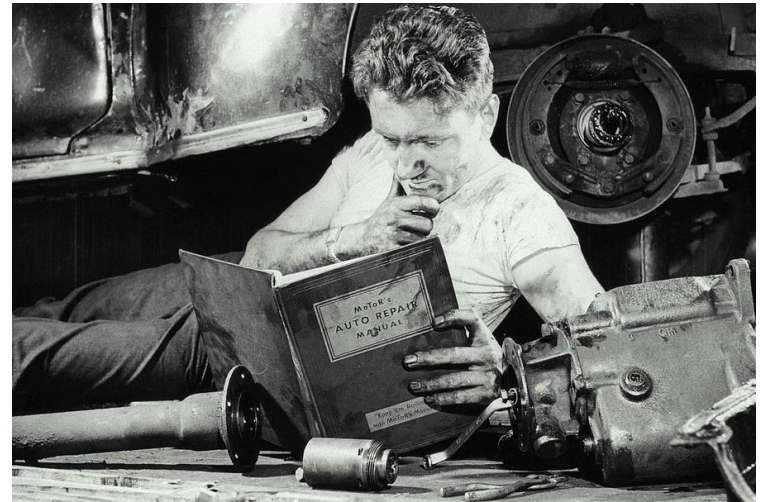


# Demo day - MechAlnic

**Problem?** Mechanics nowadays handles lot of different vehicles.

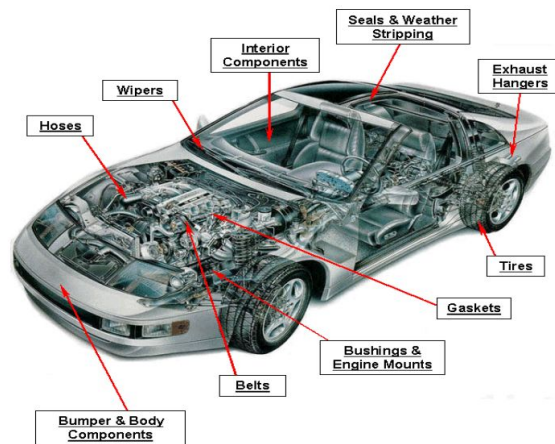
- Requires research
- Need to step back from doing repairing
- instead go look for information like searching in auto repair manuals



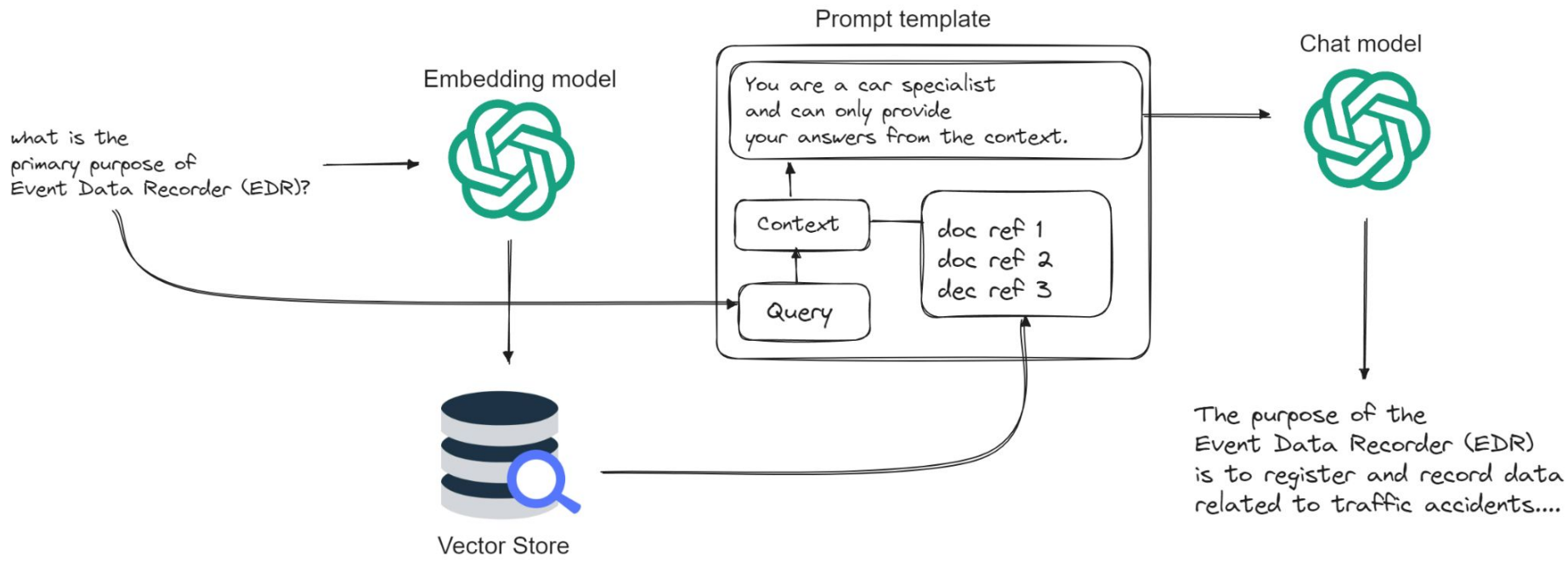
Source: <https://shorturl.at/hnGPT>

# Solution - Make use of a rag system and assistant/tooling

- Use a RAG system to prompt about certain vehicles.
  - repair manuals.
  - manufactures – car parts (experiment)
    - look up Car parts availability
    - order parts



Source: <https://shorturl.at/tZ258>



## Process

Documents



chunk size  
documents



Embedding model

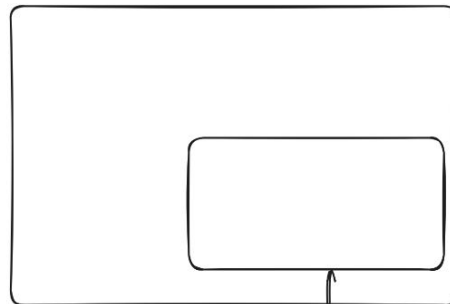


text-embedding-3-small



Pinecone

prompt template



Chat model



ChatGPT 3.5 Turbo

Answer



# So how would mecAlnic look like in practice?

## Welcome to mecAlnics

Here you can search information about cars!

Try it out!

# What is the next step?

- Validating the mechAInic RAG system
  - How well does the MecAInic RAG perform on question answering?
- Experiment with using assistants and see how that fit in with the RAG system

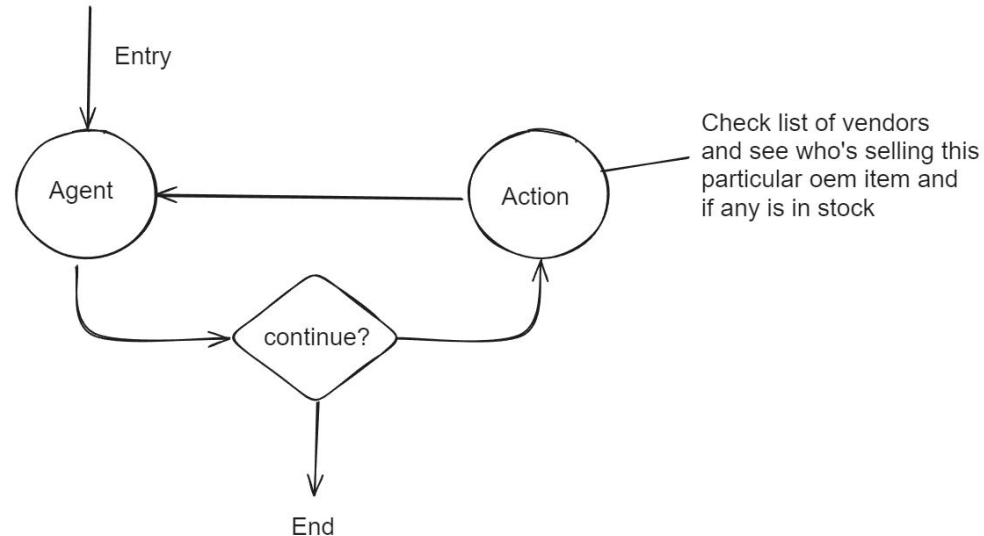


# Mecainic RAG evaluation - e167f2f0

Input	Reference Output	#1 Mecainic RAG evaluation - e167f2f0 →
<p>question: how do you manage the centre display?</p> <p>#3a5f @ Mecainic -evaluation dataset 6d686d39</p>	<p>must_contain:</p> <ul style="list-style-type: none"> <li>- centre display</li> <li>- display</li> </ul>	<p>response:</p> <p>content: To manage the centre display, you can control and regulate many of the car's functions through the touch screen interface. The screen reacts differently to actions like dragging, swiping, or tapping. You can interact with the screen using gestures like pressing once to highlight an object, pressing twice to zoom in, and pressing and holding to grab and move objects. Additionally, messages in the centre display can inform or assist the driver, with some requiring acknowledgment or action before they disappear.</p> <p>additional_kwargs: {}</p> <p>response_metadata:</p> <p>token_usage:</p> <p>completion_tokens: 94</p> <p>prompt_tokens: 1100</p> <p>total_tokens: 1194</p> <p>model_name: gpt-3.5-turbo</p> <p>system_fingerprint: fp_3bc1b5746c</p> <p>finish_reason: stop</p> <p>logprobs: null</p> <p>type: ai</p> <p>CORRECTNESS → COT CONTEXTUAL ACCURACY → HELPFULNESS → Show 1 more...</p> <p>4.08s SUCCESS 1,194 Open Run</p>
<p>question: how do I adjust the door mirrors?how do I lower the backrests in the rearseat?how do I lock and unlock the car?what is a care key?</p> <p>#429b @ Mecainic -evaluation dataset 6d686d39</p>	<p>must_contain:</p> <ul style="list-style-type: none"> <li>- door mirrors</li> <li>- door</li> <li>- mirrors</li> </ul>	<p>To change the setting for retractable rearview</p> <p>mirrors* when locking:</p> <p>1.Tap on Settings in the centre display's top view.</p> <p>2. Press My Car Mirrors and Convenience .</p> <p>3.Select Fold Mirror When Locked to activate or deactivate the function.</p> <p>CORRECTNESS → COT CONTEXTUAL ACCURACY → HELPFULNESS → MUST_CONTAIN : 0 Show less</p> <p>5.76s SUCCESS 1,871 Open Run</p>
<p>question: what is the primary purpose of Event Data Recorder?</p>	<p>must_contain:</p> <ul style="list-style-type: none"> <li>- EDR</li> </ul>	<p>The driver's use of the accelerator or brake pedal</p> <p>The travel speed of the vehicle</p> <p>CORRECTNESS → COT CONTEXTUAL ACCURACY → HELPFULNESS → MUST_CONTAIN : 0 Show less</p> <p>4.08s SUCCESS 1,871 Open Run</p>

## Experiment - car parts availability & order?

So what is the order time for  
taillight part number 102345...





That's it folks! Thanks for listening!

