

```
import os
```

```
from dotenv import load_dotenv
```

```
from swarm_models import Anthropic, OpenAIChat
```

```
from swarms.prompts.accountant_swarm_prompts import (
```

```
    DECISION_MAKING_PROMPT,
```

```
    DOC_ANALYZER_AGENT_PROMPT,
```

```
    SUMMARY_GENERATOR_AGENT_PROMPT,
```

```
)
```

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

```
from swarms.utils.pdf_to_text import pdf_to_text
```

```
# Environment variables
```

```
load_dotenv()
```

```
anthropic_api_key = os.getenv("ANTHROPIC_API_KEY")
```

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

```
# Base llms
```

```
llm1 = OpenAIChat(
```

```
    openai_api_key=openai_api_key,
```

```
    max_tokens=5000,
```

```
)
```

```
llm2 = Anthropic(
```

```
anthropic_api_key=anthropic_api_key,  
max_tokens=5000,  
)
```

Agents

```
doc_analyzer_agent = Agent(  
    llm=llm2,  
    sop=DOC_ANALYZER_AGENT_PROMPT,  
    max_loops=1,  
    autosave=True,  
    saved_state_path="doc_analyzer_agent.json",  
)
```

```
summary_generator_agent = Agent(  
    llm=llm2,  
    sop=SUMMARY_GENERATOR_AGENT_PROMPT,  
    max_loops=1,  
    autosave=True,  
    saved_state_path="summary_generator_agent.json",  
)
```

```
decision_making_support_agent = Agent(  
    llm=llm2,  
    sop=DECISION_MAKING_PROMPT,  
    max_loops=1,  
    saved_state_path="decision_making_support_agent.json",  
)
```

```
pdf_path = "bankstatement.pdf"

fraud_detection_instructions = "Detect fraud in the document"

summary_agent_instructions = (
    "Generate an actionable summary of the document with action steps"
    " to take"
)

decision_making_support_agent_instructions = (
    "Provide decision making support to the business owner:"
)
```

```
# Transform the pdf to text
```

```
pdf_text = pdf_to_text(pdf_path)

print(pdf_text)
```

```
# Detect fraud in the document
```

```
fraud_detection_agent_output = doc_analyzer_agent.run(
    f"{fraud_detection_instructions}: {pdf_text}"
)
```

```
# Generate an actionable summary of the document
```

```
summary_agent_output = summary_generator_agent.run(
    f"{summary_agent_instructions}: {fraud_detection_agent_output}"
)
```

)

Provide decision making support to the accountant

decision_making_support_agent_output = (

decision_making_support_agent.run(

f"{decision_making_support_agent_instructions}:"

f" {summary_agent_output}"

)

)