```python
from dataclasses import dataclass

from typing import List


from swarms import JSON, BaseLLM, BaseVectorDatabase, Agent


@dataclass
class YourAgent(Agent):
    """
    Represents an agent in the swarm protocol.


    Attributes:
        llm (BaseLLM): The low-level module for the agent.
        long_term_memory (BaseVectorDatabase): The long-term memory for the agent.
        tool_schema (List[JSON]): The schema for the tools used by the agent.
    """


    llm: BaseLLM

    long_term_memory: BaseVectorDatabase

    tool_schema: JSON

    tool_schemas: List[JSON]


    def step(self, task: str, *args, **kwargs):
        """
        Performs a single step in the agent's task.
```

```
    Args:

        task (str): The task to be performed.

        *args: Additional positional arguments.

        **kwargs: Additional keyword arguments.

    """

    ...


def run(self, task: str, *args, **kwargs):

    """

    Runs the agent's task.


    Args:

        task (str): The task to be performed.

        *args: Additional positional arguments.

        **kwargs: Additional keyword arguments.

    """

    ...


def plan(self, task: str, *args, **kwargs):

    """

    Plans the agent's task.


    Args:

        task (str): The task to be performed.

        *args: Additional positional arguments.

        **kwargs: Additional keyword arguments.
```

"""

...