SOFTWARE DEVELOPER | CODING CHALLENGE

DESCRIPTION

This is the Farmobile full-stack developer challenge.
Our challenge to you is to create a ReSTful API that delivers the requested data.
You may use any open source libraries you wish as long as the basic requirements are met.

LANGUAGE

Python

INSTRUCTIONS

Deliver the requested data below via ReSTful API endpoint(s).

REQUESTED DATA:
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1. Total GPS messages
2. Total CAN messages
3. Total unique CAN messages (for purposes of this count message_id define a unique CAN message)
4. Total run time of the data in the file base on the ts (timestamps)
5. Average CAN messages per second of run time and per gps message
6. The first ts (timestamp) that contains the most CAN messages
7. The first ts (timestamp) that contains the least CAN messages

DATA STRUCTURE:

(Please see attached "gps_can_data.csv" for data).

Rows that have a gps_id, latitude, longitude, groundspeed and truecourse are GPS messages.
Rows that have a message_id, dlc, payload are CAN messages.

DELIVERABLE

Please return your source code as well as any outputs generated (if any) via email within 1 week of receipt.

TO: Kris Antonetti, VP Engineering Operations at kris@farmobile.com
CC: Kristen Brown, Director of People Operations at kbrown@farmobile.com

Your solution will be evaluated on the following criteria:

1. Code Structure and Composition
2. Readability and Maintainability
3. Correct Results and Proof of Correctness
4. Instrumentation and Logging