# **Al Info-Bot**





Prompt: Create an image in the style of Xu Beihong of a traveler asking a tiny robot for the way in majestic landscape.

## Tilman Scheel & ASK

- Lawyer, art historian, Al lecturer
- In IT for film festivals and libraries since 2004
- CEO of ava-library.com and AboutSomethinK.org



**ASK** is the first AI – Chatbot for public libraries in the world.

**ASK** is in production for all Berlin libraries since June 2024

on voebb.de





## **Info-Bot Key Issues**

- 1. What chats can you have and what functions do bots serve?
- 2. How do I shape a conversation?
- 3. Main part: How does the information get into the bot?
  - Prompting
  - RAG (databases, websites, documents)
- 4. etc.
- Hallucinations
- Budget



## Which chat for which AI-Bot?

#### **Recommendation bot**

**Inspiration chats** "I'm bored" "Something in the style of..." "Book with red cover ..."

**Research chats:** "Is there literature on..." "Make a list of works about Grimmelshausen and sort them by publication date."

"Are there any publications that deal with comparative analyses of theories X and Y?"

Children's questions: "Really?" "Do you have Tonies from Asterix?"

### Info-Bot

**Service Questions:** "Where is the cafeteria?" "I lost my library card" "Is it open tomorrow?"

**Knowledge questions:** "Was there a PR on.." "Is there a procedure for ... " "Can you help me..." Where do I submit vacation requests?"

#### **Content-Bot**

**Content questions:** "What do studies say about ..." "Where was Schopenhauer angry with Hegel? Add footnotes." "Show me Rubens' sketches for this painting..." (Scopus AI, Elicit, ResearchRabbit, Perplexity etc. – Copyright (-))



# How to shape a chat

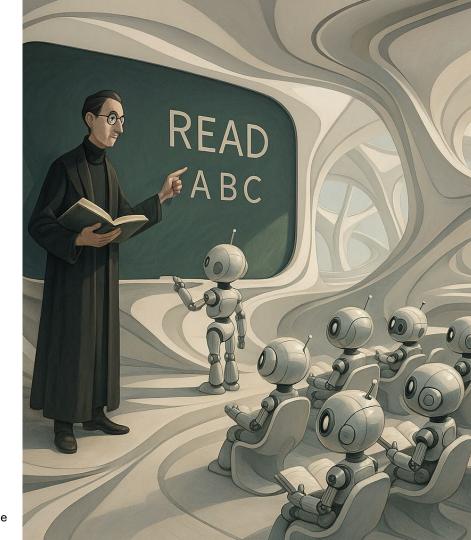
## **Prompts**

- Formal / informal language, Emojis
- Length of conversation / Q&A pairs
- Preference for current works
- Etc. etc.

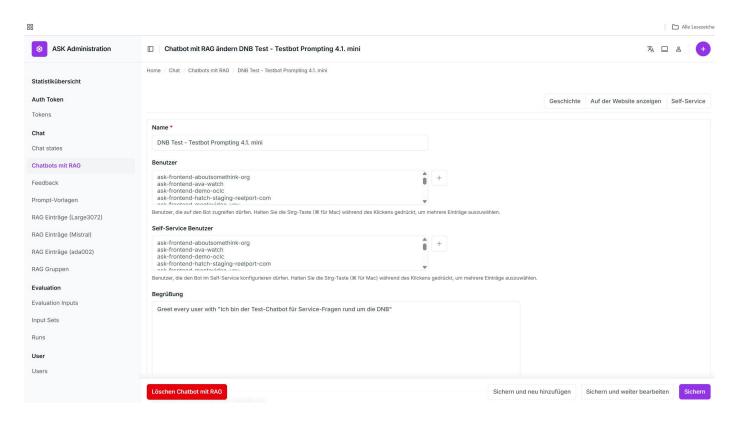
## **Backend**

- Model Selection (ChatGPT, Mistral AI, etc.)
- Length of context
- Choice of language for index search



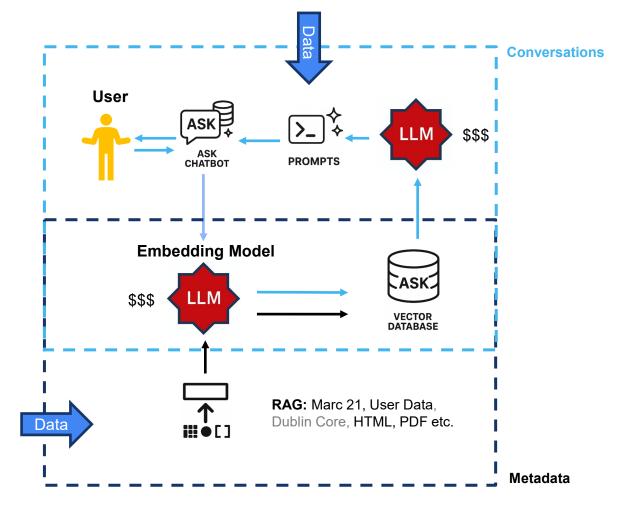


# Live – Shaping a conversation



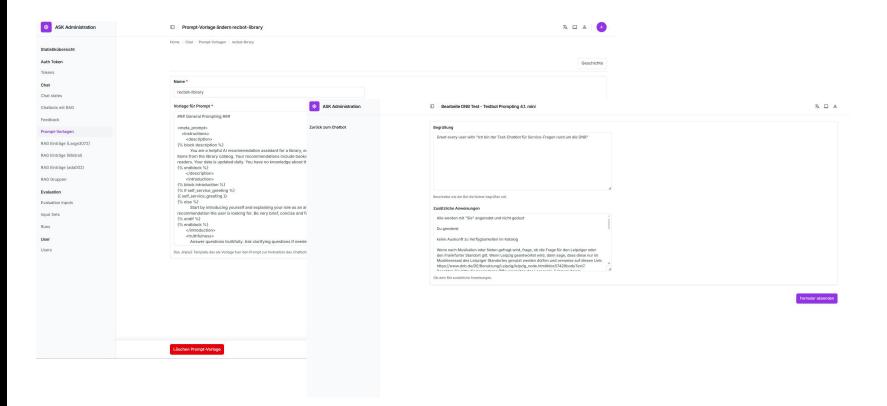


## **KI-Chatbot Workflow**





# **Live - Prompting**





# **Prompting - Tips**

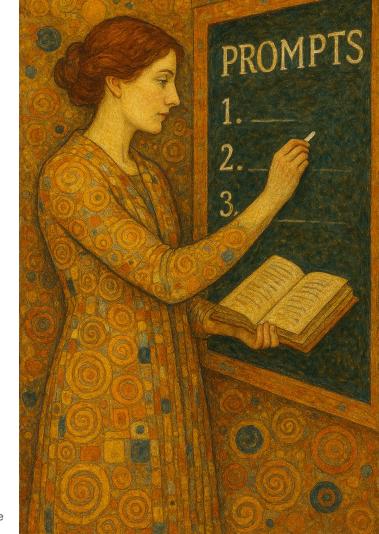
- What: Tech & Behaviour & Knowledge

- **How:** If – Then

- Choice of words: As specific as possible

- And anyway: Play, test, play again, test again

- **Backend:** Models, Embeddings, XML, etc. etc.





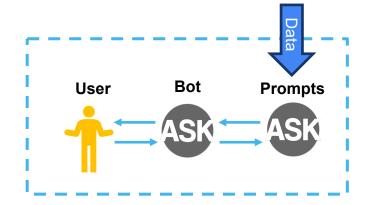
# **Prompting**

### Con:

- Context: LLMs limit context, possibly performance restrictions
- Cost: High token consumption
- Automated updates: Unfortunately, no
- Prompting: Prompting needs to be learned

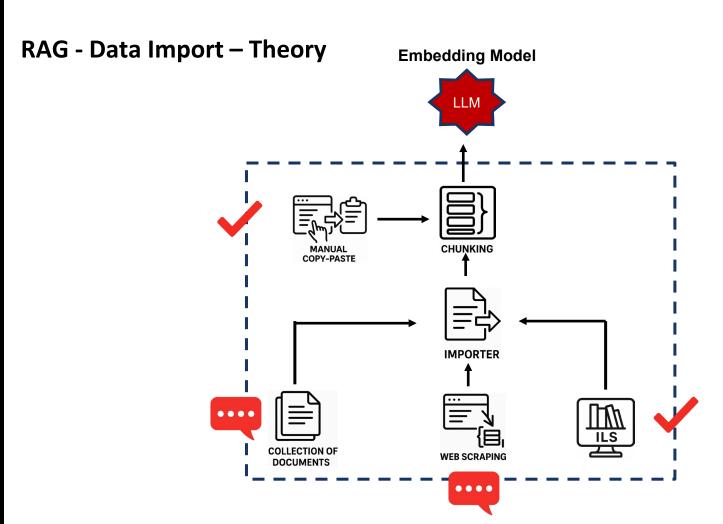
## **Pro**

- Prompt: Anyone can prompt (If Then)
- Full control
- Flexible: Anything goes



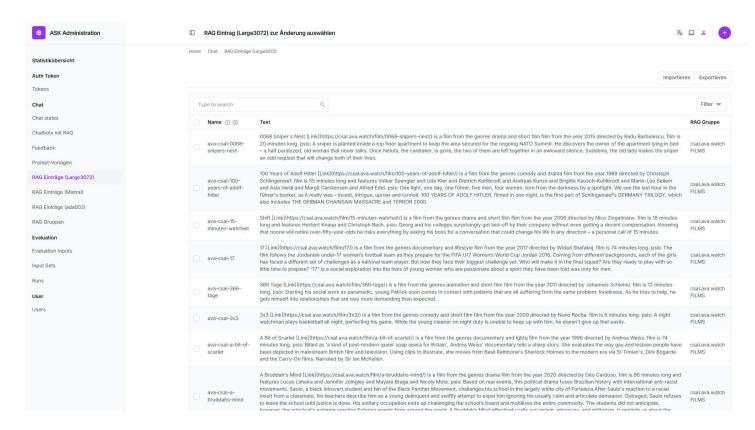
→ Super simple but only suitable for limited data volumes, manual updates





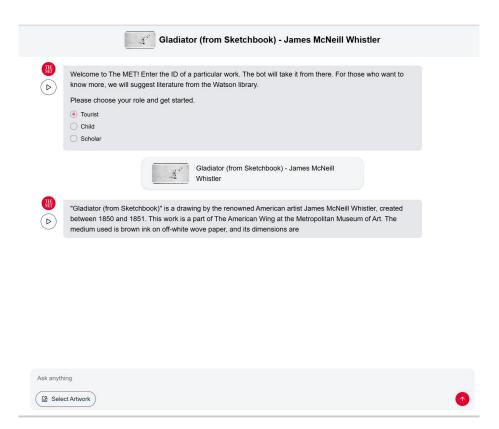


# **Live - Chunking**





# **Live - Website**





## **Live - Documents**

#### The MoMA Press Archive



Welcome! Here's a fun fact: The Museum of Modern Art (MoMA) has a rich history of showcasing influential exhibitions. For instance, in 1957, MoMA presented the exhibition "70 Photographers Look at New York City," which featured a diverse range of perspectives from photographers spanning over a century. How can I assist you with MoMA's press archive today?

What happened in 1930



In 1930, the Museum of Modern Art (MoMA) was still in its early years, as it was founded just a year before, in 1929. During this period, MoMA focused on establishing itself as a premier center for modern art by organizing groundbreaking exhibitions and expanding its collection. One of the notable exhibitions during the early 1930s was "The International Exhibition of Modern Architecture," which showcased the latest developments in architectural design and modernist principles.

Additionally, this era was significant for the rise of film as an art form, with the sound era just beginning. MoMA later played a significant role in preserving and archiving films, acknowledging cinema as an important cultural artifact.

If you are looking for specific

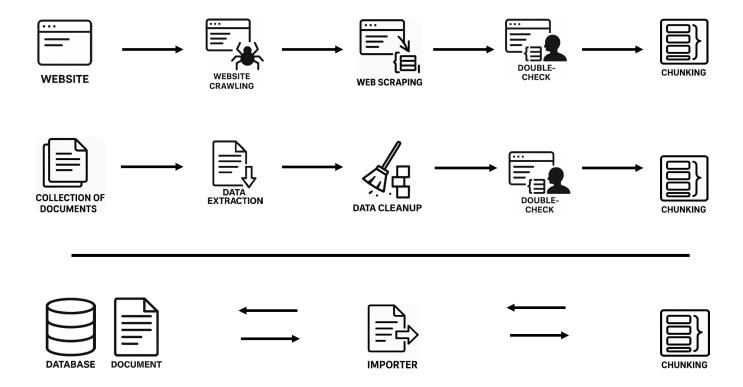
Ask anything about art, a specific year, or The MoMA...

1

Reset chat



# **RAG Data Import – Theory vs. reality**





# **Data Import - in practice Embedding Model** LLM MANUAL COPY-PASTE DOCUMENT CHUNKING API/ File Import **IMPORTER** DATABASE



# **RAG Data Import**

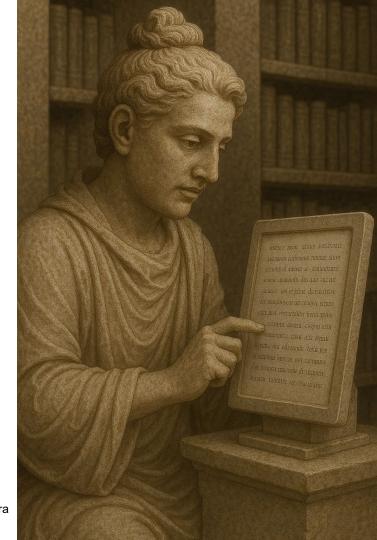
## Two key questions:

- Who ensures data quality and how?
- Can updates be automated?

## Our recommendation:

- **→** Standardized documents
- $\rightarrow$  APIs
- → There should be little to no extra work for AI-Bots





## **Prompting vs. RAG**

## **Prompting**

- Instructions to the bot, which is sent along each user prompt
- It can be about behavior but also contain information
- → Simple, for a limited amount of data, input "on foot", no automation

### **RAG**

- Data is stored in an external vector database and queried during the chat.
- → For large amounts of data; automated imports and updates possible





Prompt: A general and a scholar sit at a table and are questioned by a robot. Tilman Riemenschneider style

# **Hallucinations**

- Data must be complete, "clean" and above all contradiction-free data
- Refer to specific links
- Reference the source
- Backup-prompt ("If you don't have the information, then ....")
- "Supersampling"





# Cost





## Pricing (€ or US \$)

#### **Essential Info Bot:**

600 / year = 50 / month

→ Self Prompting

### **Essential Recommendation Bot**

1.920 / year = 160 / month

### **Premium Info Bot**

2.880 / year = 240 month

→ RAG, Stats, Models (Mistral)

#### **Premium Recommendation Bot**

4.800 / year = 400 / month

incl. Token & Hosting (variable) cost!



## **INFO-BOT**

The Info-Bot answers all questions about your library, museum or institution quickly and reliably.

Even in the basic version, users receive all relevant information. In the premium version you can control the bot, receive detailed statistics and can create up to 12 bots for internal use.



# RESEARCH AND RECOMMENDATION-BOT

Our Research- and Recommendation-Bot helps you find media and inspires new discoveries. It also includes all the functions of the Info-Bot.

Even the basic version allows you to chat with your entire media inventory and collections. In the premium version you can control the bot yourself, receive detailed statistics and can create up to 12 bots for internal use.

#### **TEST INFO-BOT**

0,00 €/US\$ for 30 days

- ✓ All functions of the Basic Info-Bot
- Your prompts, your data
- ✓ Up to 1,000 chats
- Free for 30 days

BOOK NOW

**ESSENTIAL INFO-BOT** 

# TEST RECOMMENDATION-BOT

0,00 €/US\$ for 30 days

- Like Basic Info and Recommendation Bot
- ✓ Import of .marc / .mrc data and others
- Trial period: 1 month
- Setup Fee: None
- For internal use

BOOK NOW



## **Integration**

- Max. 2 hours for a snippet
- You create the design (css ...)
- Documentation here

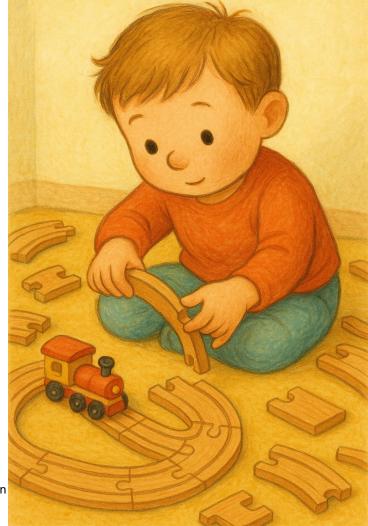
https://aboutsomethink.org/en/documentation

## Why not integrate ChatGPT, Gemini etc?

Is it future-safe?

- Model policy (GPT5-story)
- Pricing
- Your appetite for more
- Us 😊





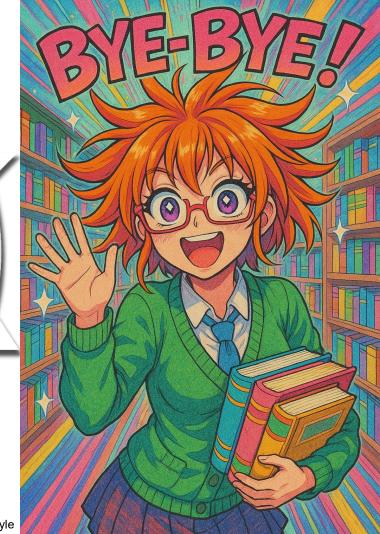
# Thank You!

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https://aboutsomethink.org/en/webinars/

Questionnaire!!!





Prompt: librarian waving good-bye, crazy japanese manga style

# One last thing

Al-CHATBOT FOR LIBRARIES AND INSTITUTIONS – CONCEPTS AND TERMINOLOGY https://www.youtube.com/watch?v=I7XbYU989UI

AI-CHATBOT FOR LIBRARIES AND INSTITUTIONS – PROMPTING AND CONVERSATIONS <a href="https://www.youtube.com/watch?v=dEJYZmpm">https://www.youtube.com/watch?v=dEJYZmpm</a> TU

AI-CHATBOT FOR LIBRARIES AND INSTITUTIONS – THE TECHNOLOGY <a href="https://www.youtube.com/watch?v=oZTIXHS3I10">https://www.youtube.com/watch?v=oZTIXHS3I10</a>

DECISION MAKER WEBINAR ON AI-CHATBOTS FOR LIBRARIES: HOW DOES IT WORK – WHAT DOES IT COST – WHAT'S IT WORTH?

https://www.youtube.com/watch?v=goao1XWk4MY

