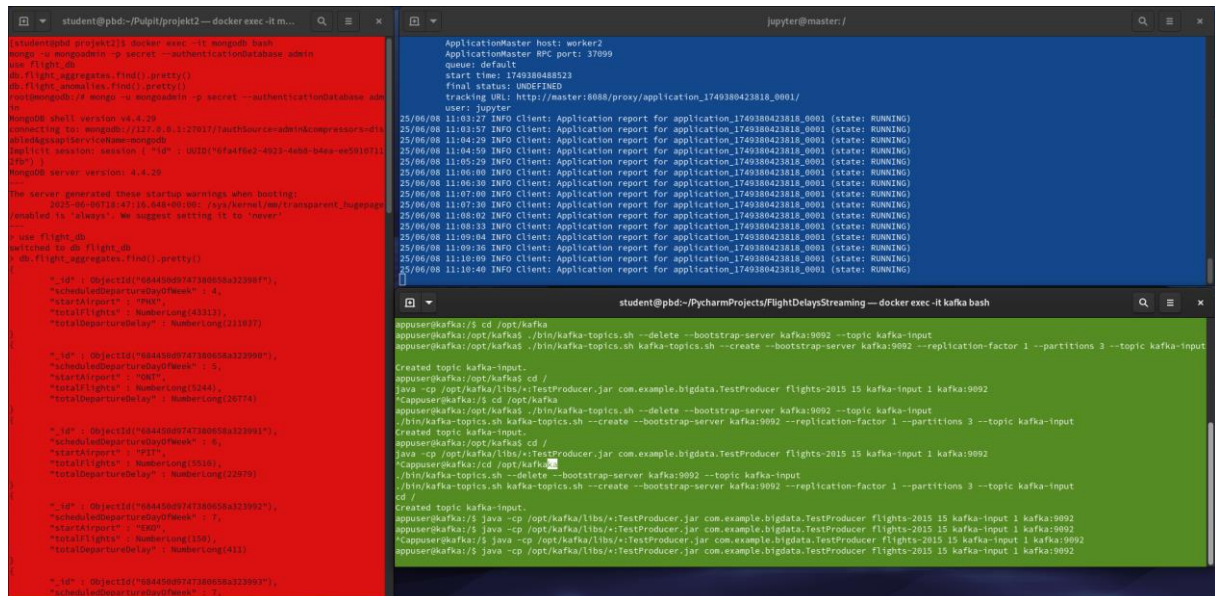


Wszystkie skrypty zamieszczone są w pliku **scripts.txt**. Wykonywanie ich po kolei sprawi, że projekt poprawnie się zbuduje. Poszczególne fragmenty skryptów są wydzielone dla czytelności w oddzielnych plikach. Aby zadziałał cały projekt kluczowe jest uruchomienie kontenerów z docker compose + mongodb + kafka (zawarte w skryptach). Przy poprawnym uruchomieniu powinniśmy uzyskać taki rezultat:



```
student@pbd:~/Pulpit/projekt2 -- docker exec -it m...
mongo -- mongoadmin -p secret --authenticationDatabase admin
use flight_db
db.flight_aggregates.find().pretty()
db.flight_analytics.find().pretty()
root@mongo: /# mongo -- mongoadmin -p secret --authenticationDatabase admin
MongoDB server version: 4.4.29
The server generated these startup warnings when booting:
2023-06-08T18:47:16.041600000: /sys/kernel/debug/transparent_hugepage
enabled is 'always'. We suggest setting it to 'never'
> use flight_db
switched to db flight_db
use flight_db
db.flight_aggregates.find().pretty()
{ "_id" : ObjectId("60443060747380658a1290f7"),
  "scheduledDepartureDayOfWeek" : 4,
  "starRating" : "PMO",
  "totalFlights" : NumberLong(14311),
  "totalDepartureDelay" : NumberLong(111837) }

{ "_id" : ObjectId("60443060747380658a1290f8"),
  "scheduledDepartureDayOfWeek" : 5,
  "starRating" : "PMO",
  "totalFlights" : NumberLong(1244),
  "totalDepartureDelay" : NumberLong(10774) }

{ "_id" : ObjectId("60443060747380658a1290f9"),
  "scheduledDepartureDayOfWeek" : 6,
  "starRating" : "PMO",
  "totalFlights" : NumberLong(1518),
  "totalDepartureDelay" : NumberLong(10770) }

{ "_id" : ObjectId("60443060747380658a1290fa"),
  "scheduledDepartureDayOfWeek" : 7,
  "starRating" : "PMO",
  "totalFlights" : NumberLong(134),
  "totalDepartureDelay" : NumberLong(411) }

{ "_id" : ObjectId("60443060747380658a1290fb"),
  "scheduledDepartureDayOfWeek" : 7,
  "starRating" : "PMO",
  "totalFlights" : NumberLong(134),
  "totalDepartureDelay" : NumberLong(411) }

ApplicationMaster host: worker2
ApplicationMaster RPC port: 37099
Queue: default
start time: 1749380488523
final status: UNOFTNED
tracking URL: http://master:8088/proxy/application_1749380423818_0001/
user: jupyter
25/06/08 11:03:27 INFO Client: Application report for application_1749380423818_0001 (state: RUNNING)
25/06/08 11:03:37 INFO Client: Application report for application_1749380423818_0001 (state: RUNNING)
25/06/08 11:04:29 INFO Client: Application report for application_1749380423818_0001 (state: RUNNING)
25/06/08 11:04:59 INFO Client: Application report for application_1749380423818_0001 (state: RUNNING)
25/06/08 11:05:29 INFO Client: Application report for application_1749380423818_0001 (state: RUNNING)
25/06/08 11:06:00 INFO Client: Application report for application_1749380423818_0001 (state: RUNNING)
25/06/08 11:06:30 INFO Client: Application report for application_1749380423818_0001 (state: RUNNING)
25/06/08 11:07:00 INFO Client: Application report for application_1749380423818_0001 (state: RUNNING)
25/06/08 11:07:30 INFO Client: Application report for application_1749380423818_0001 (state: RUNNING)
25/06/08 11:08:02 INFO Client: Application report for application_1749380423818_0001 (state: RUNNING)
25/06/08 11:08:33 INFO Client: Application report for application_1749380423818_0001 (state: RUNNING)
25/06/08 11:09:04 INFO Client: Application report for application_1749380423818_0001 (state: RUNNING)
25/06/08 11:09:36 INFO Client: Application report for application_1749380423818_0001 (state: RUNNING)
25/06/08 11:10:09 INFO Client: Application report for application_1749380423818_0001 (state: RUNNING)
25/06/08 11:10:40 INFO Client: Application report for application_1749380423818_0001 (state: RUNNING)

student@pbd:~/PycharmProjects/FlightDelaysStreaming -- docker exec -it kafka bash
appuser@kafka:/# cd /opt/kafka
appuser@kafka:/opt/kafka$ ./bin/kafka-topics.sh --delete --bootstrap-server kafka:9092 --topic kafka-input
appuser@kafka:/opt/kafka$ ./bin/kafka-topics.sh --create --bootstrap-server kafka:9092 --replication-factor 1 --partitions 3 --topic kafka-input
Created topic kafka-input.
appuser@kafka:/opt/kafka$ cd /
appuser@kafka:/opt/kafka$ ./bin/kafka-topics.sh --delete --bootstrap-server kafka:9092 --topic kafka-input
./bin/kafka-topics.sh --create --bootstrap-server kafka:9092 --replication-factor 1 --partitions 3 --topic kafka-input
Created topic kafka-input.
appuser@kafka:/opt/kafka$ cd /
appuser@kafka:/opt/kafka$ ./bin/kafka-topics.sh --delete --bootstrap-server kafka:9092 --topic kafka-input
./bin/kafka-topics.sh --create --bootstrap-server kafka:9092 --replication-factor 1 --partitions 3 --topic kafka-input
Created topic kafka-input.
appuser@kafka:/# java -cp /opt/kafka/libs/*:TestProducer.jar com.example.bigdata.TestProducer flights-2015 15 kafka-input 1 kafka:9092
./bin/kafka-topics.sh --delete --bootstrap-server kafka:9092 --topic kafka-input
./bin/kafka-topics.sh --create --bootstrap-server kafka:9092 --replication-factor 1 --partitions 3 --topic kafka-input
Created topic kafka-input.
appuser@kafka:/# java -cp /opt/kafka/libs/*:TestProducer.jar com.example.bigdata.TestProducer flights-2015 15 kafka-input 1 kafka:9092
appuser@kafka:/# java -cp /opt/kafka/libs/*:TestProducer.jar com.example.bigdata.TestProducer flights-2015 15 kafka-input 1 kafka:9092
appuser@kafka:/# java -cp /opt/kafka/libs/*:TestProducer.jar com.example.bigdata.TestProducer flights-2015 15 kafka-input 1 kafka:9092
```

czerwony terminal = mongoDB

niebieski terminal = Spark Structured Streaming

zielony terminal = Apache Kafka