



Programming test

Write a console program that will be periodically scanning a location on a hard drive for new JSON files. Files can be of any size and may be placed in the location at any time in any numbers. Each file contains a list (array) of objects.

There will be three types of files available to process (example files are provided):

- orders
- order items
- order shipments

Order class has following fields:

- order reference
- marketplace
- name
- surname

Order item class has following fields:

- order reference
- marketplace
- order item number
- sku
- price per unit
- quantity

Order shipment class has following fields:

- order reference
- marketplace
- shipping service
- postcode



Notes:

- order to order item has one to many relation
- order reference is not unique, it can be duplicated across different marketplaces, however order reference is unique for a particular marketplace
- order to order shipment is one-to-one relationship, there is only one shipping service for an order.
- order item number is unique for order item record for a specific order

Task:

Processing program should create one CSV file per order and place it in predefined output location. The produced CSV file is denormalized into a flat structure.

Format for output files is:

- order reference
- marketplace
- name
- surname
- order item number
- sku
- price per unit
- quantity
- postal service
- postcode

Considerations:

- 1) Only fully constructed lines ie only those that have entries in all three types of files should be added to output files.
- 2) Files can arrive at any time, not in sequence. i.e. we can receive order item without an order, or order shipment without an order, or order without shipment file or order without order item file. See consideration 1.
- 3) Keep in mind that another developer may want to extend the program later to also work with files located on FTP server, dropbox, etc. Also more formats for input/output files can be added in the future.

Delivery

- working C# console application, that periodically scans a location specified in the command line
- outputs files into a location specified in command line parameter
- -? parameter in a command line to output a help menu defining parameters for scan location and for output location
- please submit your solution source code to GitHub, make sure it's public and send us the link to the repo