Setup and Installation

First install all the libraries mention in the requirements.txt . You can install it with pip install -r requirements.txt.

Make a .env file in the main directory along with requirements.txt. And paste the api keys use in the project I have given it below  
  
MONGODB\_URI=mongodb+srv://tusharkoshti01:9824243834@cluster0.frnytdq.mongodb.net/?retryWrites=true&w=majority&appName=Cluster0

GROQ\_API\_KEY=gsk\_wyNBDdJNCHIYGsThDSwlWGdyb3FYzBAjL01P8FlCNRDxGzDVMPFm

Then run the code with the command uvicorn app.main:app –reload. Insure you are in the project directory.

Then open the local host given in the terminal and open <http://127.0.0.1:8000/docs> and test api on that page.

API Example

Request:-

{

"platform": "Instagram",

"post\_text": "hi how are you"

}

Response:-

{

"\_id": "682ac0d043952022a513c429",

"platform": "Instagram",

"post\_text": "hi how are you",

"generated\_reply": "Hey! I'm doin' alright, just got back from a hike and trying to shake off the post-adventure caffeine crash 😊 How about you?",

"timestamp": "2025-05-19T05:25:36.857287Z"

}

Approach to make human like reply

I have integrate the grok model with api .

First we analyze the text emotion . Like exciting , casual etc.

Then I pre prompt the grok api with some text to make better human like reply.

I give the prompt with the platform to match platform humour. Like instagram and linkedin both have different humour place . So model reply on depending on platform too.

Architecture decisions

**Decision**: Use **Meta LLaMA 3 via Groq API**

**Groq provides free access (at time of writing)**

Fast, hosted inference with support for Meta's LLaMA 3 (8B, 70B)

**Alternatives considered: OpenAI GPT-3.5**