LABO
REM
US*

Interview process

Software Developer case

September 2020

1 INTRODUCTION

Welcome to the Laboremus Uganda Software Developer case. This case contains of two parts. Part 1 is a coding challenge. You are expected to write a solution as described. Part 2 is a design challenge. No code is expected here but the design should be descriptive enough for another team to implement. The final section presents a guide on how the case should be delivered.

2 CASE

You are the lead developer at an international sales firm which sales goods both online and from retail stores. The annual sales report is shared periodically as a CSV file that is zipped here.

2.1 Part 1

The CEO requires that we improve our reporting tools. As such, the first order of business is to digitize our records.

a. You will build a web-based system where the store manager can upload the csv file into the system. A tabular display will be needed to show the following properties: order date, order priority, units sold, unit price, total cost total revenue and item type.
b. You will create a mini-dashboard that takes in a given date range and shows the following (for that date range);
    - The total profit made
    - The top 5 profitable itemTypes

Hint:

- *We are not looking for beautiful user interface.*
- *We are mainly interested in your thought process*
- *Unit testing will be an added advantage*

2.2 Part 2

In the future we would like this system to fully automate this report mechanism. The sales firm is in the process of procuring a third party ERP system with POS points that the sales stores will use to record sales. The ERP system will then generate the sales records and dump them in a specified folder on the server in the same structure as 1) above. Your web-based system shall then pick up these files and update its own database.

Using your preferred graphical tool, draw up a detailed architecture for this solution to be used by the implementing team without your assistance.

Hint:

- *We do not expect any code for this.*
- *You can use draw.io for your drawings*

3 DELIVERABLE

You will send your work to the following email address: titin@laboremus.no. The following are the deliverables:

- For 1), Include a Github repository link for the solution with a descriptive ReadMe that includes how to run this solution locally. The repository should be publicly accessible.

- For 2), include a link to the document/image(s) or add them as attachments in the email that you are sending.