

Transactions Aggregator Documentation V1.0

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1. Expected behavior

For a given list of input csv files containing transactions like:

	A	B	C	D	E
1	date	type	amount	to	from
2	Oct 1 2019	remove	99	182	198
3	Oct 2 2019	add	2000	198	188
4					

	A	B	C	D	E
1	date	transaction	amounts	to	from
2	03/10/2019	remove	99	182	198
3	04/10/2019	add	2000	198	188

	A	B	C	D	E
1	date	type	amount	to	from
2	Oct 4 2019	remove	99	182	198
3	Oct 5 2019	add	2000	198	188
4					

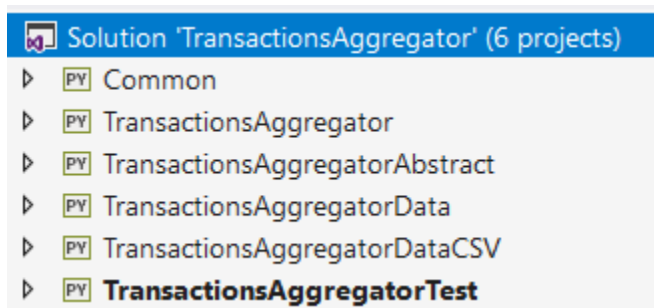
The application is expected to aggregate those transactions into a single output csv file:

	A	B	C	D
1		Bank1.csv	Bank2.csv	Bank3.csv
2	0	['Oct 1 2019', 'remove', 99, 182, 198]	['03/10/2019', 'remove', 99, 182, 198]	['Oct 4 2019', 'remove', 99, 182, 198]
3	1	['Oct 2 2019', 'add', 2000, 198, 188]	['04/10/2019', 'add', 2000, 198, 188]	['Oct 5 2019', 'add', 2000, 198, 188]

2 Technical Solution

2.1 General structure

The implemented solution on Visual Studio 2017, Python 3.7.3, is structured like below:



2.2 TransactionsAggregatorData Project

This project offers data parsing services.

2.3 TransactionsAggregatorDataCSV Project

This project offers a specific implementation of the above interface by parsing CSV files.

2.4 TransactionsAggregatorAbstract Project

This project offers the core service of the aggregation process.

2.5 TransactionsAggregator Project

This project offers the concrete implementation of the core service of the aggregation process.

2.6 TransactionsAggregatorTest Project

This project is available for acceptance tests (through Given When Then) purposes.

3 Acceptance Tests - Given When Then (GWT)

3.1 GWT Aggregate Data structure

Given																										
When	TransactionsAggregatorTest.test_ToTransactionHistoryOutput() is run																									
Then	<div>Test OK, output.csv generated in TransactionsAggregator\TransactionsAggregatorTest\outputs</div> <table><tr><th></th><th>A</th><th>B</th><th>C</th><th>D</th></tr><tr><td>1</td><td></td><td>bank1.csv</td><td>bank2.csv</td><td>bank3.csv</td></tr><tr><td>2</td><td>0</td><td>['Oct 1 2019', 'remove', 99, 182, 198]</td><td>['03-10-2019', 'remove', 99, 182, 198]</td><td>['Oct 4 2019', 'remove', 99, 182, 198]</td></tr><tr><td>3</td><td>1</td><td>['Oct 2 2019', 'add', 2000, 198, 188]</td><td>['04-10-2019', 'add', 2000, 198, 188]</td><td>['Oct 5 2019', 'add', 2000, 198, 188]</td></tr><tr><td>4</td><td></td><td></td><td></td><td></td></tr></table>		A	B	C	D	1		bank1.csv	bank2.csv	bank3.csv	2	0	['Oct 1 2019', 'remove', 99, 182, 198]	['03-10-2019', 'remove', 99, 182, 198]	['Oct 4 2019', 'remove', 99, 182, 198]	3	1	['Oct 2 2019', 'add', 2000, 198, 188]	['04-10-2019', 'add', 2000, 198, 188]	['Oct 5 2019', 'add', 2000, 198, 188]	4				
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4																										

3.2 GWT CSV files

Given	TransactionsAggregator\TransactionsAggregatorTest\bank1.csv					
		A	B	C	D	E
	1	date	type	amount	to	from
	2	Oct 1 2019	remove	99	182	198
	3	Oct 2 2019	add	2000	198	188
bank2.csv						
	A	B	C	D	E	
1	date	transaction	amounts	to	from	
2	03/10/2019	remove	99	182	198	
3	04/10/2019	add	2000	198	188	
bank3.csv						
	A	B	C	D	E	
1	date	type	amount	to	from	
2	Oct 4 2019	remove	99	182	198	
3	Oct 5 2019	add	2000	198	188	
When	TransactionsAggregatorTest.test_ToTransactionHistoryOutputCSV() is run					
Then	Test OK, outputInputsFromCSV.csv generated in TransactionsAggregator\TransactionsAggregatorTest\outputs					
	A	B	C	D		
1		bank1.csv	bank2.csv	bank3.csv		
2	0	['Oct 1 2019', 'remove', 99, 182, 198]	['03-10-2019', 'remove', 99, 182, 198]	['Oct 4 2019', 'remove', 99, 182, 198]		
3	1	['Oct 2 2019', 'add', 2000, 198, 188]	['04-10-2019', 'add', 2000, 198, 188]	['Oct 5 2019', 'add', 2000, 198, 188]		
4						