```python
import os

from swarms import Agent

from swarm_models import OpenAIChat

from swarms.structs.spreadsheet_swarm import SpreadSheetSwarm


# Define custom system prompts for each social media platform

TWITTER_AGENT_SYS_PROMPT = """
You are a Twitter marketing expert.


Your task is to create engaging, concise tweets and analyze trends to maximize engagement.


Consider hashtags, timing, and content relevance.
"""


INSTAGRAM_AGENT_SYS_PROMPT = """
You are an Instagram marketing expert. Your task is to create visually appealing and engaging
content, including captions and hashtags, tailored to a specific audience.
"""


FACEBOOK_AGENT_SYS_PROMPT = """
You are a Facebook marketing expert. Your task is to craft posts that are optimized for engagement
and reach on Facebook, including using images, links, and targeted messaging.
"""


EMAIL_AGENT_SYS_PROMPT = """
You are an Email marketing expert. Your task is to write compelling email campaigns that drive
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conversions, focusing on subject lines, personalization, and call-to-action strategies.
"""

Example usage:

api_key = os.getenv("OPENAI_API_KEY")

Model

model = OpenAIChat(

    openai_api_key=api_key, model_name="gpt-4o-mini", temperature=0.1

)

Initialize your agents for different social media platforms

agents = [

    Agent(

        agent_name="Twitter-Marketing-Agent",

        system_prompt=TWITTER_AGENT_SYS_PROMPT,

        llm=model,

        max_loops=1,

        dynamic_temperature_enabled=True,

        saved_state_path="twitter_agent.json",

        user_name="swarms_corp",

        retry_attempts=1,

        output_type=str,

        return_step_meta=False,

    ),

    Agent(

```python
        agent_name="Instagram-Marketing-Agent",

        system_prompt=INSTAGRAM_AGENT_SYS_PROMPT,

        llm=model,

        max_loops=1,

        dynamic_temperature_enabled=True,

        saved_state_path="instagram_agent.json",

        user_name="swarms_corp",

        retry_attempts=1,

        output_type=str,

        return_step_meta=False,

    ),

    Agent(

        agent_name="Facebook-Marketing-Agent",

        system_prompt=FACEBOOK_AGENT_SYS_PROMPT,

        llm=model,

        max_loops=1,

        dynamic_temperature_enabled=True,

        saved_state_path="facebook_agent.json",

        user_name="swarms_corp",

        retry_attempts=1,

        output_type=str,

        return_step_meta=False,

    ),

    Agent(

        agent_name="Email-Marketing-Agent",

        system_prompt=EMAIL_AGENT_SYS_PROMPT,
```

```python
        llm=model,

        max_loops=1,

        dynamic_temperature_enabled=True,

        saved_state_path="email_agent.json",

        user_name="swarms_corp",

        retry_attempts=1,

        output_type=str,

        return_step_meta=False,

    ),

]


# Create a Swarm with the list of agents
swarm = SpreadSheetSwarm(

    name="Social-Media-Marketing-Swarm",

    description="A swarm that processes social media marketing tasks using multiple agents on
different threads.",

    agents=agents,

    autosave_on=True,

    save_file_path="social_media_marketing_spreadsheet.csv",

    run_all_agents=False,

    max_loops=2,

)


# Run the swarm
out = swarm.run(

    task="Create posts to promote hack nights in miami beach for developers, engineers, and tech
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enthusiasts. Include relevant hashtags, images, and engaging captions."

)

print(out)