# File Transfer Project

* The console application should monitor .dat files in the input folder, when new files appear it should transform them as described below.
* For integrity check each .dat file in the Input folder is paired with corresponding .md5 file with the same name.
* Input .dat file format:
  + The first row contains headers: EventId|Details|Timestamp
  + Next rows are data (0 or more data rows, up to 10M rows), separated with |
  + Lines are separated with \r\n
  + EventId is positive 64 bit integer
  + Details is an arbitrary string (but cannot contain |), possible empty
  + Timestamp is a date and time in format month/day/year hours:minutes:seconds AM or PM, example: 2/18/2022 9:31:25 PM
  + Data row example: 224544|BUY APPL:120@350 |2/18/2022 9:31:25 PM
  + Data rows can have duplicates (with the same EventId, Timestamp and Details)
* Md5 file format: a hexadecimal string, case insensitive, example (for an empty file): D41D8CD98F00B204E9800998ECF8427E
* Do not start processing input .dat until corresponding .md5 is also present.
* Ignore files other than \*.dat and \*.md5
* All successfully processed files should be moved to “Output” folder.
* All erroneous files should be moved to “errors” folder:
  + When md5 does not match or dat file format is not correct.
  + If one of the rows is invalid consider the whole file is invalid and do not create an output for it
  + The .error.txt file should be created near the file in errors folder with the description of the issue:
    - MD5 is invalid
    - Wrong headers
    - Less columns in data row (including the row number)
    - Etc.