SOFTWARE ENGINEER
REMOTE TECHNICAL EXERCISE

Thanks for agreeing to do our remote technical exercise
The brief, plus two data files should be included in your pack

For your info, here are some of the things we'd hope to see demonstrated in your solution:

SOLID principles
Unit testable code
Writing unit tests
Self documenting code

We hope you enjoy it. Good Luck

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01 TASK

Ensuring the Acceptance Criteria are met, build a C# Web API that connects to an instance of a database and persists the contents of the Meter Reading CSV file.

We have provided you with a list of test customers along with their respective Account IDs (please refer to Test_Accounts.csv). Please seed the Test_Accounts.csv data into your chosen data storage technology and validate the Meter Read data against the accounts.

From the day you receive this test, you have 48 hours to submit your work for assessment. Please send it to careers@ensek.co.uk. with the Subject: "ENSEK Software Engineer Technical Exercise Submission [Your Name]".

It is advised to use a publicly accessible Git repository to commit and share your work with us. Any work committed after the deadline won't be considered towards the technical assessment.

Please submit your work after a reasonable amount of time. We will use the work you have submitted as a topic of conversation, so please don't feel you need to complete the task or spend an excessive amount of time on it.

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02 USER STORY

As an Energy Company Account Manager, I want to be able to load a CSV file of Customer Meter Readings So that we can monitor their energy consumption and charge them accordingly

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03 ACCEPTANCE CRITERIA

MUST HAVE

- Create the following endpoint:

  POST => /meter-reading-uploads

- The endpoint should be able to process a CSV of meter readings. An example CSV file has been provided (Meter_reading.csv)

- Each entry in the CSV should be validated and if valid, stored in a DB.

- After processing, the number of successful/failed readings should be returned.

- Validation:
  - You should not be able to load the same entry twice
  - A meter reading must be associated with an Account ID to be deemed valid
  - Reading values should be in the format NNNNN

NICE TO HAVE

- Create a client in the technology of your choosing to consume the API. You can use angular/react/whatever you like

- Other functionality such as CRUD for accounts/individual meter readings

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04 ATTACHED MATERIALS

- Meter_reading.csv (test file for uploading meter readings)
- Test_accounts.csv (use this to seed your db)

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