# Liquid Metrix Coding Task

This task is based on a real tool which we made internally.

# Code Quality

Your solution should be:

1. Understandable
   * A junior developer should be able to understand it, with limited explanation
2. Elegant
   * Other developers (juniors, mid-weights, seniors & architects) should notice that that it is a good solution, with appropriate use of design patterns, and only minimal abstractions
3. Concise
   * Use the minimal amount of code required to do the job. However, do not sacrifice understandability.
4. Unit Tested
   * We are looking for pragmatic unit tests, not 100% coverage
   * Your unit tests should be well named, based on the behaviour of the application
   * There will be extra recognition if there is evidence of Behaviour/Test Driven Development.
5. SOLID & Pragmatic
   * SOLID principals should be followed
   * We are looking for pragmatism, and good decisions/trade-offs which can be easily explained

# Deliverable

A link to a public Github repository.

# Task

## Background

Banks provide us with stock market transactions as CSV files.

Characteristics of the CSV:

* Simple fields – eg. Integer, Float
* Complex fields - Requires parsing & transformation to extract desired data
* Some files are not valid CSVs, and hence require some pre-processing/clean-up/error-checking

## Input

DataExtractor\_Example\_Input.csv as a parameter.

## Processing

Our task is to extract 3 simple fields and a complex field, then output our own smaller “clean” CSV file.

Simple fields (just output these values!)

* ISIN
* CFICode
* Venue

Complex field: AlgoParams - Extract the value of PriceMultiplier.

For example, the following string, the extracted value should be 25.0

xxxx|;PriceMultiplier:25.0|;xxxx

**The CSV header for this value should be called Contract Size**

*Note: You may use ANY library which is publicly available – We do not want to see manual string parsing. Use a library!*

## Output

### The CSV output file with header titles:

* ISIN
* CFICode
* Venue
* Contract Size