

SOP Management Docker Setup – Implementation and Guide



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Pre-requisites

- Docker Desktop
- SQL server 16 or above.
- SOP manage code folder.
- SOP manage database.
- Docker Desktop requires Windows 10 Pro/Enterprise/Home version 19044 or above.

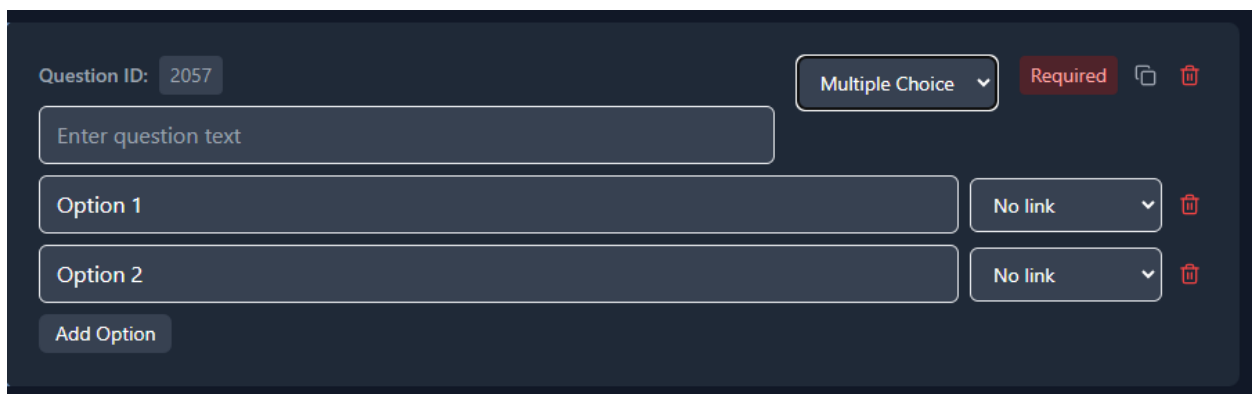
Points to consider when crafting a question:

- When building the SOP, using the <http://10.192.0.228:5173/builder>
- Ensure you switch the multiple-choice question to another format and then revert it back to a multiple-choice question.



The screenshot shows a question editor interface. At the top left, it says "Question ID: 2057". To the right of this is a dropdown menu set to "Multiple Choice", followed by a red "Required" label and two small icons (a copy icon and a trash icon). Below these elements is a single text input field with the placeholder text "Enter question text".

- As shown in the image above, there is no space to write the answers. Changing it to another format will display the option.



The screenshot shows the same question editor interface but with multiple choice options. It has the same "Question ID: 2057", "Multiple Choice" dropdown, "Required" label, and copy/trash icons. Below the "Enter question text" field, there are two rows for options. Each row has a text input field for the option text and a dropdown menu for the link status. The first row shows "Option 1" and "No link". The second row shows "Option 2" and "No link". At the bottom left, there is a button labeled "Add Option".

Introduction

The Incident Management System allows administrators to create workflows, which consist of a series of questions and answers designed to guide users through specific incident-handling processes. The system offers features for admins to design workflows, share them with users, and review completed responses.

Docker Setup

- Docker setup is provided in the SOP files
- Just install the docker setup.

Restoring the SOP manage database

- The SOP manage Query is provided
- Just open SQL studio and select the master db and run the SOP manage query

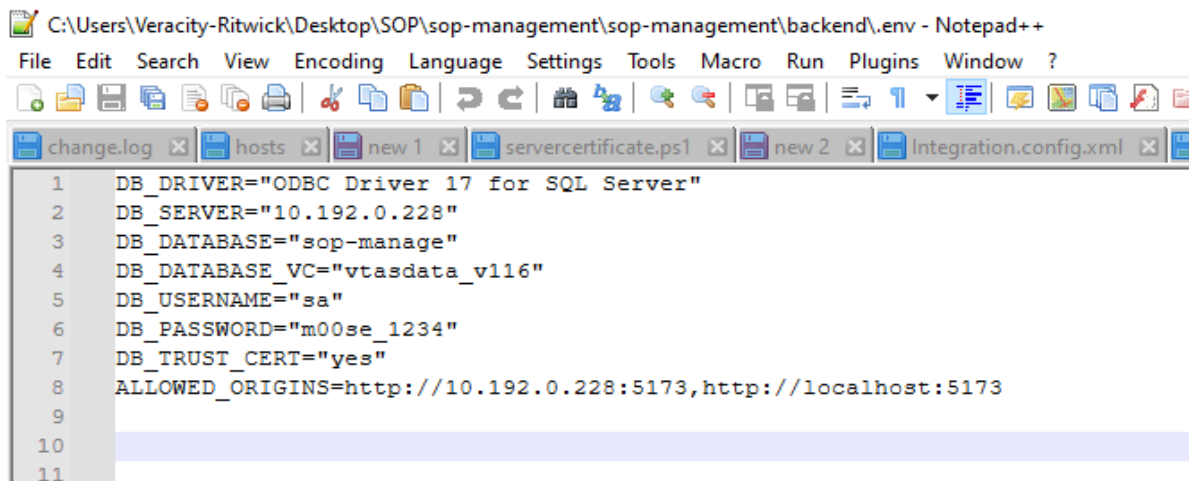
Changes in frontend and backend code

- You will receive a folder named "SOP Management" containing all the frontend and backend code. You can place the folder in any location of your choice.
- Change the code in **.env** (Environment variables).

Path: sop-management\backend\.env

- DB_DRIVER="ODBC Driver 17 for SQL Server" (Check in control panel)
- DB_SERVER="10.192.0.228"
- DB_DATABASE="sop-manage"
- DB_DATABASE_VC="vtasdata_v116" (or the DB which has IncidentLog_TBL)"(where you want to attach SOP)
- DB_USERNAME="sa"
- DB_PASSWORD="m00se_1234"
- DB_TRUST_CERT="yes"
- ALLOWED_ORIGINS=http://10.192.0.228:5173,http://localhost:5173
- **Change the above code according to your system.**

Microsoft Intune Management Extension	Microsoft Corporation	16-12-2024	19.6 MB	1.86.101.0
Microsoft ODBC Driver 17 for SQL Server	Microsoft Corporation	08-11-2024	7.27 MB	17.10.6.1



The screenshot shows a Notepad++ window with the file path `C:\Users\Veracity-Ritwick\Desktop\SOP\sop-management\sop-management\backend\.env`. The file content is as follows:

```
1 DB_DRIVER="ODBC Driver 17 for SQL Server"
2 DB_SERVER="10.192.0.228"
3 DB_DATABASE="sop-manage"
4 DB_DATABASE_VC="vtasdata_v116"
5 DB_USERNAME="sa"
6 DB_PASSWORD="m00se_1234"
7 DB_TRUST_CERT="yes"
8 ALLOWED_ORIGINS=http://10.192.0.228:5173,http://localhost:5173
9
10
11
```

- **Change the database name and IP of SQL server in backend/wf_builder_service.py:**
C:\Users\Veracity-Ritwick\Desktop\SOP\sop-management\sop-management\backend\config

- Change line 18 and 28, add the IP where your SQL is installed
- Change line 19 and 29 according to the database names

```
DB_CONFIG = {
    'driver': os.getenv('DB_DRIVER', 'ODBC Driver 17 for SQL Server'),
    'server': os.getenv('DB_SERVER', '10.192.0.228'),
    'database': os.getenv('DB_DATABASE', 'sop-manage'),
    'username': os.getenv('DB_USERNAME', 'sa'),
    'password': os.getenv('DB_PASSWORD', ''),
    'trust_cert': os.getenv('DB_TRUST_CERT', 'yes'),
}

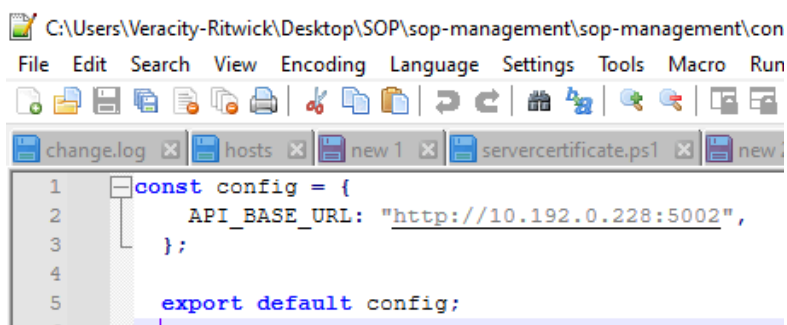
# Database configuration for TEST database
DB_VC_CONFIG = {
    'driver': os.getenv('DB_DRIVER', 'ODBC Driver 17 for SQL Server'),
    'server': os.getenv('DB_SERVER', '10.192.0.228'),
    'database': os.getenv('DB_DATABASE_VC', 'vtasdata_v116'), # Ensure correct DB name for vtasdata_v116
    'username': os.getenv('DB_USERNAME', 'sa'),
    'password': os.getenv('DB_PASSWORD', ''),
    'trust_cert': os.getenv('DB_TRUST_CERT', 'yes'),
}
```

- **Change the database name in backend/wf_builder_service.py:**

C:\Users\Veracity-Ritwick\Desktop\SOP\sop-management\sop-management\backend\services

```
472 # Dynamically format the heading with the workflow_name
473 static_heading = f"=====SOP - {workflow_name} ====="
474
475 # Construct the SQL query to update inlIncidentDetails_MEM
476 query = text("""
477 UPDATE [vtasdata_v116].[dbo].[IncidentLog_TBL]
478 SET inlIncidentDetails_MEM =
479 ISNULL(CAST(inlIncidentDetails_MEM AS NVARCHAR(MAX)), '') +
480 CASE
```

- Change “vtasdata_v116” to the database name —> Line 477
- **code change (Port and IP)**
- config.js should have the url that will run the api, add, "http://10.192.0.228:5002" (Add static IP not local IP) C:\Users\Veracity-Ritwick\Desktop\SOP\sop-management\sop-management



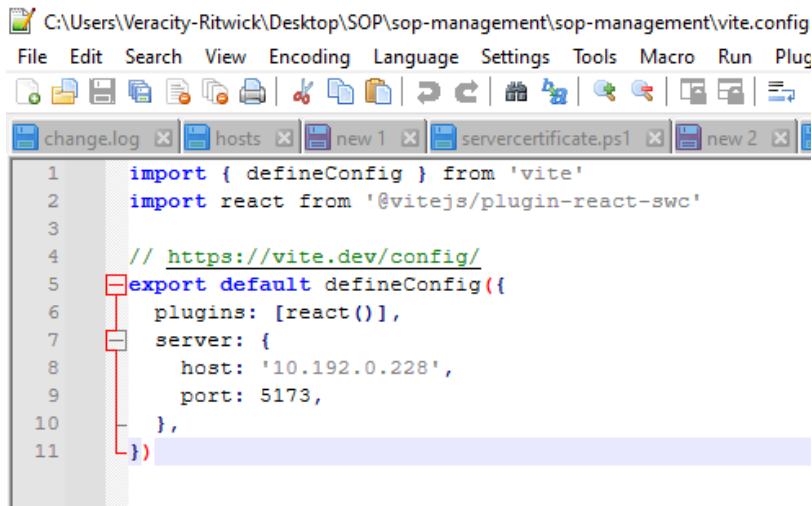
```
1 const config = {
2   API_BASE_URL: "http://10.192.0.228:5002",
3 };
4
5 export default config;
```

- To check if the port is open or not, open cmd, type netstat -an | find "5173" or netstat -an | find "5000" for both frontend and backend respectively
 - To change the port, check the main.py, on line 52, change the port for the backend C:\Users\Veracity-Ritwick\Desktop\SOP\sop-management\sop-management\backend
- app.run(host="0.0.0.0", port=5002, debug=True) (just change the port here)

```
47 question_management_service = question_management_service(question_management_service),
48
49 # Set up the Workflow API
50 setup_workflow_api(app, wf_builder_service, question_management_service, vc_service)
51
52 if __name__ == "__main__":
53     app.run(host="0.0.0.0", port=5002, debug=True)
```

- To change the frontend code, then add this to the vite.config.js (Just Change the port and IP)

- C:\Users\Veracity-Ritwick\Desktop\SOP\sop-management\sop-management



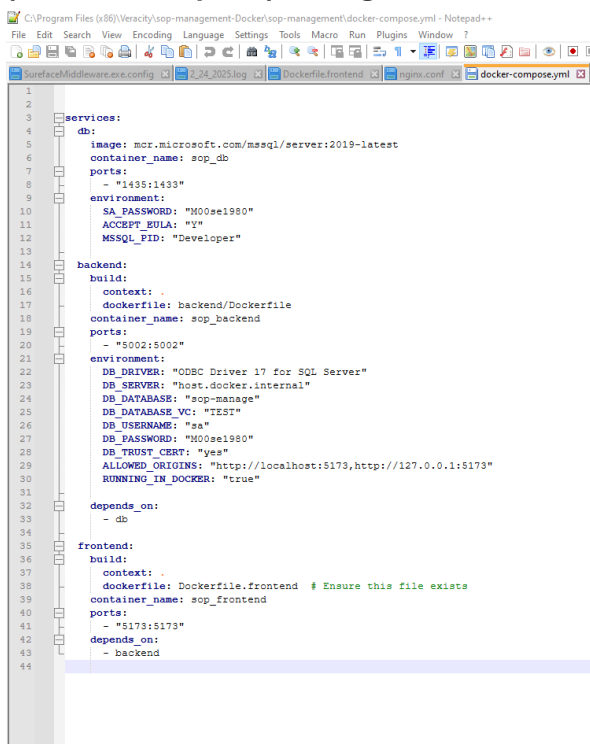
A screenshot of a code editor window titled 'C:\Users\Veracity-Ritwick\Desktop\SOP\sop-management\sop-management\vite.config'. The editor shows the following code:

```

1  import { defineConfig } from 'vite'
2  import react from '@vitejs/plugin-react-swc'
3
4  // https://vite.dev/config/
5  export default defineConfig({
6    plugins: [react()],
7    server: {
8      host: '10.192.0.228',
9      port: 5173,
10   },
11 })

```

- C:\Users\Veracity-Ritwick\Desktop\SOP\sop-management\sop-management (Docker-compose) Change the details



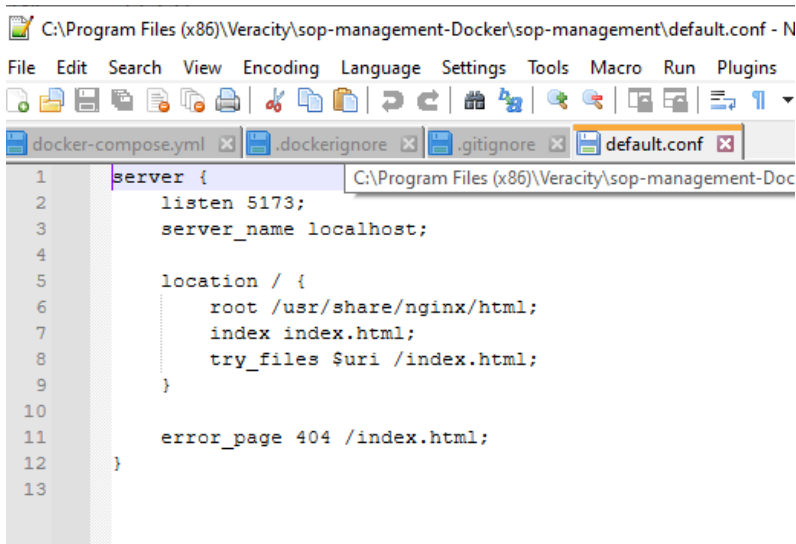
A screenshot of a code editor window titled 'C:\Program Files (x86)\Veracity\sop-management-Docker\sop-management\docker-compose.yml - Notepad++'. The editor shows the following code:

```

1
2
3  services:
4    db:
5      image: mcr.microsoft.com/mssql/server:2019-latest
6      container_name: sop_db
7      ports:
8        - "1435:1433"
9      environment:
10       SA_PASSWORD: "M00se1980"
11       ACCEPT_EULA: "Y"
12       MSSQL_PID: "Developer"
13
14    backend:
15      build:
16        context: .
17        dockerfile: backend/Dockerfile
18      container_name: sop_backend
19      ports:
20        - "5002:5002"
21      environment:
22       DB_DRIVER: "ODBC Driver 17 for SQL Server"
23       DB_SERVER: "host.docker.internal"
24       DB_DATABASE: "sop-manage"
25       DB_DATABASE_VC: "TEST"
26       DB_USERNAME: "sa"
27       DB_PASSWORD: "M00se1980"
28       DB_TRUST_CERT: "yes"
29       ALLOWED_ORIGINS: "http://localhost:5173,http://127.0.0.1:5173"
30       RUNNING_IN_DOCKER: "true"
31
32      depends_on:
33        - db
34
35    frontend:
36      build:
37        context: .
38        dockerfile: Dockerfile.frontend # Ensure this file exists
39      container_name: sop_frontend
40      ports:
41        - "5173:5173"
42      depends_on:
43        - backend
44

```

- C:\Users\Veracity-Ritwick\Desktop\SOP\sop-management\sop-management (Default - conf) Change the details



A screenshot of a code editor window titled 'C:\Program Files (x86)\Veracity\sop-management-Docker\sop-management\default.conf - N'. The editor shows the following code:

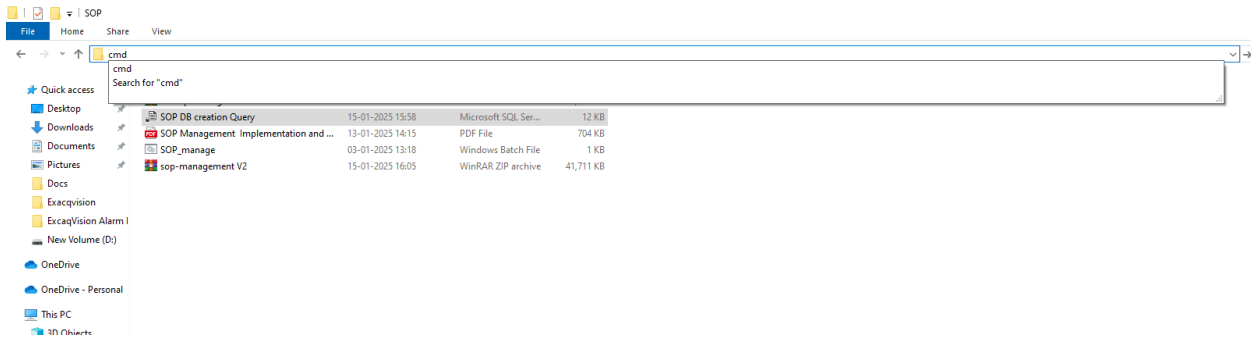
```

1  server {
2    listen 5173;
3    server_name localhost;
4
5    location / {
6      root /usr/share/nginx/html;
7      index index.html;
8      try_files $uri /index.html;
9    }
10
11    error_page 404 /index.html;
12  }
13

```

Code Execution process

- Open the frontend path in cmd where the packet.json file is present
(C:\Users\Veracity-Ritwick\Desktop\SOP\sop-management\sop-management)



- Just type CMD in the frontend path.
- To Compose docker build, run this command – **docker compose up –build -d**
- To shutdown the build, run this command – **docker-compose down**
- To run the composed build, run this command – **docker-compose up**

Veracity Global - Completed Workflow

Question 1 of 5
DID YOU CALL FIRE BRIGADE
Answer:
no

Question 2 of 5
DID THEY REACH ON TIME
Answer:
No answer provided

Question 3 of 5
DID YOU UPDATE SUPERVISOR THAT FIRE BRIGADE NOT REQUIRED
Answer:
No answer provided

Question 4 of 5
please close the incident and update to supervisor

System Features

1. Admin Dashboard

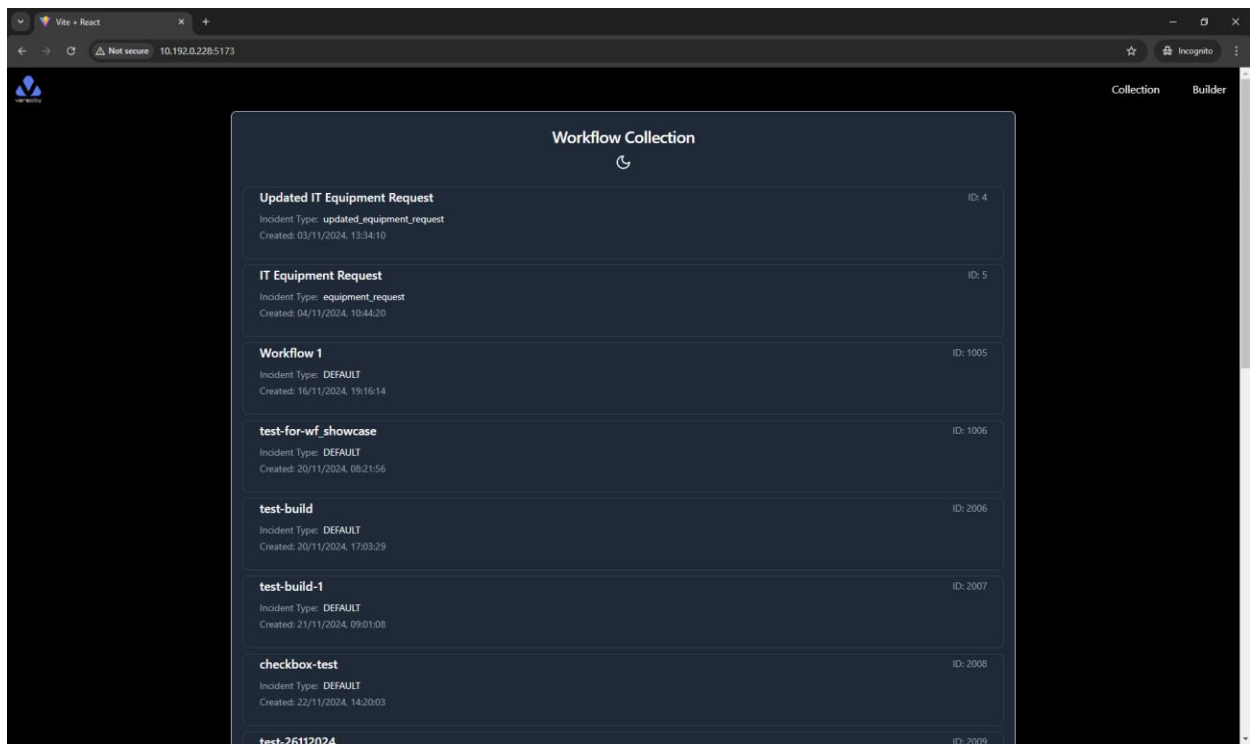
- Create Workflows: Administrators can design workflows consisting of sequential questions and branching paths based on user inputs.
- Manage Workflows: Admins can edit, delete, and update existing workflows as needed.
- Assign and Share Workflows: Admins can share a workflow link with users, enabling them to participate in incident-specific workflows.
- Analyse Responses: Admins can review completed questions submitted by users for specific incidents.

2. User Interface (Form Format)

- Dynamic Question Flow: Users answer questions dynamically, progressing through the form based on their inputs.
- Workflow Summary: Upon completion, users are shown a summary of the questions they answered.

3. Pages Overview

- Workflow Collection for administrators (<http://127.0.0.1:5173/workflow-collection>): Displays all available workflows for the admin.
- Workflow Builder (<http://127.0.0.1:5173/builder>): Enables admins to create or edit workflows.
- Workflow Showcase (<http://127.0.0.1:5173/workflow/>): A sharable link where users can access and fill out the form for a specific workflow and incident number.
- Workflow Lists for Operators (<http://127.0.0.1:5173>): Display all available workflow to operators



How It Works

1. Admin Creating Workflow

- Step 1: The admin logs into the system and navigates to the Workflow Builder page (<http://127.0.0.1:5173/builder>).
- Step 2: The admin can define the start question (Q1) and connect subsequent questions (Q2, Q3, etc.) based on the user's answer (Yes/No or other answers).
- Step 3: Each option in question leads to another question, and the admin can keep adding branches until the workflow is fully built. PS: The Builder component allows only MULTIPLE CHOICE TO BE CONNECTED Checkbox, Subjective and Instructions cannot be connected and will be shown
- Step 4: The workflow is saved and can be assigned to users for incidents.

Veracity Global

Collection Builder

Workflow 1

Question ID: 2035 Multiple Choice Required

Did you visit the office today?

Yes

No

Add Option

Question 2036

No link

Question 2035

Question 2036

Question 2037

Question ID: 2036 Multiple Choice Required

Did you connect on teams?

Yes

No

Add Option

No link

No link

Question ID: 2037 Subjective Required

2. User Taking a form

- Step 1: The user opens the sharable link and enters the incident_number through the modal or through the link (<http://127.0.0.1:5173/workflow/>)
- Step 2: The user answers questions dynamically presented based on their previous responses.
- Step 3: After completing the workflow, the user is shown a summary of the questions they answered.

Enter Incident Number

Enter incident number

Submit

3. Viewing Completed Questions

- Step 1: Admins or users with access can view completed questions for a specific incident by visiting the Workflow Showcase page: (<http://127.0.0.1:5173/workflow/>)
- Step 2: The incident number can be entered via a modal or appended directly to the URL.
- Step 3: The decision tree helps the admin analyse the user's decision-making process for future incident management.