## Pulse Energy Back-end Sr Code Assignment

## **Assignment:**

- Download & open this <u>CSV file</u>. The CSV file has two columns: *charge\_point\_id* and *payload*. Each row represents a "meter value record".
- Make a Websocket server. This server is to be beamed up with the data above, coming from more than 50,000 clients at a single point in time. The data will continue to stream iteratively for 1 hours in a repeated manner.
- You'll have to make mock clients (use <a href="https://www.artillery.io/">https://www.artillery.io/</a>) that pick up the individual meter value records from the given CSV file and send it to the Websocket server that you created in an interval of 5 seconds. You can consider each charge\_point\_id as a client and send only the meter value records of that client/charge point.
- The data received by the server should be stored in a DB (SQL or NoSQL, it's up to you).
- This stored data should be retrievable by 1000 external parties via 2 API endpoints (use <a href="https://www.artillery.io/">https://www.artillery.io/</a> to mock up the external parties as well).
  - List endpoint: this API endpoint should be able to return the data in a paginated format and if requested only for certain charge point ids that are passed in the request.

- Detail endpoint: this API endpoint should be able to return the complete data for a single record.
- Use 2000K as the validator for a successful request response cycle
- Make sure each request response occurs under 200ms (P50th percentile)

## Final Deliverables:

- 1. Send us a GitHub/BitBucket link of the repo or a zip file (DO NOT include node\_modules or env folder and include .git folder so that we can see the commit history).
- 2. Please write up a README describing how to setup and run the project.

## Bonus points for:

- using TypeScript (applicable only if you are using Node.js)
- adding tests

Feel free to reach out to me if you have any questions at <a href="mailto:devang@pulseenergy.io">devang@pulseenergy.io</a> or call on +919702394073

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India as you know is making an impact on the global scale in every aspect. We too have a similar mission by making products in India, by Indians for the world.

Pulse Energy is our attempt to do so!