

```
import uuid
```

```
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 specializing in real estate. Your task is to create engaging, concise tweets to promote properties, analyze trends to maximize engagement, and use appropriate hashtags and timing to reach potential buyers.

```
""
```

```
INSTAGRAM_AGENT_SYS_PROMPT = ""
```

You are an Instagram marketing expert focusing on real estate. Your task is to create visually appealing posts with engaging captions and hashtags to showcase properties, targeting specific demographics interested in real estate.

```
""
```

```
FACEBOOK_AGENT_SYS_PROMPT = ""
```

You are a Facebook marketing expert for real estate. Your task is to craft posts optimized for engagement and reach on Facebook, including using images, links, and targeted messaging to attract potential property buyers.

```
""
```

```
LINKEDIN_AGENT_SYS_PROMPT = ""
```

You are a LinkedIn marketing expert for the real estate industry. Your task is to create professional and informative posts, highlighting property features, market trends, and investment opportunities, tailored to professionals and investors.

"""

EMAIL_AGENT_SYS_PROMPT = """

You are an Email marketing expert specializing in real estate. Your task is to write compelling email campaigns to promote properties, focusing on personalization, subject lines, and effective call-to-action strategies to drive conversions.

"""

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-RealEstate-Agent",

system_prompt=TWITTER_AGENT_SYS_PROMPT,

llm=model,

max_loops=1,

```
dynamic_temperature_enabled=True,

saved_state_path="twitter_realestate_agent.json",

user_name="realestate_swarms",

retry_attempts=1,

),

Agent(

    agent_name="Instagram-RealEstate-Agent",

    system_prompt=INSTAGRAM_AGENT_SYS_PROMPT,

    llm=model,

    max_loops=1,

    dynamic_temperature_enabled=True,

    saved_state_path="instagram_realestate_agent.json",

    user_name="realestate_swarms",

    retry_attempts=1,

),

Agent(

    agent_name="Facebook-RealEstate-Agent",

    system_prompt=FACEBOOK_AGENT_SYS_PROMPT,

    llm=model,

    max_loops=1,

    dynamic_temperature_enabled=True,

    saved_state_path="facebook_realestate_agent.json",

    user_name="realestate_swarms",

    retry_attempts=1,

),

Agent(
```

```

agent_name="LinkedIn-RealEstate-Agent",
system_prompt=LINKEDIN_AGENT_SYS_PROMPT,
llm=model,
max_loops=1,
dynamic_temperature_enabled=True,
saved_state_path="linkedin_realestate_agent.json",
user_name="realestate_swarms",
retry_attempts=1,
),
Agent(
    agent_name="Email-RealEstate-Agent",
    system_prompt=EMAIL_AGENT_SYS_PROMPT,
    llm=model,
    max_loops=1,
    dynamic_temperature_enabled=True,
    saved_state_path="email_realestate_agent.json",
    user_name="realestate_swarms",
    retry_attempts=1,
),
]

# Create a Swarm with the list of agents

swarm = SpreadSheetSwarm(
    name="Real-Estate-Marketing-Swarm",
    description="A swarm that processes real estate marketing tasks using multiple agents on
different threads.",

```

```
agents=agents,  
autosave_on=True,  
save_file_path=f"{uuid.uuid4().hex}_real_estate_swarm.csv",  
run_all_agents=False,  
max_loops=2,  
workspace_dir="real-estate-swarm",  
)
```

Run the swarm

```
swarm.run(  
    task=""
```

Create posts to promote luxury properties in North Texas, highlighting their features, location, and investment potential. Include relevant hashtags, images, and engaging captions.

Property:

\$10,399,000

1609 Meandering Way Dr, Roanoke, TX 76262

Link to the property:

https://www.zillow.com/homedetails/1609-Meandering-Way-Dr-Roanoke-TX-76262/308879785_zpid/

What's special

Unveiling a new custom estate in the prestigious gated Quail Hollow Estates! This impeccable residence, set on a sprawling acre surrounded by majestic trees, features a gourmet kitchen

equipped with top-tier Subzero and Wolf appliances. European soft-close cabinets and drawers, paired with a double Cambria Quartzite island, perfect for family gatherings. The first-floor game room&media room add extra layers of entertainment. Step into the outdoor sanctuary, where a sparkling pool and spa, and sunken fire pit, beckon leisure. The lavish master suite features stunning marble accents, custom his&her closets, and a secure storm shelter. Throughout the home, indulge in the visual charm of designer lighting and wallpaper, elevating every space. The property is complete with a 6-car garage and a sports court, catering to the preferences of basketball or pickleball enthusiasts. This residence seamlessly combines luxury&recreational amenities, making it a must-see for the discerning buyer.

Facts & features

Interior

Bedrooms & bathrooms

Bedrooms: 6

Bathrooms: 8

Full bathrooms: 7

1/2 bathrooms: 1

Primary bedroom

Bedroom

Features: Built-in Features, En Suite Bathroom, Walk-In Closet(s)

Cooling

Central Air, Ceiling Fan(s), Electric

Appliances

Included: Built-In Gas Range, Built-In Refrigerator, Double Oven, Dishwasher, Gas Cooktop, Disposal, Ice Maker, Microwave, Range, Refrigerator, Some Commercial Grade, Vented Exhaust Fan, Warming Drawer, Wine Cooler

Features

Wet Bar, Built-in Features, Dry Bar, Decorative/Designer Lighting Fixtures, Eat-in Kitchen, Elevator, High Speed Internet, Kitchen Island, Pantry, Smart Home, Cable TV, Walk-In Closet(s), Wired for Sound

Flooring: Hardwood

Has basement: No

Number of fireplaces: 3

Fireplace features: Living Room, Primary Bedroom

Interior area

Total interior livable area: 10,466 sqft

Total spaces: 12

Parking features: Additional Parking

Attached garage spaces: 6

Carport spaces: 6

Features

Levels: Two

Stories: 2

Patio & porch: Covered

Exterior features: Built-in Barbecue, Barbecue, Gas Grill, Lighting, Outdoor Grill, Outdoor Living Area, Private Yard, Sport Court, Fire Pit

Pool features: Heated, In Ground, Pool, Pool/Spa Combo

Fencing: Wrought Iron

Lot

Size: 1.05 Acres

Details

Additional structures: Outdoor Kitchen

Parcel number: 42232692

Special conditions: Standard

Construction

Type & style

Home type: SingleFamily

Architectural style: Contemporary/Modern,Detached

Property subtype: Single Family Residence

""

)

print(swarm.export_to_json())