In this assignment, I will cover the usage of queueing, using Kafka, and caching technologies using Redis, to implement an event driven architecture for the Asset project.

We will review the implementation of Kafka producer at the organization service, on which a message will be sent to a Kafka consumer at the Asset service.

After publishing a message successfully, we will use the RedisRepository at Asset project to lookup for the asset that was passed through the Kafka stream.

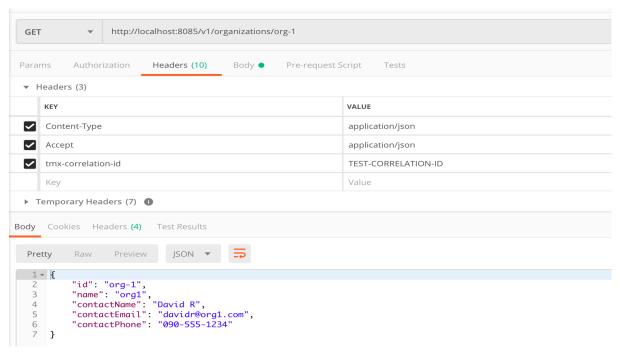
Mvn clean package docker:build

```
-> d23bdf5b1b1b
ProgressMessage{id=null, status=null, stream=null, error=null, progress=null, progressDetail=null}
Successfully built d23bdf5b1b1b
Successfully tagged example:latest
[INFO] Built example
[INFO] -
[INFO] Reactor Summary:
[INFO]
[INFO] Eagle Eye Organization Service ...... SUCCESS [ 7.658 s]
[INFO] Eureka Server ...... SUCCESS [
[INFO] Zuul Proxy Server ...... SUCCESS [ 5.548 s]
[INFO] assignment3_2-parent-pom 0.0.1-SNAPSHOT ...... SUCCESS [ 0.243 s]
[INFO] BUILD SUCCESS
[INFO] --
[INFO] Total time: 37.545 s
[INFO] Finished at: 2019-05-15T23:14:27+03:00
[INFO] --
→ Assignment3_2
Spring Q 3: Find \≡ 6: TODO \□ Terminal C$ CheckStyle
```

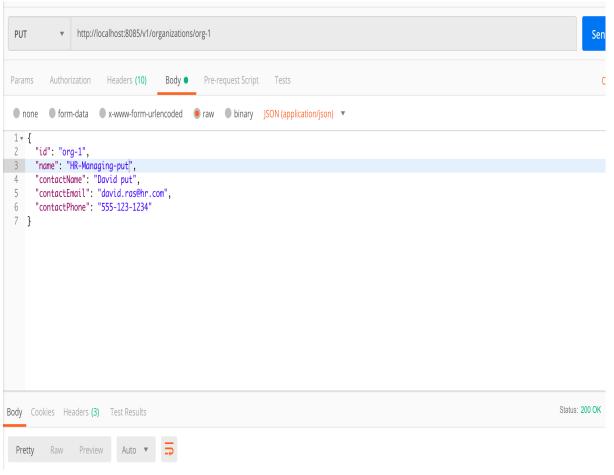
docker-compose -f docker/common/docker-compose.yml up

```
organizationservice 1
                                  ssl.cipher.suites = null
 organizationservice_1 |
                                  ssl.truststore.type = JKS
 organizationservice 1
                                  security.protocol = PLAINTEXT
 organizationservice_1 |
                                  retries = 0
 organizationservice_1 |
                                  max.request.size = 1048576
                                  value.serializer = class org.apache.kafka.common.serialization.ByteArraySerializer
 organizationservice_1 |
 organizationservice_1 |
                                  ssl.truststore.location = null
 organizationservice_1 |
                                  ssl.keystore.password = null
 organizationservice_1 |
                                  ssl.keymanager.algorithm = SunX509
 organizationservice_1 |
                                  metrics.sample.window.ms = 30000
 organizationservice_1 |
                                  partitioner.class = class org.apache.kafka.clients.producer.internals.DefaultPartitioner
 organizationservice_1
                                  send.buffer.bytes = 131072
 organizationservice_1 |
                                  linger.ms = 0
 organizationservice_1 |
 organizationservice 1 | 2019-05-16 19:37:33.486 INFO 28 --- [nio-8085-exec-6] o.a.kafka.common.utils.AppInfoParser
                                                                                                                           : Kafka version : 0.9.0.1
 organizationservice_1 | 2019-05-16 19:37:33.487 INFO 28 --- [nio-8085-exec-6] o.a.kafka.common.utils.AppInfoParser
                                                                                                                           : Kafka commitId : 23c69d
 assetservice_1
                         | 2019-05-16 19:37:33.754 DEBUG 30 --- [afka-listener-1] r.t.a.e.h.OrganizationChangeHandler
                                                                                                                           : Received a message of t
 assetservice 1
                         | 2019-05-16 19:37:33.755 DEBUG 30 --- [afka-listener-1] r.t.a.e.h.OrganizationChangeHandler
                                                                                                                           : Received a UPDATE event
 organizationservice_1 | 2019-05-16 19:38:05.907 DEBUG 28 --- [nio-8085-exec-7] r.t.o.utils.UserContextFilter
                                                                                                                           : Entering the UserContex
 organizationservice_1 | 2019-05-16 19:38:05.907 DEBUG 28 --- [nio-8085-exec-7] r.t.o.utils.UserContextFilter
                                                                                                                           : I am entering the organ
  Dockarfila dataction: Vau may catus Dockar danlayment rus configuration for the following filade): zuwleyr/cre/main/dockar/Dockarfila confere/main/dockar/Dockarfila confere/main/dockar/Dockarfila confere/cre/main/dockar/Dockarfila
```

Getting an organization details.



Updating organization details using "Put"



The output shows that we've updated the organization entity

```
eclo "***************
                                   Application.iava
                                                                                                                                         echo "Waiting for the REDIS server to start on port $REDIS_PORT"
               ▼ resources
                                                                                                                                         echo "******************
                                                                                                                                         while ! 'nc -z redis $REDIS PORT'; do sleep 10; done
                      application.yml
                                                                                                                             33
                                                                                                                                         echo "***** REDIS has started"
                      bootstrap.yml
Terminal: Local x +
organizationservice 1
                                                metrics.sample.window.ms = 30000
organizationservice_1 |
                                                partitioner.class = class org.apache.kafka.clients.producer.internals.DefaultPartitioner
                                                send.buffer.bytes = 131072
organizationservice_1 |
organizationservice_1 |
                                                linger.ms = 0
organizationservice_1 |
organizationservice 1 | 2019-05-16 19:37:33.406 INFO 28 --- [nio-0005-exec-6] o.a.kafka.common.utils.AppInfoParser
                                                                                                                                                                                         : Kafka version : 0.9.0.1
organizationservice_1 | 2019-05-16 19:37:33.407 INFO 28 --- [nio-8005-exec-6] o.a.kafka.common.utils.AppInfoParser
                                                                                                                                                                                         : Kafka commitId : 23c69d62a0cabf06
assetservice 1
                                   | 2019-05-16 19:37:33.754 DEBUG 30 --- [afka-listener-1] r.t.a.e.h.OrganizationChangeHandler
                                                                                                                                                                                         : Received a message of type rasoly.thoughtmechanix.organization.events.models.Organizatio
                                                                                                                                                                                         : Received a UPDATE event from the organization service for organization id org-1 \,
assetservice 1
                                   | 2019-05-16 19:37:33.755 DEBUG 30 --- [afka-listener-1] r.t.a.e.h.OrganizationChangeHandler
organizationservice_1 | 2019-05-16 19:38:05.907 DEBUG 28 --- [nio-8005-exec-7] r.t.o.utils.UserContextFilter
                                                                                                                                                                                         : Entering the UserContextFilter for the organization service
                                                                                                                                                                                         : I am entering the organization service id with auth token:
organizationservice 1 | 2019-05-16 19:38:05.907 DEBUG 28 --- [nio-8085-exec-7] r.t.o.utils.UserContextFilter
organizationservice_1 | 2019-05-16 19:38:05.908 DEBUG 28 --- [nio-8005-exec-7] r.t.o.utils.UserContextFilter
                                                                                                                                                                                         : ***** I am entering the organization service id with correlation id: TEST-CORRELATION-II
organizationservice 1 | 2019-05-16 19:38:05.908 DEBUG 28 --- [nio-8005-exec-7] r.t.o.utils.UserContextFilter
                                                                                                                                                                                         : Exiting the UserContextFilter
organizationservice 1 | Hibernate: select organizati0 .organization id as organizati0 0 , organizati0 .contact email as contact 2 0 0 , organizati0 .contact name as contact 3 0 0 , organizati0 .contact name as contact 3 0 0 , organizati0 .contact name as contact 3 0 0 , organizati0 .contact name as contact 2 0 0 , organizati0 .contact name as contact 3 0 0 , organizati0 .contact name as contact 2 0 0 , organizati0 .contact name as contact 3 0 0 , organizati0 .contact name as contact 2 0 0 , organizati0 .contact name as contact 3 0 0 , organizati0 .contact name as contact name as contact 2 0 0 , organizati0 .contact name as contact 3 0 0 , organizati0 .contact name as contact 2 0 0 , organizati0 .contact name as contact 2 0 0 , organizati0 .contact name as contact 2 0 0 , organizati0 .contact name as contact 2 0 0 , organizati0 .contact name as contact 2 0 0 , organizati0 .contact name as contact 2 0 0 , organizati0 .contact name as contact 2 0 0 , organizati0 .contact name as contact 2 0 0 , organizati0 .contact name as contact 2 0 0 , organizati0 .contact name as contact 2 0 0 , organizati0 .contact name as contact 2 0 0 , organizati0 .contact name as contact 2 0 0 , organizati0 .contact name as contact 2 0 0 , organizati0 .contact name as contact 2 0 0 , organizati0 .contact name as contact 2 0 0 , organizati0 .contact name as contact 2 0 0 , organizati0 .contact name as contact 2 0 0 , organizati0 .contact name as contact 2 0 0 , organizati0 .contact name as contact 2 0 0 , organizati0 .contact name as contact 2 0 0 , organizati0 .contact name as contact name as contact 2 0 0 , organizati0 .contact name as contact n
anizatiO_name as name5_0_0_ from organizations organizatiO_where organizatiO_organization_id=?
organizationservice 1 | Hibernate; update organizations set contact email=?, contact name=?, contact phone=?, name=? where organization id=?
                                                                                                                                                                                         : Sending Kafka message UPDATE for Organization Id: org-1
organizationservice_1 | 2019-05-16 19:38:05.919 DEBUG 28 --- [nio-8085-exec-7] r.t.o.events.source.SimpleSourceBean
                                   | 2019-05-16 19:38:05.932 DEBUG 30 --- [afka-listener-1] r.t.a.e.h.OrganizationChangeHandler
                                                                                                                                                                                         : Received a message of type rasoly.thoughtmechanix.organization.events.models.Organizatio
assetservice 1
                                                                                                                                                                                         : Received a UPDATE event from the organization service for organization id org-1
assetservice 1
                                   | 2019-05-16 19:38:05.933 DEBUG 30 --- [afka-listener-1] r.t.a.e.h.OrganizationChangeHandler
```

Porchefile detaction: You may eathn Dorker dealnument run configuration for the following filed: instance in the following filed: in

Asserting that both email, name and contact name was changed.

