

```
from __future__ import annotations
```

```
import time
```

```
import uuid
```

```
from typing import List, Optional
```

```
from typing import Any
```

```
from pydantic import BaseModel, Field
```

```
from swarms.schemas.base_schemas import (
```

```
    AgentChatCompletionResponse,
```

```
)
```

```
from typing import Union
```

```
def get_current_time():
```

```
    return time.strftime("%Y-%m-%d %H:%M:%S")
```

```
uuid_hex = uuid.uuid4().hex
```

```
class Step(BaseModel):
```

```
    step_id: Optional[str] = Field(
```

```
        default_factory=lambda: uuid.uuid4().hex,
```

```
        description="The ID of the task step.",
```

```
        examples=["6bb1801a-fd80-45e8-899a-4dd723cc602e"],
```

```
)
```

```
time: Optional[float] = Field(
    default_factory=get_current_time,
    description="The time taken to complete the task step.",
)
response: Optional[AgentChatCompletionResponse]
```

```
class ManySteps(BaseModel):
```

```
    agent_id: Optional[str] = Field(
        ...,
        description="The ID of the agent.",
        examples=["financial-agent-1"],
    )
```

```
    agent_name: Optional[str] = Field(
        ...,
        description="The ID of the agent.",
        examples=["financial-agent-1"],
    )
```

```
    task: Optional[str] = Field(
        ...,
        description="The name of the task.",
        examples=["Write to file"],
    )
```

```
    max_loops: Optional[Any] = Field(
        ...,
        description="The number of steps in the task.",
    )
```

```

    examples=[3],
)
run_id: Optional[str] = Field(
    uuid.uuid4().hex,
    description="The ID of the task this step belongs to.",
    examples=["50da533e-3904-4401-8a07-c49adf88b5eb"],
)
steps: Optional[List[Union[Step, Any]]] = Field(
    [],
    description="The steps of the task.",
)
full_history: Optional[str] = Field(
    ...,
    description="The full history of the task.",
    examples=[
        "I am going to use the write_to_file command and write"
        " Washington to a file called output.txt"
        " <write_to_file('output.txt', 'Washington')"
    ],
)
total_tokens: Optional[int] = Field(
    ...,
    description="The total number of tokens generated.",
    examples=[7894],
)
stopping_token: Optional[str] = Field(

```

```
...,  
    description="The token at which the task stopped.",  
)  
interactive: Optional[bool] = Field(  
    ...,  
    description="The interactive status of the task.",  
    examples=[True],  
)  
dynamic_temperature_enabled: Optional[bool] = Field(  
    ...,  
    description="The dynamic temperature status of the task.",  
    examples=[True],  
)
```