

Twitter Sentiment Analyzer & Response Manager



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Motivation ?

Say I'm a brand, I want to track how people receive my products on Twitter

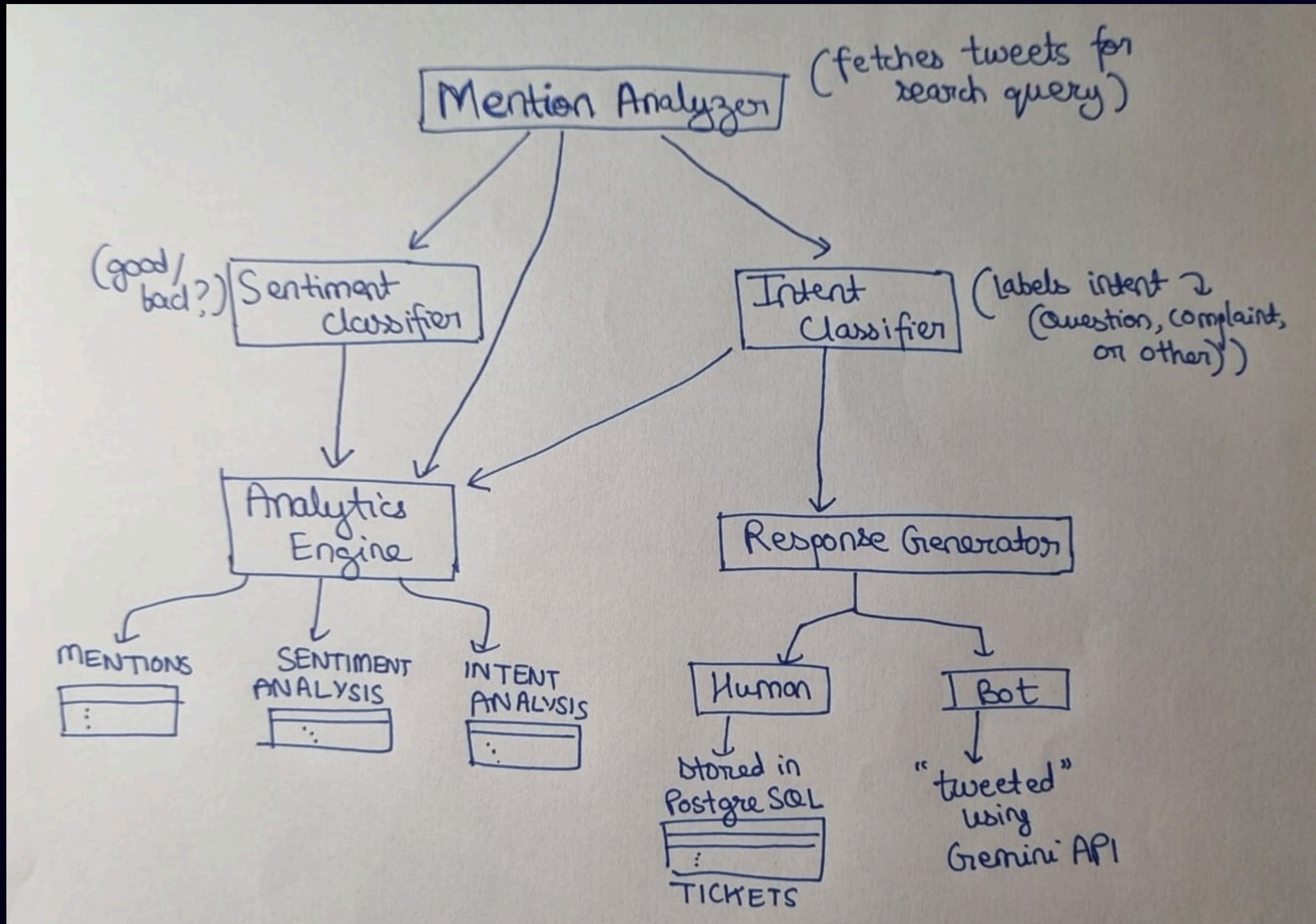
My brand image on Twitter matters

I need a way to quickly resolve easy to answer queries + complains that require human intervention

Search keyword - “gymshark”



Flow / Architecture



Microservices:

- mention analyzer
- sentiment classifier
- intent classifier
- response generator
- analytics engine

NLP Usage



Sentiment Analyzer



Intent Classifier

&

GenAI Usage



Automated Bot Responses

automated reply!

Gemini API bot
automatically replies to
bot type responses, i.e.
easy to handle replies



bhavya @bhavyaproably · 11m



Replying to @nizesec_ and @Gymshark

I understand your frustration trying to order the Onyx; please DM us details so we can help!



bhavya @bhavyaproably · 11m



Replying to @carlitosgct

We're so sorry you're having a frustrating day; please DM us details so we can help!



Ticket Support

Stores queries that need human attention/
bot can't answer

Support Tickets

	tweet_url	tweet_text	intent	status	created_at
10	https://x.com/yanitedseason/status/1920544011598561553	@Gymshark fix your shitty app. Its defo all sold out to scalpers ffs	question	open	2025-05-11 22:52:14
9	https://x.com/ImBaIL_/status/1920559318308372833	@itsofficialdamo @BenFrancis1992 @Gymshark If they weren't they should hand over th	complaint	open	2025-05-11 22:52:14
8	https://x.com/AetosMatzio/status/1920553129466069136	a whole hour, still can't access gymshark....just want to know how its all sold out already?	question	open	2025-05-11 22:52:14
7	https://x.com/ImBaIL_/status/1920559609938330079	@Hxzzaaa1 @Gymshark Because they have hyped this up for eons and can't even handle	question	open	2025-05-11 22:52:14
6	https://x.com/JoseLMinero/status/1920554763063562602	Can't add a single thing to my cart @Gymshark	complaint	open	2025-05-11 22:52:14
5	https://x.com/lolmachttoll/status/1920566598055739868	@Gymshark I'm sitting here with my brother for 2 hours i don't even know what I'm doing	complaint	open	2025-05-11 22:52:14
4	https://x.com/nizesec_/status/1920543418368803293	@Gymshark TAKE MY MONEY I ONLY WANT THE FUCKING ONYX PLEASSEE	complaint	open	2025-05-11 22:52:14
3	https://x.com/Shadow_Gaming7/status/1921317311090229391	@Gymshark My mental health will for be declining without an onyx 💔	complaint	open	2025-05-11 22:52:14
2	https://x.com/nizesec_/status/1920541349457076371	@Gymshark fix your site I want to get the fucking onyx so bad	question	open	2025-05-11 22:52:14

Product Analytics

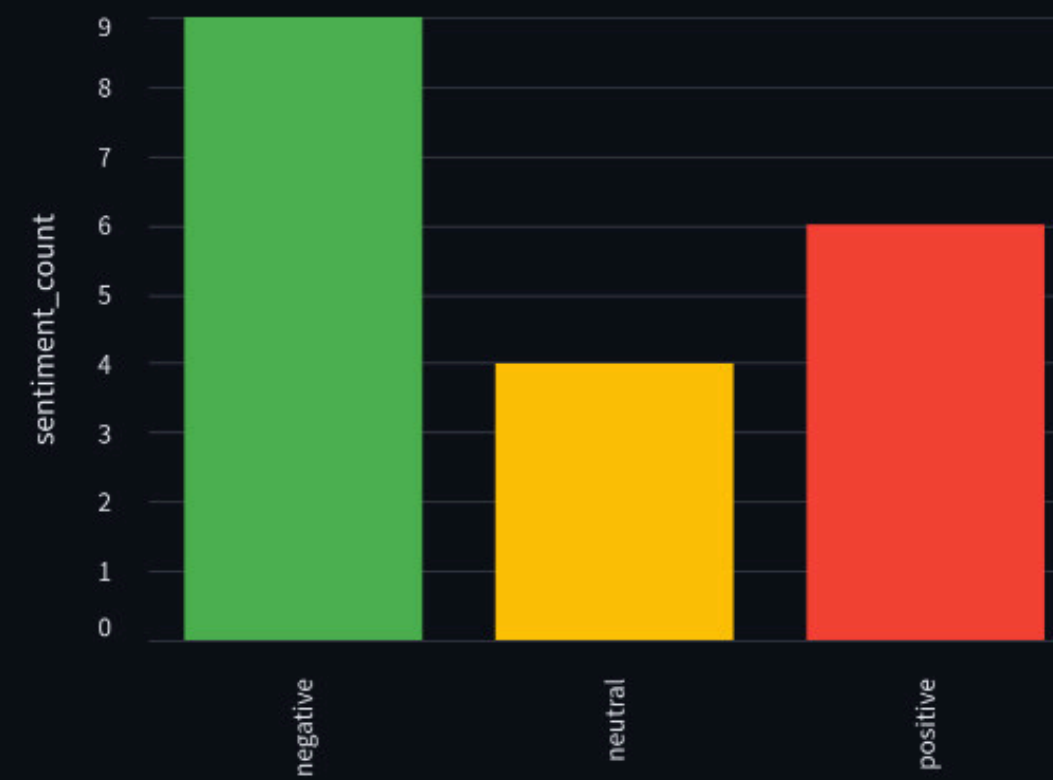
Everything a brand manager can ever want...

Social Media Analytics

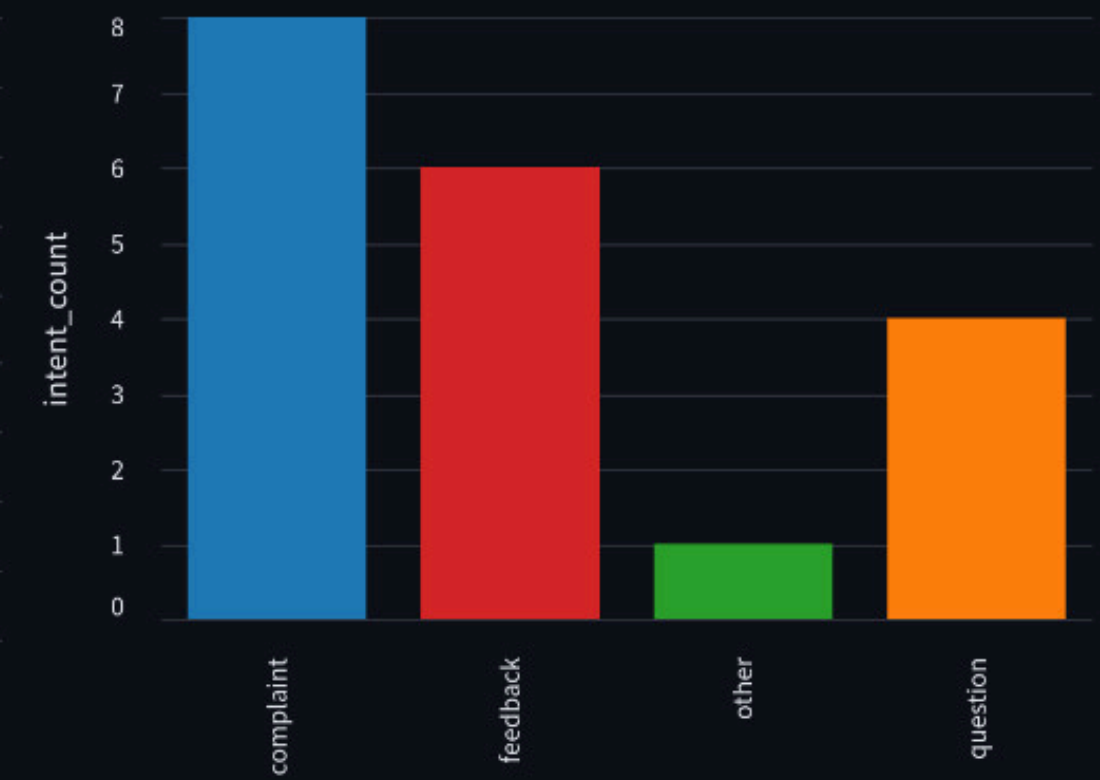
Mentions Over Time



Sentiment Distribution



Intent Distribution



Technologies Used

Code	JS
Test	Jest
Gen Ai	Gemini
Integrating microservices	Kafka
UI	Streamlit
Deployment	Google Cloud

Challenges faced

- Scraping Twitter (no access to API)
- Tokens Potential Expiration
- Integration with microservices (kafka)
- NLP based classifiers must be trained on good data
- Tweet text can be misleading (cannot trust 100%)