SimpleNem12Parser

Task

- Expected duration: 3-4 hours
- Requires Java 8
- Solution can be in Java (preferably Java8) or Groovy

NEM12 is a file format used to represent read data from smart meters.

You are given a sample of a simplified version of the NEM12 file. You are also given the domain model to represent the data in this file. Here are more details.

Refer to comments for following files.

- `EnergyUnit.java`
- `MeterRead.java`
- `MeterVolume.java`
- `Quality.java`
- `SimpleNem12Parser.java`
- `TestHarness.java`

SimpleNem12.csv format specifications

- You can assume, for this exercise, that no quotes or extraneous

commas appear in the CSV data.

- First item on every line is the RecordType
- RecordType 100 must be the first line in the file
- RecordType 900 must be the last line in the file
- RecordType 200 represents the start of a meter read block. This record has the following subsequent items (after RecordType).

  You can assume each file does not contain more than one RecordType 200 with the same NMI.

  - NMI - String ID representing the meter on the site, modelled in `MeterRead.nmi`. Value should always be 10 chars long.
  - EnergyUnit - Energy unit of the meter reads, modelled in `EnergyUnit` enum type and `MeterRead.energyUnit`. Value should always be KWH.
- RecordType 300 represents the volume of the meter read for a particular date. This record has the following subsequent items (after RecordType).

  You can assume each file does not contain more than one RecordType 300 with the same date.

  - Date - In the format yyyyMMdd (e.g. 20170102 is 2nd Jan, 2017). Modelled in `MeterRead.volumes` map key.
  - Volume - Signed number value. Modelled in `MeterVolume.volume`.
  - Quality - Represents quality of the meter read, whether it's Actual (A) or Estimate (E). Value should always be A or E. Modelled in `MeterVolume.quality`

Your task is to create a new class (e.g. SimpleNem12ParserImpl) that implement interface `SimpleNem12Parser`.

You cannot modify SimpleNem12.csv. Any changes to the provided domain model is fine though it shouldn't be necessary.

Please send your submission to tommy.li@redenergy.com.au either in a zip file or online source code sharing services such as GitHub or Bitbucket.