

```
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
```

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,
```

```
    ),
```

```
    Agent(
```

```
        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,  
),
```

```
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,  
),
```

```
Agent(  
    agent_name="Email-Marketing-Agent",  
    system_prompt=EMAIL_AGENT_SYS_PROMPT,  
    llm=model,  
    max_loops=1,  
    dynamic_temperature_enabled=True,  
    saved_state_path="email_agent.json",  
    user_name="swarms_corp",  
    retry_attempts=1,
```

```

    ),
]

# 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
enthusiasts. Include relevant hashtags, images, and engaging captions."
)

print(out)

```