```
from swarms import BaseSwarm, Agent, Anthropic


class MarketingSwarm(BaseSwarm):
    """
    A class representing a marketing swarm.

    Attributes:
        name (str): The name of the marketing swarm.
        market_trend_analyzer (Agent): An agent for analyzing market trends.
        content_idea_generator (Agent): An agent for generating content ideas.
        campaign_optimizer (Agent): An agent for optimizing marketing campaigns.

    Methods:
        run(task: str, *args, **kwargs) -> Any: Runs the marketing swarm for the given task.

    """

    def __init__(
        self, name="kyegomez/marketingswarm", *args, **kwargs
    ):
        super().__init__(*args, **kwargs)
        self.name = name

        # Agent for market trend analyzer
        self.market_trend_analyzer = Agent(
```

```
    agent_name="Market Trend Analyzer",
    system_prompt="Analyze market trends to identify opportunities for marketing campaigns.",
    llm=Anthropic(),
    meax_loops=1,
    autosave=True,
    dashboard=False,
    streaming_on=True,
    verbose=True,
    stopping_token="<DONE>",
)

# Agent for content idea generator
self.content_idea_generator = Agent(
    agent_name="Content Idea Generator",
    system_prompt="Generate content ideas based on market trends.",
    llm=Anthropic(),
    max_loops=1,
    autosave=True,
    dashboard=False,
    streaming_on=True,
    verbose=True,
    stopping_token="<DONE>",
)

# Agent for campaign optimizer
self.campaign_optimizer = Agent(
```

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            agent_name="Campaign Optimizer",
                system_prompt="Optimize marketing campaigns based on content ideas and market trends.",
            llm=Anthropic(),
            max_loops=1,
            autosave=True,
            dashboard=False,
            streaming_on=True,
            verbose=True,
            stopping_token="<DONE>",
        )

    def run(self, task: str, *args, **kwargs):
        """
        Runs the marketing swarm for the given task.

        Args:
            task (str): The task to be performed by the marketing swarm.
            *args: Additional positional arguments.
            **kwargs: Additional keyword arguments.

        Returns:
            Any: The result of running the marketing swarm.

        """
        # Analyze market trends
```

```
analyzed_trends = self.market_trend_analyzer.run(
    task, *args, **kwargs
)

# Generate content ideas based on market trends
content_ideas = self.content_idea_generator.run(
    task, analyzed_trends, *args, **kwargs
)

# Optimize marketing campaigns based on content ideas and market trends
optimized_campaigns = self.campaign_optimizer.run(
    task, content_ideas, analyzed_trends, *args, **kwargs
)

return optimized_campaigns
```