

```
import os
```

```
from dotenv import load_dotenv
```

```
from swarm_models import GPT4VisionAPI
```

```
from swarms.prompts.personal_stylist import (  
    ACCESSORIES_STYLIST_AGENT_PROMPT,  
    BEARD_STYLIST_AGENT_PROMPT,  
    CLOTHING_STYLIST_AGENT_PROMPT,  
    HAIRCUT_STYLIST_AGENT_PROMPT,  
    MAKEUP_STYLIST_AGENT_PROMPT,  
)
```

```
from swarms.structs import Agent
```

```
# Load environment variables
```

```
load_dotenv()
```

```
api_key = os.getenv("OPENAI_API_KEY")
```

```
# Initialize GPT4VisionAPI
```

```
llm = GPT4VisionAPI(openai_api_key=api_key)
```

```
# User selfie and clothes images
```

```
user_selfie = "user_image.jpg"
```

```
clothes_image = "clothes_image2.jpg"
```

```
# User gender (for conditional agent initialization)
```

```
user_gender = "man" # or "woman"
```

```
# Initialize agents with respective prompts for personal styling
```

```
haircut_stylist_agent = Agent(
```

```
    llm=llm,
```

```
    sop=HAIRCUT_STYLIST_AGENT_PROMPT,
```

```
    max_loops=1,
```

```
    multi_modal=True,
```

```
)
```

```
# Conditional initialization of Makeup or Beard Stylist Agent
```

```
if user_gender == "woman":
```

```
    makeup_or_beard_stylist_agent = Agent(
```

```
        llm=llm,
```

```
        sop=MAKEUP_STYLIST_AGENT_PROMPT,
```

```
        max_loops=1,
```

```
        multi_modal=True,
```

```
)
```

```
elif user_gender == "man":
```

```
    makeup_or_beard_stylist_agent = Agent(
```

```
        llm=llm,
```

```
        sop=BEARD_STYLIST_AGENT_PROMPT,
```

```
        max_loops=1,
```

```
        multi_modal=True,
```

```
)
```

```
clothing_stylist_agent = Agent(  
    llm=llm,  
    sop=CLOTHING_STYLIST_AGENT_PROMPT,  
    max_loops=1,  
    multi_modal=True,  
)
```

```
accessories_stylist_agent = Agent(  
    llm=llm,  
    sop=ACCESSORIES_STYLIST_AGENT_PROMPT,  
    max_loops=1,  
    multi_modal=True,  
)
```

Run agents with respective tasks

```
haircut_suggestions = haircut_stylist_agent.run(  
    (  
        "Suggest suitable haircuts for this user, considering their"  
        " face shape and hair type."  
    ),  
    user_selfie,  
)
```

Run Makeup or Beard agent based on gender

```
if user_gender == "woman":  
    makeup_suggestions = makeup_or_beard_stylist_agent.run(  
        user_selfie,
```

```
(  
    "Recommend makeup styles for this user, complementing"  
    " their features."  
)  
    ,  
    user_selfie,  
)
```

```
elif user_gender == "man":
```

```
    beard_suggestions = makeup_or_beard_stylist_agent.run(  
        (  
            "Provide beard styling advice for this user, considering"  
            " their face shape."  
        ),  
        user_selfie,  
    )
```

```
    clothing_suggestions = clothing_stylist_agent.run(  
        (  
            "Match clothing styles and colors for this user, using color"  
            " matching principles."  
        ),  
        clothes_image,  
    )
```

```
    accessories_suggestions = accessories_stylist_agent.run(  
        (  
            "Suggest accessories to complement this user's outfit,"
```

" considering the overall style."

),

clothes_image,

)