

# Task statement

## 1. Process Monitoring Application:

- Write a Python application that will check all processes running on the current machine and output the following process statistics every x number of seconds (x should be configurable):
  - PID
  - Process name
  - CPU usage %
  - MEM usage %
  - **Bonus/Optional:** Add more statistics if you feel something is particularly important to monitor for a given PID.
- User should be able to order in both ascending and descending way the results by PID, process name, CPU usage, MEM usage
- Enhance the features of the application by implementing the following:
  - **Anomaly Detection:** Develop an algorithm to detect unusual spikes in CPU or memory usage and alert the user.
  - **Filtering by process name:** Provide an input field that allows users to filter results based on the process name.
  - **Bonus/Optional:** functionality that checks if a process is a child process to another

## 2. Expose all application functionalities via a JSON REST API

## 3. Web UI:

- Create a simple web UI for visualizing the results. The web UI should display the process statistics in a user-friendly manner.

## 4. Dockerfile:

- Make a Dockerfile for your app.