PFM Code assignment

The Assignment

At PFM we collect, and process footfall data collected by all sorts of sensors. All this data is stored in 15-minute time slots per sensor. Often, we want to use this data in other aggregations than 15-minute time slots. For this we want to make use of an API where we can request that data from.

Your assignment is to create a simple ASP.NET Core API with a single endpoint that can return this data. We want to be able to retrieve the data in hourly, daily and weekly aggregations. The count data used by the API is provided in an attached csv file that you can use as you see fit. For us the correctness of the data is the most important thing, we cannot afford to report incorrect data to our customers.

Time limit

We would like you to timebox this assignment to a maximum of 4 hours - It's ok if you're not "done" after 4 hours – just send us what you have, we don't want to take up much of your time.

We don't mind if you keep on coding past the 4 hour mark – assignments can be fun – feel free to go ahead and commit whatever you build! It would be nice if you could indicate where you were at the ± 4 hour mark.

Git Repository

We want to get a feel for your way of working and problem solving. We find it less important that everything is 100% complete.

For this we ask that you create a Git repository, preferably in Github, and share that access with us. We're ok with the repository being public. If you'd rather keep it private, then please let us know by email, so we can provide you with the right github handles to share the repository with.

Please commit regularly, at least every 30 mins, preferably more often, while developing, so that we can see the app evolve. Tip – put an egg timer on your phone or computer – it's very easy to forget to commit on a time basis once you're in the exercise

README

Please provide a readme in the repository that explains how we can setup or run your application. Feel free to add any type of explanation, coding or design decisions you made.

Questions

Of course you can ask questions! Feel free to email your contact person. And we'll get back to you asap.

Tips

- Set an "egg timer" to 20 or 30 minutes to remind yourself to commit your current state of work. It's easy to forget once you're in the flow.

- It's OK to show-off - this is a recruitment assignment in the end – but focus on the basics first. The most commonly made "mistake" is that people go in wanting to be perfect with a wide range of dependencies and tooling. You might end up spending 4 hours getting an ecosystem of tools and techniques to work – before you even start coding on the actual assignment. We can't stop you from doing that – but we'd like to stress that we're not intending this exercise to be a very large assignment – so our tip: get the basics done in the first hour(s), then fill the rest of the time with incremental luxury.