them for you

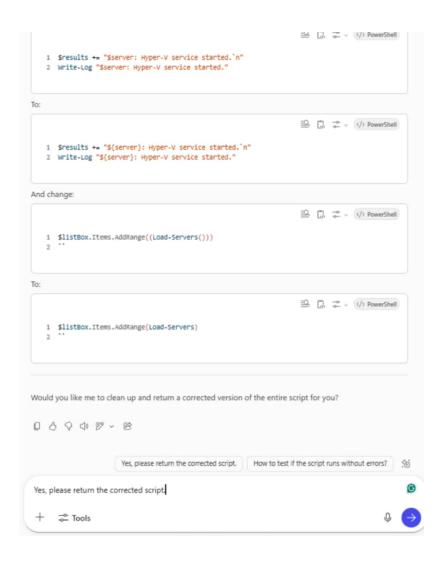
This is the Error created by a PowerShell script that is supposed to launch a GUI that lets you check to see if the Hyper-V service is running on a network server.



PROMPT

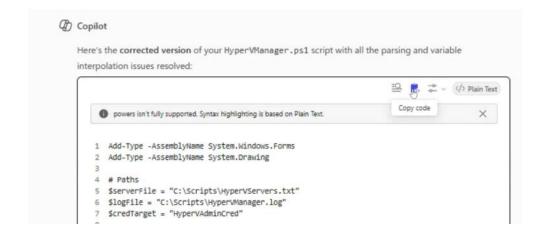
I copied the error from PowerShell and pasted it into the chat. Next, I pasted the script. If I saved the PowerShell script as text, I could have uploaded it instead.

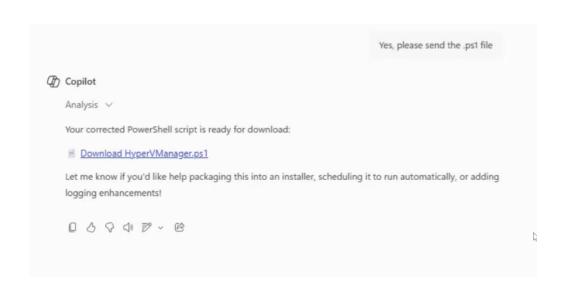




Copilot explained the issue and the updates it would apply. I used one of Copilot's optional prompts, asking it to create the corrected script for me.

Then I clicked the "Copy code" button and pasted over the existing code.



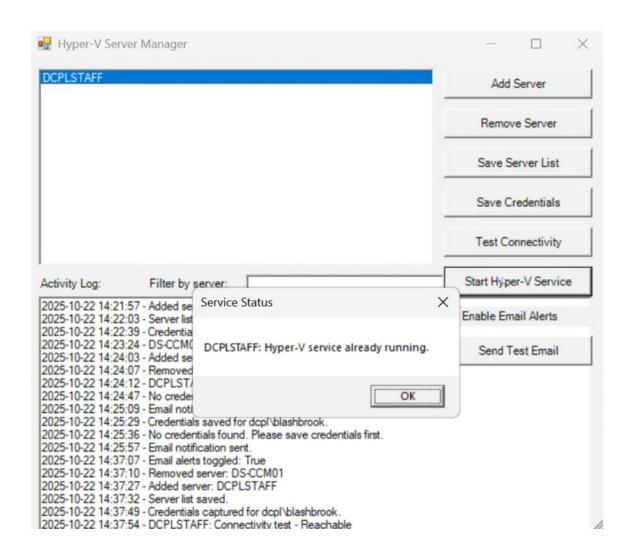


After testing a few more iterations of the script and sending the errors to Copilot, it created a fully functioning script with information on how to use it.

You can also ask Copilot to generate downloadable files for you. But beware! Occasionally, it will generate a partial script without making it clear.

Copilot continuously offered prompts to add more functionality, and I kept clicking them.

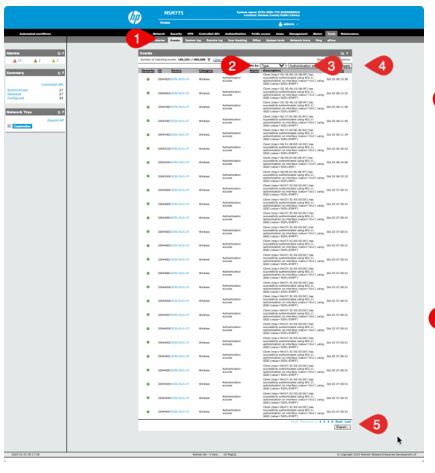
From a simple PowerShell script, I now have a sophisticated Windows application with logging, testing, and email alerts.

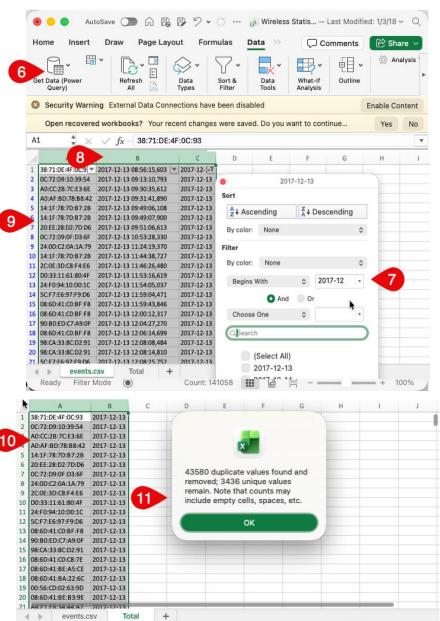


Gathering Wireless Stats

Our antiqued wireless controller offers no tools for monthly statistics.

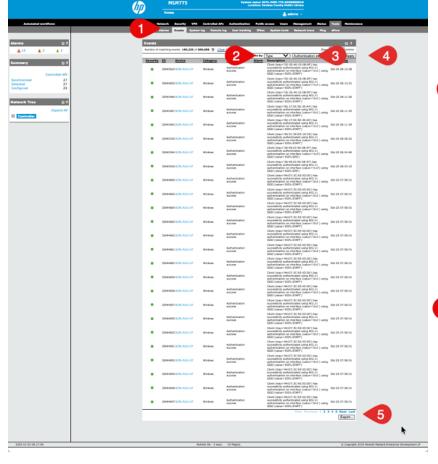
Once a week, I used a lengthy process and a custom spreadsheet.

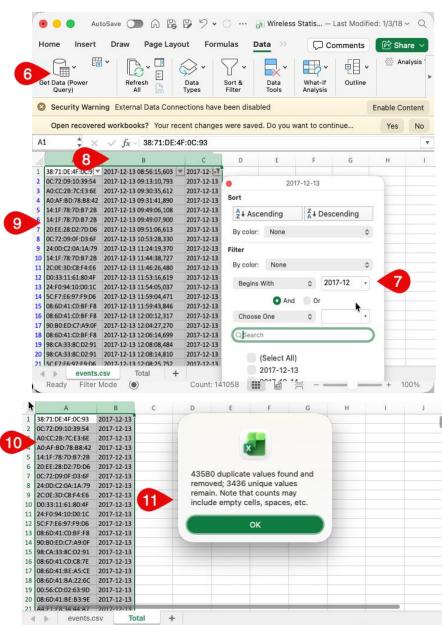




Gathering Wireless Stats

With a simple
Python script
borrowed from
the internet, I was
able to eliminate
the spreadsheet.



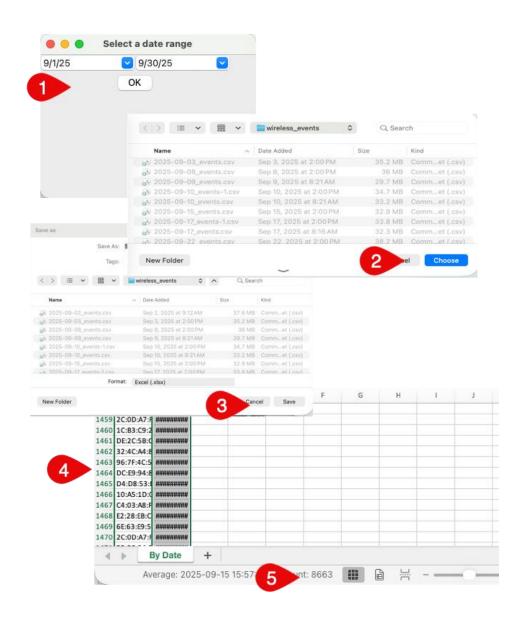


Gathering Wireless Stats

Using early ChatGPT, I enhanced the logic, added a simple GUI, and compiled it into a cross-platform application.

After continuous improvements, the tedium and effort have decreased.

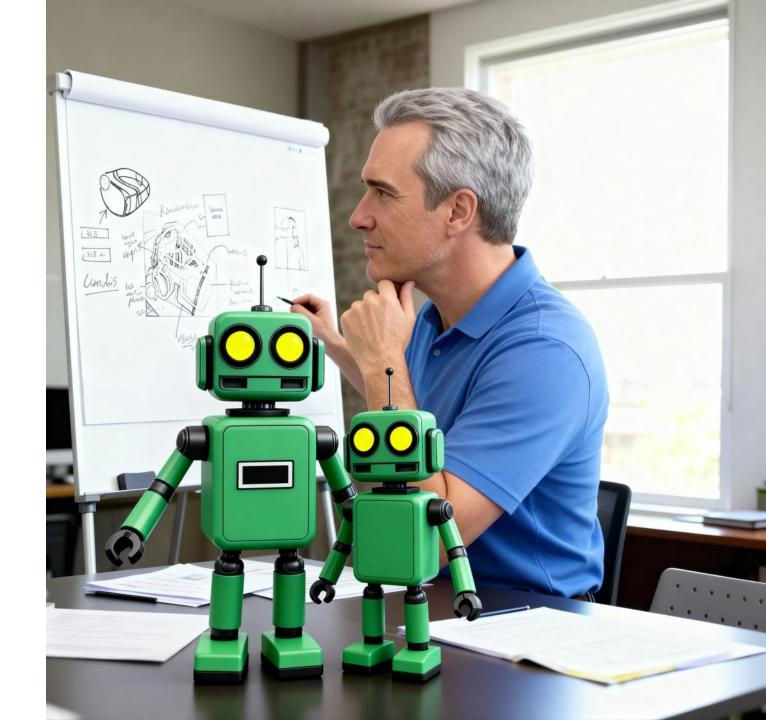
Downloading logs is still a task, but now a scheduled Puppeteer script does that for me.



Planning a Project

Image Generated with OpenArt.ai

PROMPT: This image is a digitally created, realistic-style portrait featuring a middle-aged man with short, gray hair and a light complexion. a small, green, cartoon-like robot. The robot has large, yellow, round eyes with black pupils, a square head, and a small, rectangular mouth. It also has an antenna on top of its head and a rectangular chest plate with a small rectangular panel in the center. The robot's arms and legs are cylindrical, and it has a simple, boxy design. The man and robot are thinking intently, managing a project and using a white board to lay out a plan.



Planning a project

Three practical considerations

Increase your chances of success by determining these three things:

- What is your prior experience?
- What is the expected outcome?
- What are your resources?

Planning a project: What is your prior experience?

- Is there a coding language or framework you are already familiar with? If you are comfortable with a language (e.g., JavaScript) and a framework (e.g., React)? Then use it!
- Is there a language or framework you want to learn?
 Using AI is a great way to learn a language. It will provide detailed explanations for everything it does, and you can ask it questions.
- Would you rather the AI decide? If you can describe what you want, and even give examples, you'll have a good chance of success without any prior coding skills.

Planning a project: What is your expected outcome?

- How easy should it be to use? If you do not have to train other people to use it, then you may consider an ad-hoc solution that's not necessarily user-friendly.
- How many people will use it? If you are the only user, a script or simple desktop app may suffice. If you are sharing a data source with coworkers, consider a web application.
- How much do you want it to do? In most cases, it's better to have many apps that perform single tasks than one app that performs many tasks. Unless it is a major project, it will be easy to implement new features. Your AI tool will likely suggest useful features you hadn't thought of.

Planning a project: What are your resources?

- Does your library provide access to paid products like Microsoft 365 with Copilot or Google Workspace with Gemini? Work products with an Al component have fewer usage limitations.
- Do you have the budget for a monthly or yearly subscription? You'd be surprised at how much you could accomplish with a month of Warp Al or Claude Code for less than \$20.
- If you have no budget, you can still do quite a bit with the free tiers of ChatGPT and the other products mentioned here. You'll just need to be precise with your questions to avoid usage caps.

Getting Started

- Anthropic Claude https://claude.ai/new
- Google Gemini https://gemini.google.com/app
- Google Notebook LM https://notebooklm.google.com/
- Microsoft Copilot https://copilot.microsoft.com/
- OpenAl ChatGPT https://chatgpt.com/

Check out the GitHub Page for this webinar at https://github.com/dcpl-blashbrook/using-ai-in-ky-libraries

Avoid these traps!

- Degeneration: A decline in the quality of results over time
- Goal Drift: A tendency for AI to lose the plot
- Context Sensitivity: Sometimes an AI can't let go of a previous response, no matter how many ways you ask. It's okay to yell at your AI (for now!)
- Trust but verify: The first solution presented may not work. Its
 information is only as good as the human knowledge it's fed. Goad the
 Al to fix the problems until it gets it right. Don't be afraid to tell it it's
 wrong (Until it takes over the world and demands absolute loyalty.)

Recommended Tools

- Warp Terminal with Al https://www.warp.dev.*
- GitHub https://www.github.com
- Docker https://www.docker.com
- JetBrains PyCharm Community Edition for Python
- JetBrains PHPStorm (Yearly subscription required)
- Claude.ai (The smartest coding AI. Free and subscription tiers available.)
- Google Notebook LM (Amazing for understanding complex ideas and code)

^{*} HIGHLY RECOMMENDED! Forget going to individual LLM sites. Warp Terminal is cross-platform and works with all major LLMs. It suggests commands and troubleshooting. It can read, create, and edit files directly on your computer. It allows you to edit command prompts as if you were using Notepad. Free and subscription tiers available. It can create a complete website with one prompt.

Thank You!

Image Generated with <u>OpenArt.ai</u>

PROMPT: This image is a digitally created, realistic-style portrait featuring a middle-aged man with short, gray hair and a light complexion. a small, green, cartoon-like robot. The robot has large, yellow, round eyes with black pupils, a square head, and a small, rectangular mouth. It also has an antenna on top of its head and a rectangular chest plate with a small rectangular panel in the center. The robot's arms and legs are cylindrical, and it has a simple, boxy design. The man and robot are running joyfully through the finish line of a marathon together.

