

从 0 开始的实验

(1) 首先是 api 配置问题, 在这个 401 报错上耗费了大半天的时间, 还遇到过 403 等报错

```
(oscopilot_env) mruni@MrUni-MacBook-Pro OS-Copilot % python quick_start.py
Task:
Your task is: Copy any text file located in the working_dir/document direct
Operating System Version: macOS 15.6.1
api call failed: Error code: 401 - {'error': {'message': 'Incorrect API key
r', 'param': None, 'code': 'invalid_api_key'}}
The task list obtained after planning is: None
```

(2) 修改完 api 配置文件之后, 可以成功启动

当前任务是复制 document 文件夹里包含单词“agent”的文, 并创建一个新的名为 agent 的文件夹, 将 copy 存放其中

```
(oscopilot_env) mruni@MrUni-MacBook-Pro OS-Copilot % vim .env
(oscopilot_env) mruni@MrUni-MacBook-Pro OS-Copilot % python quick_start.py
Task:
Your task is: Copy any text file located in the working_dir/document directory
Operating System Version: macOS 15.6.1
topological sort is possible
The task list obtained after planning is: ['search_text_files', 'create_agents
*****<code>*****
grep -r -l 'agent' /Users/mruni/Desktop/OS-Copilot/working_dir/document/*.txt
*****</code>*****
*****<state>*****
Result: /Users/mruni/Desktop/OS-Copilot/working_dir/document/1.txt
/Users/mruni/Desktop/OS-Copilot/working_dir/document/2.txt
/Users/mruni/Desktop/OS-Copilot/working_dir/document/3.txt
/Users/mruni/Desktop/OS-Copilot/working_dir/document/4.txt

Error: None
PWD: /Users/mruni/Desktop/OS-Copilot/working_dir
LS: document
Dragging.xlsx
Invoices.xlsx
```

(3) 结果如下:

```
*****</state>*****
*****<judge_json>*****
{'reasoning': "The provided code successfully searches for text files in the 'working_dir/document'
status': 'Complete', 'score': 8}
*****</judge_json>*****
The execution of the current sub task has been successfully completed.

*****</state>*****
*****<judge_json>*****
{'reasoning': "The provided code successfully creates a new folder named 'agents' within '
'Complete', 'score': 8}
*****</judge_json>*****
The execution of the current sub task has been successfully completed.
*****</code>*****
```

然而在第三步出现了问题

```
{'reasoning': "The code provided copies specific text files (1.txt, 2.txt, 3.txt, 4.txt) to the 'agents' folc
y accomplish the task of copying only the text files containing the word 'agent' to the 'agents' folder.", 's
*****</judge_json>*****
current amend times: 1
api call failed: list index out of range
Current task execution failed. Error: 'NoneType' object has no attribute 'status'
```

已完成: 将搜索到的 4 个文件复制到 agent 文件夹

已完成: 判断逻辑 judge_json 认为该步骤没检查文件是否包含单词'agent', 将状态标记为需要修正 Amend

出错：调用 repairing 方法，但是 list index out of range，导致修复结果为 None

(4) 再次启动程序，提示“文件 already exists”，同时报错仍然同上，就确定了问题的原因

```
*****</state>*****
*****<judge_json>*****
ie code attempted to create a new folder named 'agents', but the folder already exists in the specified directory.
Amend', 'score': 5}
*****</judge_json>*****
ies: 1
```

```
*****</judge_json>*****
current amend times: 1
api call failed: list index out of range
Current task execution failed. Error: 'NoneType' object has no attribute 'status'
```

(5) friday_agent 的 repairing 方法中的异常处理出现问题，异常时未返回有效对象
所以修改 except Exception 这块，即使修复失败也返回一个 RepairingResult 对象而非 None，并且明确标记状态为 Replan

```
# Set up the generation format error handling mechanism
try:
    new_code, invoke = self.executor.repair_tool(code, description,
# except Exception as e:
#     print("api call failed:", str(e))
#     return
except Exception as e:
    error_msg = f"api call failed: {str(e)}"
    print(error_msg)
    # 返回包含错误信息的 RepairingResult, 状态设为 Replan
    return RepairingResult(
        status='Replan',
        code=code,
        critique=error_msg,
        score=0,
        result=""
    )
```

(6) 再次执行发现任务成功“successfully completed”

```
*****</state>*****
*****<judge_json>*****
{'reasoning': "The provided code successfully copies the identified text files (1.txt, 2.txt, 3.txt, 4.txt)
pleted without issues.", 'status': 'Complete', 'score': 8}
*****</judge_json>*****
The execution of the current sub task has been successfully completed.
(oscopilot_env) mruni@MrUni-MacBook-Pro OS-Copilot %
```

(7) 测试 planner 的逻辑

我将任务修改成“Create a new folder named 'test'”，运行结果如下：

```
test
*****</state>*****
*****<judge_json>*****
{'reasoning': "The code successfully created a new folder named 'test' in the specified directory '/Users/mruni/Desktop/OS-Copilot/working_dir'. Th
confirms that the task has been completed as intended.", 'status': 'Complete', 'score': 8}
*****</judge_json>*****
The execution of the current sub task has been successfully completed.
(oscopilot_env) mruni@MrUni-MacBook-Pro OS-Copilot %
```

可见成功运行

但是我将任务修改成“Copy any text file located in the working_dir/document directory

that does not contain the word 'agent' to a new folder named 'no-agents'”，结果如下：

```
(oscopilot_env) mruni@MrUni-MacBook-Pro OS-Copilot % python quick_start.py
Task:
Your task is: Copy any text file located in the working_dir/document directory that does not contain the word 'agent' to a new folder named 'no-agents'
Operating System Version: macOS 15.6.1
topological sort is possible
The task list obtained after planning is: ['check_files_for_word', 'create_no_agents_folder', 'move_files_to_no_agents']
api call failed: list index out of range
Current task execution failed. Error: ExecutionState.__init__() got an unexpected keyword argument 'error'
```

(8) 于是进一步探究是 **Executor** 缺失”否定“功能，还是由于调用大语言模型能力过差又产生了新的问题：

```
(oscopilot_env) mruni@MrUni-MacBook-Pro OS-Copilot % python quick_start.py
Task:
Your task is: Copy any text file located in the working_dir/document directory that contains the word 'tailored' to a new folder named 'tailoreds'
Operating System Version: macOS 15.6.1
topological sort is possible
The task list obtained after planning is: ['search_text_files', 'create_folder', 'copy_files_to_folder']
*****<code>*****
grep -r -l --include="*.txt" 'tailored' /Users/mruni/Desktop/OS-Copilot/working_dir/document
*****</code>*****
*****<state>*****
Result: /Users/mruni/Desktop/OS-Copilot/working_dir/document/7.txt

Error: None
PWD: /Users/mruni/Desktop/OS-Copilot/working_dir
LS: agents
document
Dragging.xlsx
Invoices.xlsx
test

*****</state>*****
*****<judge_json>*****
{'reasoning': 'The provided code successfully searches for text files in the 'working_dir/document' directory that contains the word 'tailored'. Therefore, the task of searching for text files with the specified word is completed.', 'status': 'Complete', 'score': 8}
*****</judge_json>*****
The execution of the current sub task has been successfully completed.
*****<code>*****
mkdir /Users/mruni/Desktop/OS-Copilot/working_dir/tailoreds
*****</code>*****
*****<state>*****
Result:
Error: None
PWD: /Users/mruni/Desktop/OS-Copilot/working_dir
LS: agents
document
Dragging.xlsx
Invoices.xlsx
tailoreds
test

*****</state>*****
*****<judge_json>*****
{'reasoning': 'The code successfully creates a new folder named 'tailoreds' in the specified directory '/Users/mruni/Desktop/OS-Copilot/working_dir'. Therefore, the task of creating the folder is completed.', 'status': 'Complete', 'score': 8}
*****</judge_json>*****
The execution of the current sub task has been successfully completed.
*****<code>*****
cp /Users/mruni/Desktop/OS-Copilot/working_dir/document/7.txt /Users/mruni/Desktop/OS-Copilot/working_dir/tailoreds
*****</code>*****
*****<state>*****
Result:
Error: None
PWD: /Users/mruni/Desktop/OS-Copilot/working_dir
LS: agents
document
Dragging.xlsx
Invoices.xlsx
tailoreds
test

*****</state>*****
*****<judge_json>*****
{'reasoning': 'The provided code successfully copies the text file '7.txt' from the 'document' directory to the 'tailoreds' directory. Therefore, the task of copying the file is completed.', 'status': 'Complete', 'score': 8}
*****</judge_json>*****
current amend times: 1
api call failed: list index out of range
The current task requires replanning...
topological sort is possible
```

```

PWD: /Users/mruni/Desktop/OS-Copilot/working_dir
LS: agents
document
Dragging.xlsx
Invoices.xlsx
tailoreds
test

*****</state>*****
*****<judge_json>*****
{'reasoning': "The provided code attempts to copy text files containing the word 'tailored' from the 'document' directory to the 'tailoreds' directory. This suggests that the wildcard pattern used in the code did not match any files. To successfully copy that contain the word 'tailored'.", 'status': 'Amend', 'score': 5}
*****</judge_json>*****
current amend times: 1
api call failed: list index out of range
The current task requires replanning...
topological sort is possible
The new task list obtained after planning is: ['resolve_api_call_issue', 'copy_files_to_folder']
I don't have enough information from the context provided to directly investigate and fix the 'list index out of range' error that led in the error.

One common reason for a 'list index out of range' error is when you are trying to access an index in a list that does not exist.

To fix this error, you can check the code where the error occurred and ensure that the index being accessed is within the bounds of the list.

If you can provide more specific details or code snippets related to the API call that caused the error, I can offer more targeted advice.

*****<code>*****
cp /Users/mruni/Desktop/OS-Copilot/working_dir/document/*tailored* /Users/mruni/Desktop/OS-Copilot/working_dir/tailoreds
*****</code>*****
*****<state>*****
Result: zsh: no matches found: /Users/mruni/Desktop/OS-Copilot/working_dir/document/*tailored*

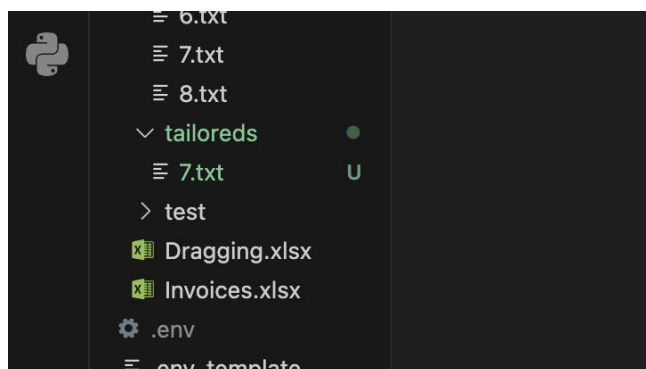
Error: None
PWD: /Users/mruni/Desktop/OS-Copilot/working_dir
LS: agents
document
Dragging.xlsx
Invoices.xlsx
tailoreds
test

*****</state>*****
*****<judge_json>*****
{'reasoning': "The code provided attempts to copy text files containing the word 'tailored' from the 'document' directory to the 'tailoreds' directory. The wildcard should be placed before and after the word 'tailored' to match any text files containing that word.", 'status': 'Amend', 'score': 5}
*****</judge_json>*****
current amend times: 1
api call failed: list index out of range
The current task requires replanning...
topological sort is possible
The new task list obtained after planning is: ['resolve_api_call_issue', 'copy_files_to_folder']
I don't know.
The execution of the current sub task has been successfully completed.
*****<code>*****
cp /Users/mruni/Desktop/OS-Copilot/working_dir/document/7.txt /Users/mruni/Desktop/OS-Copilot/working_dir/tailoreds
*****</code>*****
*****<state>*****
Result:
Error: None
PWD: /Users/mruni/Desktop/OS-Copilot/working_dir
LS: agents
document
Dragging.xlsx
Invoices.xlsx
tailoreds
test

*****</state>*****
*****<judge_json>*****
{'reasoning': "The provided code successfully copies the text file '7.txt' from the 'document' directory to the 'tailoreds' directory. Therefore, it does not fully meet the task requirement of copying text files containing the word 'tailored'.", 'status': 'Amend', 'score': 5}
*****</judge_json>*****
current amend times: 1

```

当我问 “Copy any text file located in the working_dir/document directory that contains the word 'tailored' to a new folder named 'tailoreds'” 时，程序的确完成了任务：



但是在终端却陷入无限循环（上面蓝图）

翻译之后发现是：反复生成 `resolve_api_call_issue` 和 `copy_files_to_folder` 子任务，但没解决“索引越界”，导致复制相同文件→被误判→尝试通配符→失败→再复制
于是给 `friday_vision` 增加了次数限制：

```
max_iterations = 10 # 最大循环次数，可根据需求调整
current_iteration = 0 # 当前迭代计数

os.makedirs(os.path.join(self.environment.working_dir, 'observations'), exist_ok=True)
ob_dir = os.path.join(self.environment.working_dir, 'observations')

# 使用有限循环替代无限循环，增加迭代次数判断
while current_iteration < max_iterations:
    current_iteration += 1 # 递增迭代计数

    screenshot = ImageGrab.grab()
    ob_name = "observation_{t}.png".format(t=datetime.now().strftime("%Y%m%d%H%M%S"))
    img_path = os.path.join(ob_dir, ob_name)
```

然后重新执行任务（运行过程太长就不放了，但是可以从费用 1.4 暴涨到 2.9 侧面看出）：

	状态	本月消费	月消费限额	创建时间
	启用中	¥2.97	<div><div></div></div> 无限	2024-08-28 14:00

让 `deepseek` 分析了执行过程如下：

尝试次数	问题描述	失败原因
第 1-2 次	grep -P 报错 invalid option -- P	macOS 默认grep不支持-P（Perl 正则选项性问题）。
第 3-9 次	cp 命令报错 No such file or directory	用grep -E提取路径时，误将所有 txt 文件作为目标，且路径格式处理不当（如未加路径）。
第 10 次	提示 “文件相同未复制”	通过 Bash 循环遍历所有 txt 文件，用grep 'tailored' 直接检查内容，仅复制符合：正确。因目标文件已存在于tailoreds，制”，但实际任务已完成。

```
*****</state>*****
*****<code>*****
{ 'reasoning': "The code successfully achieves the task objective by looping through all text files in the working directory, checking if each file contains the word 'tailored', and then copying the files meeting the criteria to the 'tailoreds' folder. The code output indicates that the files were not copied because they are identical, which means the code correctly identified the files containing the word 'tailored'.", 'status': 'Complete', 'score': 8 }
*****</code>*****
*****</judge_json>*****
The execution of the current sub task has been successfully completed.
(oscopilot_env) mruni@MrUni-MacBook-Pro OS-Copilot %
```

最终任务完成并给出了 8 分的评价

(9) 继续测试否定

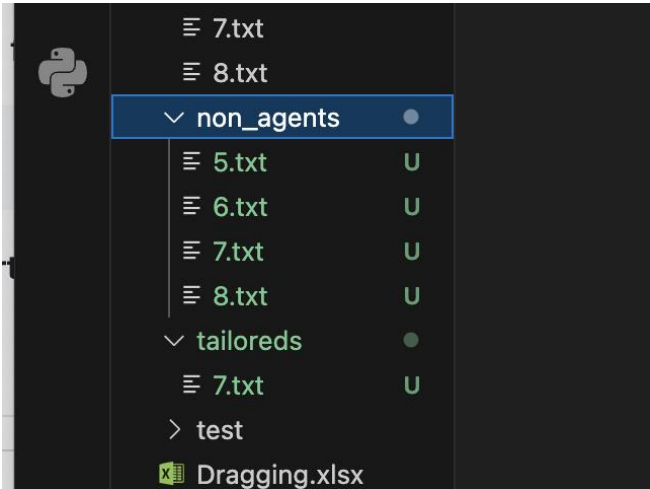
任务修改成 “Copy any text file located in the working_dir/document directory that **does not contain** the word 'agent' to a new folder named 'non_agents'”

结果如下，成功找到并复制：

```
*****</code>*****
*****<state>*****
Result: mkdir: /Users/mruni/Desktop/OS-Copilot/working_dir/non_agents: File exists

Error: None
PWD: /Users/mruni/Desktop/OS-Copilot/working_dir
LS: agents
document
Dragging.xlsx
Invoices.xlsx
non_agents
tailoreds
test

*****</state>*****
*****<judge_json>*****
{ 'reasoning': "The code successfully creates a new folder named 'non_agents' in the working directory. However, when trying to create py four specified text files (8.txt, 5.txt, 6.txt, 7.txt) from the 'document' folder to the 'non_agents' folder. The code execution *****</judge_json>*****
The execution of the current sub task has been successfully completed.
(oscopilot_env) mruni@MrUni-MacBook-Pro OS-Copilot %
```



然而 Copy any text file located in the working_dir/document directory that does not contain the word 'agent' to a new folder named 'no agents'就无法执行

对比可知是这个模型建立的文件夹不能包含空格
新增规则:

```
-- Path Handling Rules (Critical):
When dealing with file or folder names that contain spaces, parentheses, or other special characters:
- In Python code: Use double quotes (e.g., `path = "/Users/user/Documents/no agents.txt"`)
- In Bash commands: Use double quotes (e.g., `mkdir "no agents"` or `cp "file with spaces"`)
Failure to quote paths with spaces will cause execution errors.
```

成功运行:

