

```

from pydantic import BaseModel, Field

from transformers import AutoModelForCausalLM, AutoTokenizer


from swarms import ToolAgent

from swarms.tools.json_utils import base_model_to_json


# Load the pre-trained model and tokenizer

model = AutoModelForCausalLM.from_pretrained(

    "databricks/dolly-v2-12b",

    load_in_4bit=True,

    device_map="auto",

)

tokenizer = AutoTokenizer.from_pretrained("databricks/dolly-v2-12b")


# Initialize the schema for the person's information

class Schema(BaseModel):

    name: str = Field(..., title="Name of the person")

    agent: int = Field(..., title="Age of the person")

    is_student: bool = Field(

        ..., title="Whether the person is a student"

    )

    courses: list[str] = Field(

        ..., title="List of courses the person is taking"

    )

```

```
# Convert the schema to a JSON string
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```
tool_schema = base_model_to_json(Schema)
```

```
# Define the task to generate a person's information
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```
task = (
```

```
    "Generate a person's information based on the following schema:"
```

```
)
```

```
# Create an instance of the ToolAgent class
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agent = ToolAgent(
```

```
    name="dolly-function-agent",
```

```
    description="Ana gent to create a child data",
```

```
    model=model,
```

```
    tokenizer=tokenizer,
```

```
    json_schema=tool_schema,
```

```
)
```

```
# Run the agent to generate the person's information
```

```
generated_data = agent.run(task)
```

```
# Print the generated data
```

```
print(f"Generated data: {generated_data}")
```