# Description of Source Code

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| No. | Source Code Folder | Description |
| IEX Kafka Streaming | | |
| 1 | IEX\_Producer | Producer which gets data via the IEX API and ingests it into the Kafka with topic stock-quotes |
| 2 | SparkStreamingMovingAverage | Consumer which gets data from Kafka queue with topic stock-quotes and does moving average analysis |
|  | Streaming-Spark-StockwithUnixTS | Consumer which gets data from Kafka queue with topic stock-quotes and ingests it into Cassandra |
| StockTwits Kafka Streaming | | |
| 3 | Ingestion-StockTwits-Producer | Producer which gets data via the StockTwits API and ingests it into Kafka with topic Stock-Twits |
| 4 | Streaming-StockTwits-Cassandra | Consumer which gets data from Kafka with topic Stock-Twits and ingests it into Cassandra |
| Batch Analytics | | |
| 5 | BatchML | Performs predictive analytics on the data from Cassandra for future market trends |
| 6 | StockTwitAnalytics | Perform aggregate analysis to get the trend of bullish and bearish tweets, likes, follower counts for a particular ticker |
| 7 | cassandra\_stock\_quotes | Perform aggregates to get the trends on market volume, number of trades, market high and low values, and market open values |
| Others | | |
| 8 | Cassandra\_Schema\_Files | Files with CQL to perform the set-up of the Cassandra schema for the data |
| 9 | Archival | Performs scheduled archival of the data into HDFS for records older than 10 years in the form of parquet files |
| 10 | Qlik\_sense | Dashboard visualization of the analytics done |

Packaged JAR files ready for deployment are found here : <https://drive.google.com/drive/folders/1kYnweP0WGCPd1yesRgAtZUrtLXoCqq-g>