

"""

```
pip3 install -U swarms
```

```
pip3 install -U chromadb
```

task -> Understanding Agent [understands the problem better] -> Summarize of the conversation -> research agent that has access to internet perplexity -> final rag agent

Todo

- Use better llm -- gpt4, claude, gemini
- Make better system prompt
- Populate the vector database with q/a of past history

"""

```
from swarms import Agent, Llama3Hosted, AgentRearrange
```

```
from pydantic import BaseModel
```

```
from swarms_memory import ChromaDB
```

Initialize the language model agent (e.g., GPT-3)

```
llm = Llama3Hosted(max_tokens=3000)
```

Initialize Memory

```
memory = ChromaDB(
```

```

output_dir="swarm_mechanic", n_results=2, verbose=True
)

# Output

class EvaluatorOuputSchema(BaseModel):

    evaluation: str = None

    question_for_user: str = None


# Initialize agents for individual tasks

agent1 = Agent(

    agent_name="Summary ++ Hightlighter Agent",

    system_prompt="Generate a simple, direct, and reliable summary of the input task alongside the
highlights",

    llm=llm,

    max_loops=1,

)

# Point out that if their are details that can be added

# What do you mean? What lights do you have turned on.

agent2 = Agent(

    agent_name="Evaluator",

    system_prompt="Summarize and evaluate the summary and the users demand, always be
interested in learning more about the situation with extreme precision.",

    llm=llm,

```

```

max_loops=1,

list_base_models=[EvaluatorOuputSchema],

)


# research_agent = Agent(

#   agent_name="Research Agent",

#   system_prompt="Summarize and evaluate the summary and the users demand, always be
interested in learning more about the situation with extreme precision.",

#   llm=llm,

#   max_loops=1,

#   tool = [webbrowser]

# )


agent3 = Agent(

    agent_name="Summarizer Agent",

    system_prompt="Summarize the entire history of the interaction",

    llm=llm,

    max_loops=1,

    long_term_memory=memory,

)


# Task

task = "Car Model: S-Class, Car Year: 2020, Car Mileage: 10000, all my service lights are on, what
should i do?"

```

Swarm

```
swarm = AgentRearrange(  
    agents=[agent1, agent2, agent3],  
    flow=f"{agent1.agent_name} -> {agent2.agent_name} -> {agent3.agent_name}",  
    memory_system=memory,  
)
```

Task

```
out = swarm.run(task)  
print(out)
```