# **Coding Challenge**

## -Log Monitoring Application-

This task should take at most 90 minutes of your time, focus on problem solving and good coding practices. If you run out of time, then please document what else you would have liked to have achieved. You can complete this challenge in any common programming language.

You are provided with a log file, logs.log. The goal of this challenge is to build a log monitoring application that reads the file, measures how long each job takes from start to finish and generates warnings or errors if the processing time exceeds certain thresholds.

Your application should be able to:

- 1. Parse the CSV log file.
- 2. Identify each job or task and track its start and finish times.
- 3. Calculate the duration of each job from the time it started to the time it finished.
- 4. Produce a report or output that:
  - Logs a warning if a job took longer than 5 minutes.
  - Logs an error if a job took longer than 10 minutes.

#### Log Structure:

- HH:MM:SS is a timestamp in hours, minutes, and seconds.
- The job description.
- Each log entry is either the "START" or "END" of a process.
- Each job has a PID associated with it e.g., 46578.

### What we are looking for:

- Clean, readable, and well-structured code.
- Include comments to explain any tricky parts.
- Commit changes with clear and descriptive commit messages to illustrate your development process.
- Suitable testing.
- A brief README.

#### Submission:

- Create a public repository on GitHub containing your source code, tests, documentation and output/log file.
- Provide a link to your repository as proof of completion.