# Workshop 1: Getting Started with OpenWebUI for AI-Powered Research

## Introduction and Context

OpenWebUI is an **extensible, self-hosted AI interface** that runs entirely offline[[1]](https://docs.openwebui.com/#:~:text=Open%20WebUI). This first workshop is a hands-on introduction aimed at getting researchers and students (aspiring researchers) excited about using AI tools in their work. OpenWebUI has a growing community (over **258,000 users** as of 2025)[[2]](https://openwebui.com#:~:text=Join%20our%20community%20,free%21%20258K%2B%20users%20unlocked%20already), which speaks to its popularity and potential. Emphasize that even the basic features available today can already deliver powerful assistance – in fact, OpenWebUI can replicate advanced AI research capabilities without the need for expensive cloud subscriptions[[3]](https://www.youtube.com/watch?v=4qrVoMx4UV8#:~:text=%28kinda%29%20www,good%20research%E2%80%94just%20the%20right). By the end of this session, participants should feel **empowered** and **enthusiastic** about integrating AI tools like OpenWebUI into their research workflow.

## Workshop Goals and Objectives

* **Demonstrate OpenWebUI's capabilities:** Show how an offline AI model can answer questions, summarize information, and generate ideas. Highlight the platform’s usefulness and potential to yield insights **not easily obtainable without AI**.
* **Hands-on AI experience:** Ensure every participant actively uses OpenWebUI through their browser during the session. The goal is to move them from unfamiliarity to a basic level of *conscious competence* with AI tools – aware of what the AI can do and how to use it.
* **Inspire regular use of AI tools:** Convince attendees of the power and practicality of AI assistants in research. They should leave motivated to explore OpenWebUI (and similar tools) on their own, having seen first-hand how AI can spark new ideas and save time.
* **Set stage for advanced features:** Introduce the idea that this is *Workshop 1* of a series. Today covers fundamentals; upcoming sessions will unlock more advanced capabilities (custom knowledge bases, tool integrations, etc.), progressively building on what they learn.

## Audience and Prerequisites

This session is designed for a mixed audience of **researchers and students**. Assume **no prior knowledge of AI tools**, but be mindful that a few participants may already be familiar (or even adept) with tools like ChatGPT or Perplexity. Adopt a respectful, peer-to-peer tone – treat students as budding researchers. Leverage the *Four Stages of Competence* model in your approach: - **Beginners (Unconscious Incompetence → Conscious Incompetence):** They don’t know what they don’t know. Begin with foundational concepts and simple examples to illuminate AI’s capabilities. - **Intermediate/Experienced (Conscious Competence):** They know the basics or more. Keep them engaged by offering optional challenges (e.g. trying more complex prompts or sharing their own tips) and encouraging them to assist others. - **Everyone:** Emphasize that learning AI is a journey from *conscious* practice to eventual *unconscious competence*. Encourage questions and knowledge-sharing. This inclusive approach ensures no one feels talked down to, and those with experience remain challenged.

## Preparation and Setup

**Before the session**, ensure the technical setup is ready: - **OpenWebUI installation:** Have OpenWebUI running on a local server or individual laptops, accessible via browser at something like http://localhost:3000[[4]](https://docs.openwebui.com/#:~:text=Both%20commands%20facilitate%20a%20built,everything%20up%20and%20running%20swiftly). Only the basic chat functionality is required for this workshop (no advanced plugins yet). Test it beforehand with a simple prompt to confirm it’s functional. - **Model loaded:** Load a capable language model in OpenWebUI (e.g. a 7B or 13B LLM) so participants can use it without delay. If possible, pre-load any example data or texts you plan to use in exercises. - **Internet access:** While OpenWebUI operates offline, have an internet connection available for *sideline demonstrations* (like showing the Perplexity search tool or other online AI for comparison). Ensure at least the instructor’s computer can access external sites. - **Browser access:** Verify every participant can join the OpenWebUI interface. If it’s a classroom setting with a single shared display, plan to have volunteers come up or use one machine in groups. Ideally, a hands-on workshop means **each participant has some access to the interface** to try things out directly.

## Workshop Outline (2 Hours Total, In-Person & Hands-On)

1. **Opening (0:00 – 0:10)** – **Welcome and Big Picture:** Introduce the session goals and why AI tools are worth exploring. Explain in simple terms what OpenWebUI is (“a user-friendly AI platform you run yourself, like having your own ChatGPT that works offline”[[1]](https://docs.openwebui.com/#:~:text=Open%20WebUI)). Highlight an exciting benefit to hook their interest: for example, *“Today you’ll see how an AI can summarize complex articles or brainstorm fresh ideas in seconds – things that would normally take us hours.”* Mention that OpenWebUI is widely adopted (**quarter-million+ users** worldwide)[[2]](https://openwebui.com#:~:text=Join%20our%20community%20,free%21%20258K%2B%20users%20unlocked%20already) and that it can offer advanced research assistance *for free* (no need for a $200/month API plan)[[3]](https://www.youtube.com/watch?v=4qrVoMx4UV8#:~:text=%28kinda%29%20www,good%20research%E2%80%94just%20the%20right). This sets an enthusiastic tone and intellectual curiosity from the start.
2. **Intro to AI Tools & OpenWebUI Basics (0:10 – 0:25)** – **Concept Demo:** Take 15 minutes to demonstrate live how OpenWebUI works, assuming only basic functionality:
3. **Interface tour:** Share your screen (or guide them on their own) through the OpenWebUI browser interface. Point out key elements: the prompt input box, the send button, any options for model selection or settings (if visible).
4. **First query example:** Ask a straightforward question to the AI (choose a question relevant to your audience’s field if possible). For instance, *“What are some potential research questions in climate science that an AI could help with?”* or a simpler general query. As the AI generates an answer, read it aloud or summarize, and note how quick it arrives. This shows the basic Q&A capability.
5. **Highlight value:** Emphasize how even this basic Q&A can be useful. For example, the AI might list novel research questions or summarize knowledge, giving a **taste of insights** one might not have immediately thought of. Reinforce that *the AI isn’t perfect*, but it’s a powerful brainstorming partner.
6. **Address expectations:** Explain that the AI’s knowledge is based on its training (e.g. data up to a certain year). It may **not know recent events or specialized niche info** out-of-the-box. This segues into why we sometimes use other tools or provide data (to be explored later). Keep this segment interactive by asking the group what they would ask the AI – take one or two quick suggestions and run them to show varied capabilities (e.g. a “define a concept” prompt, then a “creative idea” prompt).
7. **Hands-On Exercise 1 – Q&A and Discovery (0:25 – 0:45)** – **Participant Practice:** Now it’s the attendees’ turn. Invite everyone to **try a simple prompt** in OpenWebUI themselves:
8. **Prompt suggestions:** Provide a few starter questions on a slide or whiteboard, such as *“Explain [a key concept] in simple terms,”* *“List 5 challenges in [their research area],”* or *“What are some innovative methods to solve [XYZ problem]?”* (Tailor these to the general domain of the participants to make it relevant). Encourage them to also come up with their own questions out of curiosity.
9. **Guidance:** Walk around, assist anyone having trouble phrasing a question or accessing the interface. Remind them that specificity helps (e.g. “summarize this article about \_\_” is better if they provide the article text). Also, encourage exploration: *“If the first answer isn’t useful, try rephrasing your question or ask for more detail.”*
10. **Share a wow moment:** After a few minutes, ask if anyone got an interesting or surprising answer. Choose one or two participants to briefly share what they asked and what the AI responded. This peer sharing often builds excitement as they see what others tried.
11. **Instructor insight:** If no one volunteers, be ready with your own example of an AI-delivered insight. For instance, *“I asked it to suggest a new angle on my thesis topic and it proposed an interdisciplinary approach I hadn’t considered.”* Use this to underline how AI can broaden one’s perspective and yield *“insights you couldn’t easily get otherwise.”*
12. **Hands-On Exercise 2 – Summarization and Analysis (0:45 – 1:05)** – **Deeper Dive:** Now demonstrate and have them practice a slightly more advanced use: summarizing or analyzing information. This showcases the power of AI to process large text quickly:
13. **Demo summarization:** Provide a sample of a research paper abstract, a news article, or a long paragraph of text relevant to the group. Copy and paste it into OpenWebUI and ask the AI, *“Summarize the key points of the above text.”* Within seconds, it should produce a concise summary. Point out how this could save a researcher time when doing literature review or catching up on a topic.
14. **Participant activity:** Distribute one or two text snippets (printouts or digital) and have participants try the same on their own. If they have laptops, they can copy-paste; if not, you can do another group example. Alternatively, let them use a piece of their own writing or an article they have – seeing the AI summarize *their* chosen text can make the impact more personal.
15. **Discussion:** Ask them to compare the summary to the original. Is anything important missing or incorrect? This is a chance to briefly mention AI’s limitations (e.g. it might omit nuance or occasionally **hallucinate** minor facts). However, stress that even if not perfect, it gives a solid *starting point* that they can refine. For many, reading a summary first and then the full text can guide them where to focus.
16. **Extend analysis:** If time allows, push the AI a bit further: ask an *analytical question* about the text. For example, *“Based on the above text, what are two implications for future research?”* This shows that beyond summarizing, the AI can attempt to interpret or extrapolate, hinting at its usefulness in analyzing data or literature.
17. **Brief Sideline: Complementary Tools (Perplexity) (1:05 – 1:15)** – **Connecting to the Wider AI Ecosystem:** Now that they have seen OpenWebUI’s basic abilities, acknowledge scenarios where other tools complement it. Specifically introduce **Perplexity**, an AI-powered search engine:
18. **Why Perplexity:** Explain that since OpenWebUI (in offline mode) doesn’t have up-to-the-minute knowledge or internet access, tools like Perplexity can fill that gap by searching the web **with AI assistance**. For instance, if a participant asked about a very recent event or a highly specialized statistic in Exercise 1 and OpenWebUI struggled, this is where Perplexity shines.
19. **Quick demo:** On the main screen, perform a query on Perplexity (e.g. *“latest research on \_\_”* or the same question that OpenWebUI couldn’t answer). Show how it returns an answer with cited sources. This demonstrates AI + web search integration. If feasible, click a citation to show the source – reinforcing good research habits of verifying information.
20. **Integration point:** Mention that in the future, OpenWebUI **can be extended** to do something similar internally. (In fact, there is a toolkit that adds a *“Perplexica” web search function with citations inside OpenWebUI*[*[5]*](https://github.com/Haervwe/open-webui-tools#:~:text=%EF%B8%8F%20Tools).) Although that advanced feature isn’t enabled today, the takeaway is that *OpenWebUI’s modular design will let us bring in outside information when needed.* For now, knowing how to use external AI tools in tandem – e.g., using Perplexity to gather facts and OpenWebUI to analyze or elaborate on them – is a valuable skill.
21. **Encourage critical thinking:** Use this moment to remind participants that AI outputs should be cross-checked. Seeing Perplexity’s citations and comparing with OpenWebUI’s generative answer highlights the importance of sources. This doesn’t dampen excitement; rather, it positions AI as a powerful assistant **when used thoughtfully** alongside traditional research methods.
22. **Optional Challenge (for Advanced Participants)** – *This sub-session can run in parallel with others or as a take-home suggestion if time is short.* For those already comfortable with the basics, propose an **extra challenge**:
23. **Complex prompt crafting:** Ask them to craft a more complex prompt or use an advanced setting in OpenWebUI’s interface (if available). For example, using the system/message roles if OpenWebUI supports it: *“Act as a data science expert and explain how to improve this experiment’s design…”* This tests their ability to guide the AI with context.
24. **Multi-turn interaction:** Challenge them to carry out a longer conversation with the AI on a single topic, mimicking a deep dive. For instance, iteratively refine a research question: *First ask:* “What are some potential causes of [phenomenon]?” *then follow-up:* “Which of those causes could be tested with a field experiment?” and so on. The goal is to see how the AI can help **iteratively** develop an idea.
25. **Share back:** If someone tries the advanced prompt, have them share the outcome with the group during the discussion. It could inspire others and show the flexibility of the tool. Ensure those who are newer don’t feel left behind – frame these as *future possibilities* for everyone as they gain more practice.
26. **Group Discussion and Reflections (1:15 – 1:30)** – **Interactive Wrap-up:** Bring everyone back together to discuss what they learned and discovered:
27. **Prompt reflection:** Pose questions like *“How did the AI’s responses compare to what you expected?”* or *“Can you see yourself using this tool in your research routine? In what ways?”* This encourages participants to articulate the value they found (or concerns they have).
28. **Address challenges:** Some may note issues (e.g. “The AI gave an incorrect fact about X” or “It took a long time to generate Y”). Acknowledge these honestly. Explain that current open models may have knowledge cutoffs or require patience for complex tasks. However, improvements are constantly coming. Reinforce any positive surprise that was mentioned, e.g., *“One student said the AI offered a fresh perspective on a project – that’s exactly the kind of insight we hoped for!”*
29. **Conscious competence ladder:** If appropriate, briefly revisit the skill development model. Ask who now feels more confident using an AI tool like this (many hands will likely go up). Note that earlier, many didn’t know what to expect – now they at least know how to use it and *what* it can do. Encourage them to continue practicing to move toward mastery (comfortably using AI without second-guessing at every step).
30. **Research ethics note:** As a responsible aside, remind them that any AI output used in serious research should be verified and credited appropriately. This is a short mention to instill good habits (for example, if the AI helped draft a paragraph, they should fact-check it or cite sources for any data it provided). This keeps the excitement grounded in scholarly practice.
31. **Conclusion and Next Steps (1:30 – 1:40)** – **Looking Ahead:** Thank everyone for their participation and summarize the session’s key points:
32. **Recap highlights:** *“Today we saw how OpenWebUI can* *summarize complex text, answer questions, and even brainstorm ideas. The best part: it ran locally, giving us quick answers without any cloud service.”* Maybe quote the blog example: *Even a fairly large task was accomplished* *entirely on a personal machine with one GPU* *– which is pretty impressive*[*[6]*](https://mguhlin.org/2025/03/18/exploring-ollama-and-open-webui-ai/#:~:text=In%20running%20Ollama%20with%20Open,See%20the%20reasoning%20below)[*[7]*](https://mguhlin.org/2025/03/18/exploring-ollama-and-open-webui-ai/#:~:text=or%20horrible,one%20GPU%2C%20well%2C%20that%E2%80%99s%20something)*!* This reiterates the power of having your own AI assistant.
33. **Open invitation:** Urge them to keep experimenting with OpenWebUI (or other AI tools). Suggest a simple assignment, e.g., *“Try using OpenWebUI this week to assist in one of your ongoing projects or classes. Note what it helps with and what its limits are.”* The goal is to maintain momentum.
34. **What’s next:** Create anticipation for Workshop 2. Explain that as more features become available or as they get more comfortable, future sessions will explore **advanced capabilities** of OpenWebUI. For instance, mention that OpenWebUI supports *Retrieval Augmented Generation (RAG)* – meaning it can be connected to personal documents or datasets to answer questions with real *private* data[[1]](https://docs.openwebui.com/#:~:text=Open%20WebUI). It’s also extensible with tools for research, creativity, even web search integration (turning it into a “powerful AI workstation” for academics)[[8]](https://github.com/Haervwe/open-webui-tools#:~:text=Open%E2%80%91WebUI%20Tools%20is%20a%20modular,multimodal%20creativity%2C%20workflows%2C%20and%20more). *“Imagine feeding it all your past research papers and having it answer questions or generate literature reviews – that’s where we’re headed!”* By teasing these features (without delving into technicalities now), you leave them excited about the possibilities and eager to attend the next workshop.
35. **Closing thought:** End on an encouraging note about the evolving role of AI. For example: *“AI won’t replace researchers, but researchers who leverage AI can achieve more, faster. Think of OpenWebUI as a smart collaborator ready to assist you any time.”* Thank the group and ensure they know how to reach you or the community (maybe mention OpenWebUI’s Discord or forums) if they have questions as they continue exploring.

## Tips for a Successful Session

* **Foster excitement and curiosity:** Your enthusiasm is contagious. Celebrate interesting AI outputs with the group. Even if some answers are imperfect, frame them as *“interesting attempts”* or use humor to keep the mood positive.
* **Hands-on focus:** Make sure *at least 50%* of the session is participants actively using the tool. People learn best by doing, and their excitement will grow when they see the AI respond to *their own* queries.
* **Time management:** Keep an eye on the clock, especially during exercises. It’s easy for one demonstration to run long if the AI output is lengthy – be ready to summarize or cut off to stay on track. Conversely, if participants are deeply engaged in the hands-on portion, it’s okay to adapt and give them a few extra minutes, trimming less critical parts.
* **Adapt to skill levels:** If you notice many absolute beginners, you might slow down and explain terms (like “LLM” or “prompt”) the first time you use them. If several experienced users are present, leverage them – e.g., *“I know some of you have used ChatGPT; feel free to share how this compares or any tips you have.”* This makes the experienced ones feel valued and the newbies get additional perspectives.
* **Encourage exploration beyond class:** Provide resources for self-study. You can share links to OpenWebUI’s documentation or community forums, and perhaps a list of other free AI tools (for instance, a link to the Open WebUI Tools GitHub to show what’s possible in the future[[8]](https://github.com/Haervwe/open-webui-tools#:~:text=Open%E2%80%91WebUI%20Tools%20is%20a%20modular,multimodal%20creativity%2C%20workflows%2C%20and%20more)[[9]](https://github.com/Haervwe/open-webui-tools#:~:text=Transform%20your%20Open%20WebUI%20instance,to%20extend%20your%20AI%20capabilities)). Knowing there’s a support community and further learning materials will help sustain their interest after the workshop.
* **Stay updated:** Between now and the next workshop, keep an eye on new OpenWebUI features or improvements. The AI field moves fast. By Workshop 2, you might have new tricks to show (and participants might come back with new questions). Being up-to-date ensures you can address those and maintain credibility as the instructor.

## Conclusion

Delivering this workshop should be an **exciting journey** for both you and the participants. By starting with the basics and gradually building their confidence, you’re helping researchers and students become proficient with AI tools – a skill that is increasingly important in modern research. Today’s session is just the beginning. With OpenWebUI’s robust foundation and extensibility, each new feature or tool you introduce in future sessions will further amplify what they can do. Remind them that they are early adopters of a powerful technology. As one user noted after trying OpenWebUI on their own data, *“the result was surprisingly good… the fact that it worked entirely on my machine… that’s something.”*[[6]](https://mguhlin.org/2025/03/18/exploring-ollama-and-open-webui-ai/#:~:text=In%20running%20Ollama%20with%20Open,See%20the%20reasoning%20below)[[7]](https://mguhlin.org/2025/03/18/exploring-ollama-and-open-webui-ai/#:~:text=or%20horrible,one%20GPU%2C%20well%2C%20that%E2%80%99s%20something) This sense of **possibility** is what you want everyone to walk away with.

By following this guide and adapting it to your audience, you can run a compelling two-hour session that not only **teaches** the basics of OpenWebUI but also **inspires** a vision of how AI can transform their research work. Good luck with your presentation, and enjoy the discoveries you and your participants will make together!

[[1]](https://docs.openwebui.com/#:~:text=Open%20WebUI) [[4]](https://docs.openwebui.com/#:~:text=Both%20commands%20facilitate%20a%20built,everything%20up%20and%20running%20swiftly) Home | Open WebUI

<https://docs.openwebui.com/>

[[2]](https://openwebui.com#:~:text=Join%20our%20community%20,free%21%20258K%2B%20users%20unlocked%20already) Open WebUI

<https://openwebui.com>

[[3]](https://www.youtube.com/watch?v=4qrVoMx4UV8#:~:text=%28kinda%29%20www,good%20research%E2%80%94just%20the%20right) Deep Research for FREE: Open-WebUI can already do it (kinda)

<https://www.youtube.com/watch?v=4qrVoMx4UV8>

[[5]](https://github.com/Haervwe/open-webui-tools#:~:text=%EF%B8%8F%20Tools) [[8]](https://github.com/Haervwe/open-webui-tools#:~:text=Open%E2%80%91WebUI%20Tools%20is%20a%20modular,multimodal%20creativity%2C%20workflows%2C%20and%20more) [[9]](https://github.com/Haervwe/open-webui-tools#:~:text=Transform%20your%20Open%20WebUI%20instance,to%20extend%20your%20AI%20capabilities) GitHub - Haervwe/open-webui-tools: Open‑WebUI Tools is a modular toolkit designed to extend and enrich your Open WebUI instance, turning it into a powerful AI workstation. With a suite of over 15 specialized tools, function pipelines, and filters, this project supports academic research, agentic autonomy, multimodal creativity, workflows, and more

<https://github.com/Haervwe/open-webui-tools>

[[6]](https://mguhlin.org/2025/03/18/exploring-ollama-and-open-webui-ai/#:~:text=In%20running%20Ollama%20with%20Open,See%20the%20reasoning%20below) [[7]](https://mguhlin.org/2025/03/18/exploring-ollama-and-open-webui-ai/#:~:text=or%20horrible,one%20GPU%2C%20well%2C%20that%E2%80%99s%20something) Exploring Ollama and Open WebUI #AI – Another Think Coming

<https://mguhlin.org/2025/03/18/exploring-ollama-and-open-webui-ai/>