📘 Assignment: Understanding QMS Modules in Supply Chain OS (Life Sciences)

🎯 Purpose of the Assignment

Before assessing your technical (Python) skills, this task evaluates your **understanding, learning ability, and clarity of explanation** about real-world business workflows in the **Life Sciences Supply Chain** domain.

We want to see how effectively you can **analyze, structure, and communicate** what you learn — a key skill for developers who build systems they truly understand.

🔑 Access Details

Platform URL: http://216.48.184.249:5274/quality
Login Credentials:

- **Username:** testing@aivoa.net
- **Password:** password123

🧩 Task Context

You will explore the **Quality Management System (QMS)** module in our Supply Chain OS platform.
The system focuses on **APIs (Active Pharmaceutical Ingredients)** and **Raw Materials** used by Life Science manufacturers.

The QMS module includes:

1. **In-Process Quality**
    - Deviation Management
    - CAPA (Corrective and Preventive Actions)
2. **In-Product Quality**
    - Product Complaints

- Recall Management
- Adverse Event Reporting

3. **QMS Management**
    - Supplier Management

🧠 Your Task

You are required to:

1. Explore the above QMS modules.
2. Explain the **end-to-end flow** for each module, covering how it works and its purpose.
3. Take:
    - **Example related to API**, and
    - **Examples related to Raw Materials.**
4. Explain **roles in SMEs (Small & Medium Enterprises)** such as:
    - Quality Executive / QA Officer
    - Production Manager
5. Support your explanation using **flowcharts or simple visuals** (hand-drawn or digital, not AI generated one).
6. Include a **short "Learning Reflection"** — what was challenging, how you understood it, and what you learned.
7. **End your video** with explanations for the **mini problem scenarios** below.

⚡ Mini Problem Scenarios (Explain at the End of the Video)

Scenario 1 (Optional):

A supplier repeatedly delivers raw materials that fail quality checks due to contamination.

- How would the **QMS and CAPA process** help manage and prevent this issue?
- What roles would be involved, and how would communication or documentation flow between them?

Scenario 2 (Optional):

During in-process production, a deviation occurs because a machine parameter wasn't recorded correctly.

- How would the **Deviation Management** process identify, document, and resolve such an issue?
- What steps would the team follow, and how would it link to future preventive actions?

💡 *You don't need to know the exact technical system — use logical reasoning and your understanding of QMS workflow.*

🤖 AI Tool Usage Policy

You may use **ChatGPT or Google Gemini** only for **research or conceptual understanding**.

Your **video explanation must be in your own words.**

- Do not read AI-generated text.
- We evaluate your understanding, not AI's.
- Use AI as a guide, not your answer.

📹 Video Recording Instructions (Mandatory)

1. **Duration:**
    - Minimum: **15 minutes**
    - Maximum: **25 minutes**
    - **Videos below 15 minutes will not be accepted.**

2. **Recording Format:**
    - Use your **phone or laptop** (clear audio + visible face).
3. **Recommended Structure:**

Segment	Duration	Content
Introduction	1–2 mins	Who you are & what this task is about
QMS Modules Overview	5–6 mins	Explain in-process, in-product & QMS management
Example Flows	4–5 mins	1 API + 2 Raw Material examples
SME Roles	2–3 mins	Who does what and why
Learning Reflection	2–3 mins	What was difficult and what you learned
Problem Scenarios	4–5 mins	Your reasoning for Scenario 1 andScenario 2
Summary	1 min	Final insights or suggestions

📦 Deliverables (Submit Separately)

You must submit both items **separately** using the Google Form link below:

1. Video Recording

- Duration: 15–20 mins
- Format: MP4 or MOV
- File name: YourName_QMS_Assignment_Video

2. Supporting Files

- Flowcharts, notes, or slides (PDF/DOCX/PPT/PNG)
- 1-page summary (optional but encouraged)
- File name: YourName_QMS_Assignment_Files

📤 Submission Link

Submit both files separately using this Google Form:

https://forms.gle/o8LAQBnwBZRTD8no6

(Upload both the video and files in their respective fields. Incomplete submissions will not be reviewed.)

⏰ Deadline

You have **1 day (24 hours)** from the time of assignment to complete and submit your task.
We expect the overall assignment to take around **8–10 hours of effort** including research, preparation, and recording.