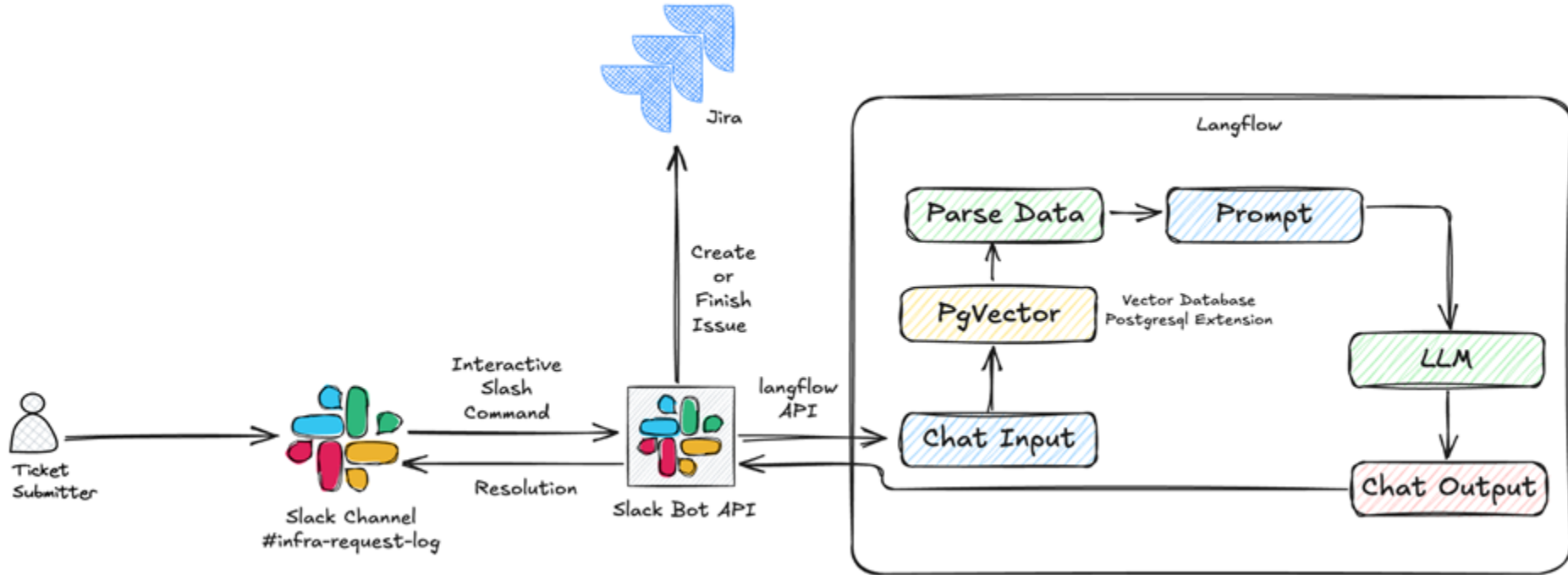


Ticketing System using slack, LLM & Langflow



The Goals

...

Speed up ticket resolution with AI

Reduce team workload and boost focus

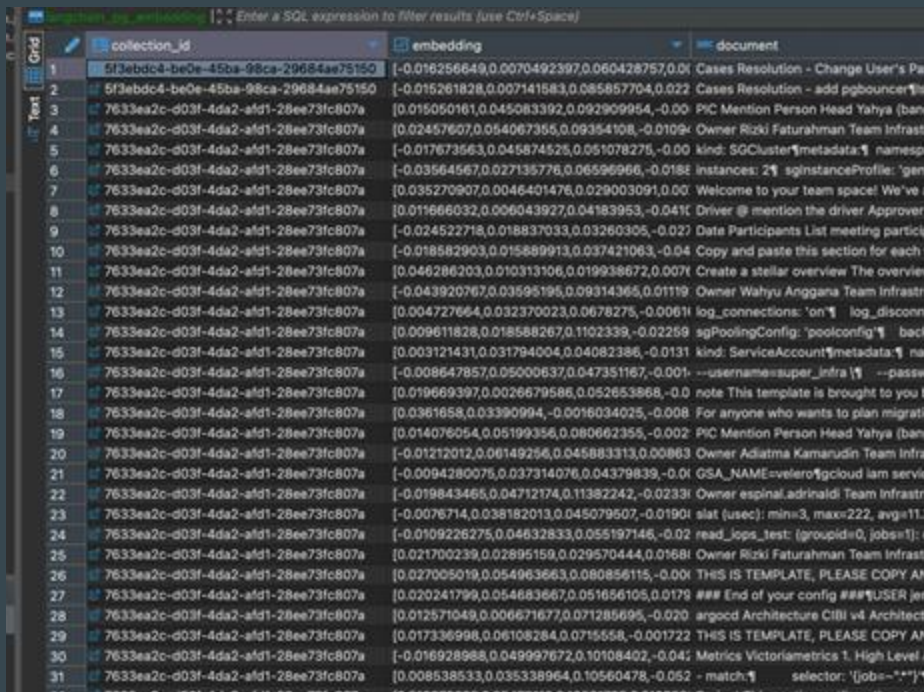
Improve response times and efficiency

Automate repetitive tasks using RAG

Leverage past solutions for faster fixes

Scale support for growing ticket volumes

Vector Store on PgVector

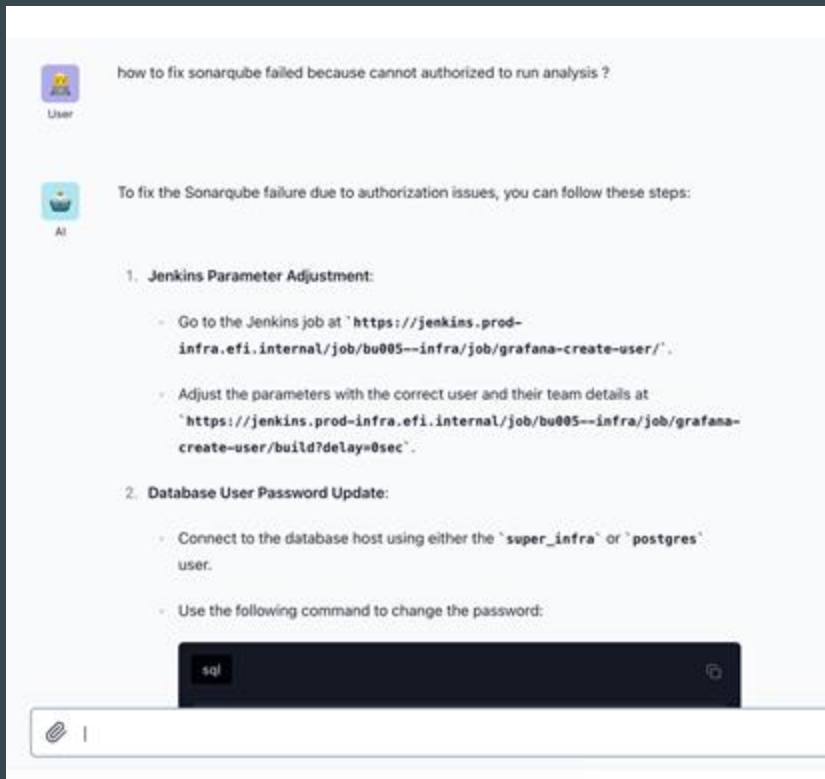


The screenshot shows a PgVector database query result. The table has three columns: collection_id, embedding, and document. The data is displayed in a grid format with row numbers 1 through 31. The embedding column contains long hexadecimal strings, and the document column contains text snippets related to system logs and user interactions.

	collection_id	embedding	document
1	5f3ebdc4-be0e-45ba-98ca-29684ae75150	[-0.016256649,0.0070492397,0.060428757,0.01...	Cases Resolution - Change User's Pa
2	5f3ebdc4-be0e-45ba-98ca-29684ae75150	[-0.015261828,0.007141583,0.085857704,0.022...	Cases Resolution - add pgbouncer's
3	7633ea2c-d03f-4da2-afd1-28ee73fc807a	[0.015050161,0.045083392,0.092909954,-0.00...	PIC Mention Person Head Yahya (ban
4	7633ea2c-d03f-4da2-afd1-28ee73fc807a	[0.02457607,0.054067355,0.09354108,-0.0109...	Owner Rizki Faturahman Team Infrastr
5	7633ea2c-d03f-4da2-afd1-28ee73fc807a	[-0.017673563,0.045874529,0.051078275,-0.00...	kind: SGCuster*metadata:{"namesp
6	7633ea2c-d03f-4da2-afd1-28ee73fc807a	[-0.03564567,0.027135776,0.06596966,-0.018...	Instances: 2* sginstanceProfile: 'gen
7	7633ea2c-d03f-4da2-afd1-28ee73fc807a	[0.035270907,0.0046401476,0.029003091,0.00...	Welcome to your team space! We've
8	7633ea2c-d03f-4da2-afd1-28ee73fc807a	[0.011666032,0.006043927,0.04183953,-0.041...	Driver @ mention the driver Approver
9	7633ea2c-d03f-4da2-afd1-28ee73fc807a	[-0.024522718,0.018837033,0.03260305,-0.027...	Data Participants List meeting partici
10	7633ea2c-d03f-4da2-afd1-28ee73fc807a	[-0.018582903,0.015889913,0.037421063,-0.04...	Copy and paste this section for each
11	7633ea2c-d03f-4da2-afd1-28ee73fc807a	[0.046286203,0.010313106,0.019938672,0.0071...	Create a stellar overview The overview
12	7633ea2c-d03f-4da2-afd1-28ee73fc807a	[-0.043920767,0.03595195,0.09314365,0.01119...	Owner Wahyu Anggana Team Infrastr
13	7633ea2c-d03f-4da2-afd1-28ee73fc807a	[0.004727664,0.032370023,0.0678275,-0.00611...	log_connections: 'on' log_disconn
14	7633ea2c-d03f-4da2-afd1-28ee73fc807a	[0.009611828,0.018588267,0.1102339,-0.02259...	sgPoolingConfig: 'poolconfig' back
15	7633ea2c-d03f-4da2-afd1-28ee73fc807a	[0.003121431,0.031794004,0.04082386,-0.0131...	kind: ServiceAccount*metadata:{"na
16	7633ea2c-d03f-4da2-afd1-28ee73fc807a	[-0.008647857,0.05000637,0.047351167,-0.001...	--username=super_infra {"* --passw
17	7633ea2c-d03f-4da2-afd1-28ee73fc807a	[0.019669397,0.0026679586,0.052653868,-0.0...	note This template is brought to you t
18	7633ea2c-d03f-4da2-afd1-28ee73fc807a	[0.0361658,0.03390994,-0.0016034025,-0.008...	For anyone who wants to plan migrati
19	7633ea2c-d03f-4da2-afd1-28ee73fc807a	[0.014076054,0.05199356,0.080602355,-0.002...	PIC Mention Person Head Yahya (ban
20	7633ea2c-d03f-4da2-afd1-28ee73fc807a	[-0.01212012,0.06149256,0.045883313,0.00863...	Owner Adiatma Kamarudin Team Infra
21	7633ea2c-d03f-4da2-afd1-28ee73fc807a	[-0.0094280076,0.037314076,0.04379839,-0.01...	GSA_NAME=velero*gccloud iam servic
22	7633ea2c-d03f-4da2-afd1-28ee73fc807a	[-0.019843465,0.04712174,0.11382242,-0.0233...	Owner espinal.adrinaldi Team Infrastr
23	7633ea2c-d03f-4da2-afd1-28ee73fc807a	[-0.0076714,0.038182013,0.045079507,-0.0190...	slat (usec): min=3, max=222, avg=111
24	7633ea2c-d03f-4da2-afd1-28ee73fc807a	[-0.0109226275,0.04632833,0.055197146,-0.02...	read_lops_test: {groupid=0, jobs=1}: {
25	7633ea2c-d03f-4da2-afd1-28ee73fc807a	[0.021700239,0.02895159,0.029570444,0.01681...	Owner Rizki Faturahman Team Infrastr
26	7633ea2c-d03f-4da2-afd1-28ee73fc807a	[0.027005019,0.054963663,0.080856115,-0.001...	THIS IS TEMPLATE, PLEASE COPY AN
27	7633ea2c-d03f-4da2-afd1-28ee73fc807a	[0.020241799,0.054683667,0.051656105,0.0179...	### End of your config ###USER jer
28	7633ea2c-d03f-4da2-afd1-28ee73fc807a	[0.012571049,0.006671677,0.071285695,-0.020...	argood Architecture CIBI v4 Architect
29	7633ea2c-d03f-4da2-afd1-28ee73fc807a	[0.017336998,0.06108284,0.0715558,-0.001722...	THIS IS TEMPLATE, PLEASE COPY AN
30	7633ea2c-d03f-4da2-afd1-28ee73fc807a	[-0.016928988,0.049997672,0.10108402,-0.041...	Metrics Victoriametrics 1. High Level
31	7633ea2c-d03f-4da2-afd1-28ee73fc807a	[0.008538533,0.035338964,0.10560478,-0.052...	- match: selector: {jobs: ""}}

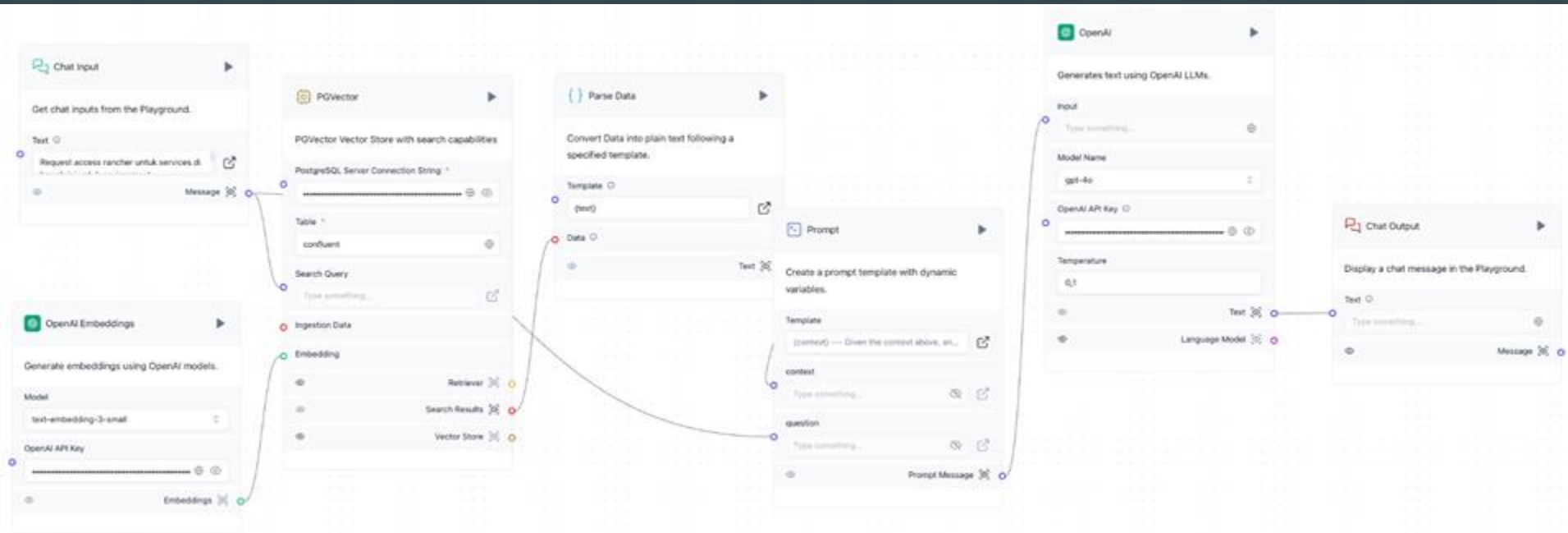
- The PGVector vector store is queried with an embedding of the input message to find similar request tickets in the vector store.
- Similar tickets are retrieved based on their proximity to the current query in the embedding space, leveraging semantic similarity.

The Results



- The prompt is fed to the OpenAI language model (gpt-4o) with a low temperature setting (0.1) to encourage more deterministic and precise responses.
- The language model generates a response based on the input query and the context derived from the retrieval process.
- Finally, the generated response is displayed in the chat playground to answer the original query.

Complete Flows using Langflow



How It Works

- Chat Input:
 - A query is received from the chat playground, containing a request or question from the user.
- Retrieve Similar Entries:
 - The PGVector vector store is queried with an embedding of the input message to find similar request tickets in the vector store.
 - Similar tickets are retrieved based on their proximity to the current query in the embedding space, leveraging semantic similarity.
- Parse Data:
 - The retrieved data is parsed into plain text, which is formatted using a predefined template.
- Prompt Creation:
 - A prompt is created that incorporates the retrieved context, providing additional information to the model.
 - This prompt includes relevant prior cases and resolutions to guide the language model's response.
- Language Model (OpenAI):
 - The prompt is fed to the OpenAI language model (gpt-4o) with a low temperature setting (0.1) to encourage more deterministic and precise responses.
 - The language model generates a response based on the input query and the context derived from the retrieval process.
- Chat Output:
 - Finally, the generated response is displayed in the chat playground to answer the original query.

Thanks!

Wahyu Anggana

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<https://github.com/k0wl0n>

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