

Lab 4

Виконав *Остап Труш*

Github

https://github.com/Adeon18/MicroServices/tree/micro_mq

0. Запускаю 3 HZ контейнера

```
2]:5701 [dev] [5.2.2]
Members {size:1, ver:1} [
    Member [172.17.0.2]:5701 - 9aadeea7-e470-4153-b5bf-1df026ac1811 thi
s]
2023-04-23 15:21:44,253 [ INFO] [main] [c.h.j.i.JobCoordinationService]: [172.17.0.2]:5701 [dev] [5.2.2] Jet started scanning for jobs
2023-04-23 15:21:44,258 [ INFO] [main] [c.h.c.LifecycleService]: [172.17.0.2]:5701 [dev] [5.2.2] [172.17.0.2]:5701 is STARTED
2023-04-23 15:22:01,660 [ INFO] [hz.kind_hodgkin.IO.thread-in-0] [c.h.i.s.t.TcpServerConnection]: [172.17.0.2]:5701 [dev] [5.2.2] Initialized new cluster connection between /172.17.0.2:5701 and /172.17.0.3:45751
2023-04-23 15:22:06,735 [ INFO] [hz.kind_hodgkin.priority-generic-operation.thread-0] [c.h.i.c.ClusterService]: [172.17.0.2]:5701 [dev] [5.2.2]
Members {size:2, ver:2} [
    Member [172.17.0.2]:5701 - 9aadeea7-e470-4153-b5bf-1df026ac1811 thi
s
    Member [172.17.0.3]:5701 - d74a2591-6790-4ffa-9f12-bb0ede2ad063
]
2023-04-23 15:22:10,592 [ INFO] [hz.kind_hodgkin.IO.thread-in-1] [c.h.i.s.t.TcpServerConnection]: [172.17.0.2]:5701 [dev] [5.2.2] Initialized new cluster connection between /172.17.0.2:5701 and /172.17.0.4:45153
2023-04-23 15:22:15,684 [ INFO] [hz.kind_hodgkin.priority-generic-operation.thread-0] [c.h.i.c.ClusterService]: [172.17.0.2]:5701 [dev] [5.2.2]
Members {size:3, ver:3} [
    Member [172.17.0.2]:5701 - 9aadeea7-e470-4153-b5bf-1df026ac1811 thi
s
    Member [172.17.0.3]:5701 - d74a2591-6790-4ffa-9f12-bb0ede2ad063
    Member [172.17.0.4]:5701 - bd0c3f5c-3b33-4b2e-83fb-e34d810d4d14
]
2023-04-23 15:22:15,797 [ INFO] [main] [c.h.c.LifecycleService]: [172.17.0.3]:5701 [dev] [5.2.2] [172.17.0.3]:5701 is STARTED
2023-04-23 15:22:15,695 [ INFO] [hz.kind_hodgkin.generic-operation.thread-1] [c.h.i.c.ClusterService]: [172.17.0.3]:5701 [dev] [5.2.2]
Members {size:3, ver:3} [
    Member [172.17.0.2]:5701 - 9aadeea7-e470-4153-b5bf-1df026ac1811 thi
s
    Member [172.17.0.3]:5701 - d74a2591-6790-4ffa-9f12-bb0ede2ad063
    Member [172.17.0.4]:5701 - bd0c3f5c-3b33-4b2e-83fb-e34d810d4d14
]
2023-04-23 15:22:15,704 [ INFO] [hz.kind_hodgkin.IO.thread-in-1] [c.h.i.s.t.TcpServerConnection]: [172.17.0.3]:5701 [dev] [5.2.2] Initialized new cluster connection between /172.17.0.3:36501 and /172.17.0.4:5701
2023-04-23 15:22:15,726 [ INFO] [hz.nifty_taussig.generic-operation.thread-2] [c.h.i.c.ClusterService]: [172.17.0.4]:5701 [dev] [5.2.2]
Members {size:3, ver:3} [
    Member [172.17.0.2]:5701 - 9aadeea7-e470-4153-b5bf-1df026ac1811 thi
s
    Member [172.17.0.3]:5701 - d74a2591-6790-4ffa-9f12-bb0ede2ad063
    Member [172.17.0.4]:5701 - bd0c3f5c-3b33-4b2e-83fb-e34d810d4d14
]
2023-04-23 15:22:15,748 [ INFO] [main] [c.h.j.i.JobCoordinationService]: [172.17.0.4]:5701 [dev] [5.2.2] Jet started scanning for jobs
2023-04-23 15:22:15,765 [ INFO] [main] [c.h.c.LifecycleService]: [172.17.0.4]:5701 [dev] [5.2.2] [172.17.0.4]:5701 is STARTED
```

1. Запускаю Мікросервіси

- FacadeService - 8080

```
23/04/2023 18:34:38.497 INFO: [139901023356608] hz.client_1[dev] [5.1.0] Trying to connect to Address[172.17.0.2]:5701
23/04/2023 18:34:38.509 INFO: [139901023356608] hz.client_1[dev] [5.1.0] Authenticated with server Address[172.17.0.2]:5701
23/04/2023 18:34:38.509 INFO: [139901023356608] hz.client_1[dev] [5.1.0] Trying to connect to Address[172.17.0.3]:5701
23/04/2023 18:34:38.520 INFO: [139901023356608] hz.client_1[dev] [5.1.0] Authenticated with server Address[172.17.0.3]:5701
[2023-04-23 18:34:38.544] [info] Service at /FacadeService started
```

- LoggingService - 8081

- LoggingService - 8082
- LoggingService - 8083

```

fecycleService::LifecycleEvent STARTED
23/04/2023 18:34:50.246 INFO: [140230775465664] hz.client_1[dev] [5.1.0] Trying to connect to Address[127.0.0.1:5701].
23/04/2023 18:34:50.250 INFO: [140230775465664] hz.client_1[dev] [5.1.0] LifecycleService::LifecycleEvent CLIENT_CONNECTED
23/04/2023 18:34:50.250 INFO: [140230775465664] hz.client_1[dev] [5.1.0]Authenticated with server Address[172.17.0.2:5701]:78c4b88a-cd03-4694-ab6c-37d696126cc4, server version: 5.2.2, local address: Address[127.0.0.1:59048]. Connection{alive=1, connection id=1, remote endpoint=Address[172.17.0.2:5701], last_read_time=2023-04-23 18:34:50.247, closedTime=never, connected server version=5.2.2}
23/04/2023 18:34:50.251 INFO: [140230539536064] hz.client_1[dev] [5.1.0]
Members [3] {
    Member[172.17.0.4]:5701 - a8ab5357-7117-4e4b-897b-a75bfd7c0aa
    Member[172.17.0.3]:5701 - 3efe0c67-0e98-4510-b9b3-4bc7bd45361b
    Member[172.17.0.2]:5701 - 78c4b88a-cd03-4694-ab6c-37d696126cc4
}

23/04/2023 18:34:50.251 INFO: [140230775465664] hz.client_1[dev] [5.1.0] Trying to connect to Address[172.17.0.4:5701].
23/04/2023 18:34:50.253 INFO: [140230775465664] hz.client_1[dev] [5.1.0]Authenticated with server Address[172.17.0.4:5701]:a8ab5357-7117-4e4b-897b-a75bfd7c0aa, server version: 5.2.2, local address: Address[172.17.0.1:51068]. Connection{alive=1, connection id=2, remote endpoint=Address[172.17.0.4:5701], last_read_time=2023-04-23 18:34:50.251, closedTime=never, connected server version=5.2.2}
23/04/2023 18:34:50.253 INFO: [140230775465664] hz.client_1[dev] [5.1.0] Trying to connect to Address[172.17.0.3:5701].
23/04/2023 18:34:50.255 INFO: [140230775465664] hz.client_1[dev] [5.1.0]Authenticated with server Address[172.17.0.3:5701]:3efe0c67-0e98-4510-b9b3-4bc7bd45361b, server version: 5.2.2, local address: Address[172.17.0.1:51584]. Connection{alive=1, connection id=3, remote endpoint=Address[172.17.0.3:5701], last_read_time=2023-04-23 18:34:50.253, closedTime=never, connected server version=5.2.2}
[2023-04-23 18:34:50.260] [info] Service at /LoggingService started
[]

.0] Trying to connect to Address[172.17.0.4:5701].
23/04/2023 18:34:51.975 INFO: [140379155310272] hz.client_1[dev] [5.1.0] Authenticated with server Address[172.17.0.4:5701]:a8ab5357-7117-4e4b-897b-a75bfd7c0aa, server version: 5.2.2, local address: Address[172.17.0.1:51070]. Connection{alive=1, connection id=2, remote endpoint=Address[172.17.0.4:5701], last_read_time=2023-04-23 18:34:51.973, closedTime=never, connected server version=5.2.2}
23/04/2023 18:34:51.975 INFO: [140379155310272] hz.client_1[dev] [5.1.0] Trying to connect to Address[172.17.0.3:5701].
23/04/2023 18:34:51.977 INFO: [140379155310272] hz.client_1[dev] [5.1.0] Authenticated with server Address[172.17.0.3:5701]:3efe0c67-0e98-4510-b9b3-4bc7bd45361b, server version: 5.2.2, local address: Address[172.17.0.1:51590]. Connection{alive=1, connection id=3, remote endpoint=Address[172.17.0.3:5701], last_read_time=2023-04-23 18:34:51.975, closedTime=never, connected server version=5.2.2}
[2023-04-23 18:34:51.980] [info] Service at /LoggingService started
[]

.0] Authenticated with server Address[172.17.0.4:5701]:a8ab5357-7117-4e4b-897b-a75bfd7c0aa, server version: 5.2.2, local address: Address[172.17.0.1:51076]. Connection{alive=1, connection id=2, remote endpoint=Address[172.17.0.4:5701], last_read_time=2023-04-23 18:34:53.257, closedTime=never, connected server version=5.2.2}
23/04/2023 18:34:53.268 INFO: [140151911384768] hz.client_1[dev] [5.1.0] Trying to connect to Address[172.17.0.3:5701].
23/04/2023 18:34:53.270 INFO: [140151911384768] hz.client_1[dev] [5.1.0] Authenticated with server Address[172.17.0.3:5701]:3efe0c67-0e98-4510-b9b3-4bc7bd45361b, server version: 5.2.2, local address: Address[172.17.0.1:51592]. Connection{alive=1, connection id=3, remote endpoint=Address[172.17.0.3:5701], last_read_time=2023-04-23 18:34:53.268, closedTime=never, connected server version=5.2.2}
[2023-04-23 18:34:53.275] [info] Service at /LoggingService started
[]

```

- MessageService - 8084
- MessageService - 8085

```
fcycleService::LifecycleEvent STARTED
23/04/2023 18:35:05.886 INFO: [140593389278912] hz.client_1[dev] [5.1.0] Trying to connect to Address[127.0.0.1:5701].
23/04/2023 18:35:05.888 INFO: [140593389278912] hz.client_1[dev] [5.1.0] LifecycleService::LifecycleEvent CLIENT_CONNECTED
23/04/2023 18:35:05.888 INFO: [140593389278912] hz.client_1[dev] [5.1.0] Authenticated with server Address[172.17.0.2:5701]:78c4b88a-cd03-4694-ab6c-37d696126cc4, server version: 5.2.2, local address: Address[127.0.0.1:58124]. Connection{alive=1, connection id=1, remote endpoint:Address[172.17.0.2:5701], last_read_time=2023-04-23 18:35:05.888, last_write_time=2023-04-23 18:35:05.888, closedTime=never, connected server version=5.2.2]
23/04/2023 18:35:05.888 INFO: [140593389278912] hz.client_1[dev] [5.1.0]
Members [3] {
    Member[172.17.0.4]:5701 - a8ab5357-7117-4e4b-897b-a75bfde7c0aa
    Member[172.17.0.3]:5701 - 3efe0c67-0e98-4510-b9b3-4bc7bd45361b
    Member[172.17.0.2]:5701 - 78c4b88a-cd03-4694-ab6c-37d696126cc4
}

23/04/2023 18:35:05.889 INFO: [140593389278912] hz.client_1[dev] [5.1.0] Trying to connect to Address[172.17.0.4:5701].
23/04/2023 18:35:05.891 INFO: [140593389278912] hz.client_1[dev] [5.1.0] Authenticated with server Address[172.17.0.4:5701]:a8ab5357-7117-4e4b-897b-a75bfde7c0aa, server version: 5.2.2, local address: Address[172.17.0.1:40336]. Connection{alive=1, connection id=2, remote endpoint:Address[172.17.0.4:5701], last_read_time=2023-04-23 18:35:05.891, last_write_time=2023-04-23 18:35:05.889, closedTime=never, connected server version=5.2.2}
23/04/2023 18:35:05.891 INFO: [140593389278912] hz.client_1[dev] [5.1.0] Trying to connect to Address[172.17.0.3:5701].
23/04/2023 18:35:05.892 INFO: [140593389278912] hz.client_1[dev] [5.1.0] Authenticated with server Address[172.17.0.3:5701]:3efe0c67-0e98-4510-b9b3-4bc7bd45361b, server version: 5.2.2, local address: Address[172.17.0.1:51408]. Connection{alive=1, connection id=3, remote endpoint:Address[172.17.0.3:5701], last_read_time=2023-04-23 18:35:05.892, last_write_time=2023-04-23 18:35:05.891, closedTime=never, connected server version=5.2.2}
[23/04/2023 18:35:05.896] [info] Service at /MessageService started
-4694-ab6c-37d696126cc4, server version: 5.2.2, local address: Address[127.0.0.1:35530]. Connection{alive=1, connection id=1, remote endpoint:Address[172.17.0.2:5701], last_read_time=2023-04-23 18:35:08.316, last_write_time=2023-04-23 18:35:08.315, closedTime=never, connected server version=5.2.2}
23/04/2023 18:35:08.317 INFO: [14019181530304] hz.client_1[dev] [5.1.0]
Members [3] {
    Member[172.17.0.4]:5701 - a8ab5357-7117-4e4b-897b-a75bfde7c0aa
    Member[172.17.0.3]:5701 - 3efe0c67-0e98-4510-b9b3-4bc7bd45361b
    Member[172.17.0.2]:5701 - 78c4b88a-cd03-4694-ab6c-37d696126cc4
}

23/04/2023 18:35:08.317 INFO: [140191624857280] hz.client_1[dev] [5.1.0] Trying to connect to Address[172.17.0.4:5701].
23/04/2023 18:35:08.318 INFO: [140191624857280] hz.client_1[dev] [5.1.0] Authenticated with server Address[172.17.0.4:5701]:a8ab5357-7117-4e4b-897b-a75bfde7c0aa, server version: 5.2.2, local address: Address[172.17.0.1:59404]. Connection{alive=1, connection id=2, remote endpoint:Address[172.17.0.4:5701], last_read_time=2023-04-23 18:35:08.317, last_write_time=2023-04-23 18:35:08.317, closedTime=never, connected server version=5.2.2}
23/04/2023 18:35:08.319 INFO: [140191624857280] hz.client_1[dev] [5.1.0] Trying to connect to Address[172.17.0.3:5701].
23/04/2023 18:35:08.320 INFO: [140191624857280] hz.client_1[dev] [5.1.0] Authenticated with server Address[172.17.0.3:5701]:3efe0c67-0e98-4510-b9b3-4bc7bd45361b, server version: 5.2.2, local address: Address[172.17.0.1:48812]. Connection{alive=1, connection id=3, remote endpoint:Address[172.17.0.3:5701], last_read_time=2023-04-23 18:35:08.320, last_write_time=2023-04-23 18:35:08.319, closedTime=never, connected server version=5.2.2}
[23/04/2023 18:35:08.323] [info] Service at /MessageService started
```

2. Роблю 10 POST запитів

msg міняю від 1 до 10. На зоображені приклад одного запиту та відповіді.

```
6 ▶ POST http://localhost:8080/FacadeService
7   Content-Type: application/text
8
9   msg1
10  ####
```

Ось логи сервісів:

```
http://localhost:8080/FacadeService
```

```
HTTP/1.1 200 OK
```

```
Date: Sun, 23 Apr 2023 15:35:26 GMT
```

```
Content-Type: text/plain
```

```
Content-Length: 38
```

```
Posted to Message and Logging services
```

```
Response code: 200 (OK); Time: 127ms (127 ms); Content length: 38 bytes (38 B)
```

FacadeService

```
[2023-04-23 18:35:26.009] [info] Controller: Received POST from: 127.0.0.1:60646
[2023-04-23 18:35:26.009] [info] Service: Generated UUID pair: [f1f920b3-447f-4046-9197-06a8a5c0582d, msg1]
[2023-04-23 18:35:26.009] [info] Service: Sending POST to: http://localhost:8082/LoggingService
[2023-04-23 18:35:26.135] [info] Service: POST STATUS: 200
[2023-04-23 18:35:48.630] [info] Controller: Received POST from: 127.0.0.1:65155
[2023-04-23 18:35:48.630] [info] Service: Generated UUID pair: [80e9cf1b-eb59-4402-9e1f-879e7343eeee8, msg2]
[2023-04-23 18:35:48.630] [info] Service: Sending POST to: http://localhost:8082/LoggingService
[2023-04-23 18:35:48.638] [info] Service: POST STATUS: 200
[2023-04-23 18:35:51.251] [info] Controller: Received POST from: 127.0.0.1:2692
[2023-04-23 18:35:51.251] [info] Service: Generated UUID pair: [59ee18df-e5a5-455b-b636-f41c36083de1, msg3]
[2023-04-23 18:35:51.251] [info] Service: Sending POST to: http://localhost:8081/LoggingService
[2023-04-23 18:35:51.254] [info] Service: POST STATUS: 200
[2023-04-23 18:35:53.888] [info] Controller: Received POST from: 127.0.0.1:5764
[2023-04-23 18:35:53.888] [info] Service: Generated UUID pair: [6f265634-aeb6-468d-85a3-7807423ea802, msg4]
[2023-04-23 18:35:53.888] [info] Service: Sending POST to: http://localhost:8082/LoggingService
[2023-04-23 18:35:53.891] [info] Service: POST STATUS: 200
[2023-04-23 18:35:56.030] [info] Controller: Received POST from: 127.0.0.1:6788
[2023-04-23 18:35:56.030] [info] Service: Generated UUID pair: [ca22a2bf-895f-4fa3-a2d2-ade97cb61acd, msg5]
[2023-04-23 18:35:56.030] [info] Service: Sending POST to: http://localhost:8083/LoggingService
[2023-04-23 18:35:56.088] [info] Service: POST STATUS: 200
[2023-04-23 18:35:59.711] [info] Controller: Received POST from: 127.0.0.1:2207
[2023-04-23 18:35:59.711] [info] Service: Generated UUID pair: [3daa20b0-fc38-4c05-9292-e5cacf039bbe, msg6]
[2023-04-23 18:35:59.711] [info] Service: Sending POST to: http://localhost:8082/LoggingService
[2023-04-23 18:35:59.717] [info] Service: POST STATUS: 200
[2023-04-23 18:36:03.070] [info] Controller: Received POST from: 127.0.0.1:6303
[2023-04-23 18:36:03.070] [info] Service: Generated UUID pair: [f0c6faa8-c8b8-499c-894d-e0618ead96f3, msg7]
[2023-04-23 18:36:03.070] [info] Service: Sending POST to: http://localhost:8082/LoggingService
[2023-04-23 18:36:03.072] [info] Service: POST STATUS: 200
```

```
[2023-04-23 18:36:03.070] [info] Controller: Received POST from: 127.0.0.1:6303
[2023-04-23 18:36:03.070] [info] Service: Generated UUID pair: [f0c6faa8-c8b8-499c-894d-e0618ead96f3, msg7]
[2023-04-23 18:36:03.070] [info] Service: Sending POST to: http://localhost:8082/LoggingService
[2023-04-23 18:36:03.072] [info] Service: POST STATUS: 200
[2023-04-23 18:36:05.447] [info] Controller: Received POST from: 127.0.0.1:8863
[2023-04-23 18:36:05.447] [info] Service: Generated UUID pair: [9633efc2-214f-42de-adba-b97b140d55db, msg8]
[2023-04-23 18:36:05.447] [info] Service: Sending POST to: http://localhost:8081/LoggingService
[2023-04-23 18:36:05.449] [info] Service: POST STATUS: 200
[2023-04-23 18:36:07.842] [info] Controller: Received POST from: 127.0.0.1:11935
[2023-04-23 18:36:07.842] [info] Service: Generated UUID pair: [81fd3b78-2afa-4098-818a-9482e22046d4, msg9]
[2023-04-23 18:36:07.842] [info] Service: Sending POST to: http://localhost:8081/LoggingService
[2023-04-23 18:36:07.845] [info] Service: POST STATUS: 200
[2023-04-23 18:36:10.901] [info] Controller: Received POST from: 127.0.0.1:21144
[2023-04-23 18:36:10.901] [info] Service: Generated UUID pair: [2511c1fa-bbf4-4238-91a0-568f352fc8df, msg10]
[2023-04-23 18:36:10.901] [info] Service: Sending POST to: http://localhost:8082/LoggingService
[2023-04-23 18:36:10.904] [info] Service: POST STATUS: 200
```

LoggingService S

- 8081

```
2023-04-23 18:34:51.980] [info] Service at /LoggingService started [0.1:51592]. Connection[alive=1, conne
2023-04-23 18:35:51.251] [info] Controller: Received POST from: 127.0.0.1:40152 18:34:53.268, closedTime=n
2023-04-23 18:35:51.253] [info] Repository: /Messages logged: [59ee18df-e5a5-455b-b636-f41c36083de1, msg3]
2023-04-23 18:36:05.447] [info] Controller: Received POST from: 127.0.0.1:33970
2023-04-23 18:36:05.449] [info] Repository: Message logged: [9633efc2-214f-42de-adba-b97b140d55db, msg8]
2023-04-23 18:36:07.843] [info] Controller: Received POST from: 127.0.0.1:35506
2023-04-23 18:36:07.844] [info] Repository: Message logged: [81fd3b78-2afa-4098-818a-9482e22046d4, msg9]
```

- 8082

```
[2023-04-23 18:34:53.275] [info] Service at /LoggingService started
[2023-04-23 18:35:26.012] [info] Controller: Received POST from: 127.0.0.1:64208
[2023-04-23 18:35:26.134] [info] Repository: Message logged: [f1f920b3-447f-4046-9197-06a8a5c0582d, msg1]
[2023-04-23 18:35:48.631] [info] Controller: Received POST from: 127.0.0.1:31424
[2023-04-23 18:35:48.637] [info] Repository: Message logged: [80e9cf1b-eb59-4402-9e1f-879e7343eee8, msg2]
[2023-04-23 18:35:53.889] [info] Controller: Received POST from: 127.0.0.1:33472
[2023-04-23 18:35:53.891] [info] Repository: Message logged: [6f265634-aeb6-468d-85a3-7807423ea802, msg4]
[2023-04-23 18:35:59.712] [info] Controller: Received POST from: 127.0.0.1:35513
[2023-04-23 18:35:59.716] [info] Repository: Message logged: [3daaa20b0-fc38-4c05-9292-e5cacf039bbe, msg6]
[2023-04-23 18:36:03.071] [info] Controller: Received POST from: 127.0.0.1:38073
[2023-04-23 18:36:03.072] [info] Repository: Message logged: [f0c6faa8-c8b8-499c-894d-e0618ead96f3, msg7]
[2023-04-23 18:36:10.901] [info] Controller: Received POST from: 127.0.0.1:28379
[2023-04-23 18:36:10.903] [info] Repository: Message logged: [2511c1fa-bbf4-4238-91a0-568f352fc8df, msg10]
```

- 8083

```
[0.3:5701], last_read_time=2023-04-23 18:34:50.255, last_write_time=2023-04-23 18:34:50.253, closedTime=ne
2023-04-23 18:34:50.260] [info] Service at /LoggingService started aa8-c8b8-499c-894d-e0618ead96f3, msg7
2023-04-23 18:35:56.031] [info] Controller: Received POST from: 127.0.0.1:54461
2023-04-23 18:35:56.088] [info] Repository: Message logged: [ca22a2bf-895f-4fa3-a2d2-ade97cb61acd, msg5]
```

MessageService - 8084 зліва, 8085 справа.

```
23/04/2023 18:35:05.888 INFO: [140593389278912] hz.client_1[dev] [5.1.0] Au
thenticated with server Address[172.17.0.2:5701]:78c4b88a-cd03-4694-ab6c-3
7d696126cc4, server version: 5.2.2, local address: Address[127.0.0.1:58124]
Connection{alive=1, connection id=1, remote endpoint=Address[172.17.0.2:5
701], last_read_time=2023-04-23 18:35:05.888, last_write_time=2023-04-23 18
:35:05.886, closedTime=never, connected server version=5.2.2}
23/04/2023 18:35:05.888 INFO: [140593153906368] hz.client_1[dev] [5.1.0]
Members [3] {
    Member[172.17.0.4]:5701 - a8ab5357-7117-4e4b-897b-a75bfde7c0aa
    Member[172.17.0.3]:5701 - 3efe0c67-0e98-4510-b9b3-4bc7bd45361b
    Member[172.17.0.2]:5701 - 78c4b88a-cd03-4694-ab6c-37d696126cc4
}

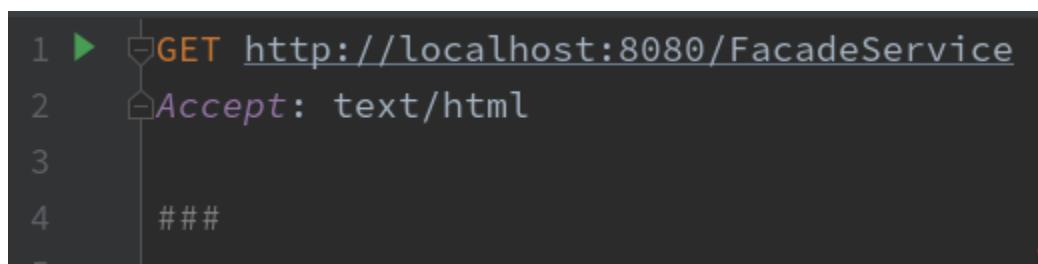
23/04/2023 18:35:05.889 INFO: [140593389278912] hz.client_1[dev] [5.1.0] Tr
ying to connect to Address[172.17.0.4:5701].
23/04/2023 18:35:05.891 INFO: [140593389278912] hz.client_1[dev] [5.1.0] Au
thenticated with server Address[172.17.0.4:5701]:a8ab5357-7117-4e4b-897b-a
75bfde7c0aa, server version: 5.2.2, local address: Address[172.17.0.1:40336]
Connection{alive=1, connection id=2, remote endpoint=Address[172.17.0.4:
5701], last_read_time=2023-04-23 18:35:05.891, last_write_time=2023-04-23 1
8:35:05.889, closedTime=never, connected server version=5.2.2}
23/04/2023 18:35:05.891 INFO: [140593389278912] hz.client_1[dev] [5.1.0] Tr
ying to connect to Address[172.17.0.3:5701].
23/04/2023 18:35:05.892 INFO: [140593389278912] hz.client_1[dev] [5.1.0] Au
thenticated with server Address[172.17.0.3:5701]:3efe0c67-0e98-4510-b9b3-4
bc7bd45361b, server version: 5.2.2, local address: Address[172.17.0.1:51408]
Connection{alive=1, connection id=3, remote endpoint=Address[172.17.0.3:
5701], last_read_time=2023-04-23 18:35:05.892, last_write_time=2023-04-23 1
8:35:05.891, closedTime=never, connected server version=5.2.2}
[2023-04-23 18:35:05.896] [info] Service at /MessageService started
[2023-04-23 18:35:26.149] [info] Service: Pulled element from MQ: msg2
[2023-04-23 18:35:51.255] [info] Service: Pulled element from MQ: msg3
[2023-04-23 18:35:56.090] [info] Service: Pulled element from MQ: msg5
[2023-04-23 18:36:03.073] [info] Service: Pulled element from MQ: msg7
[2023-04-23 18:36:07.846] [info] Service: Pulled element from MQ: msg9
Member[172.17.0.3]:5701 - 3efe0c67-0e98-4510-b9b3-4bc7bd45361b
Member[172.17.0.2]:5701 - 78c4b88a-cd03-4694-ab6c-37d696126cc4
23/04/2023 18:35:08.317 INFO: [140191624857280] hz.client_1[dev] [5.1.0]
o connect to Address[172.17.0.4:5701].
23/04/2023 18:35:08.318 INFO: [140191624857280] hz.client_1[dev] [5.1.0]
cated with server Address[172.17.0.4:5701]:a8ab5357-7117-4e4b-897b-a75b
server version: 5.2.2, local address: Address[172.17.0.4:5701], last_rea
e=1, connection id=2, remote endpoint=Address[172.17.0.4:5701], last_read
23/04/2023 18:35:08.318, last_write_time=2023-04-23 18:35:08.317, closedTi
connected server version=5.2.2}
23/04/2023 18:35:08.319 INFO: [140191624857280] hz.client_1[dev] [5.1.0]
o connect to Address[172.17.0.3:5701].
23/04/2023 18:35:08.320 INFO: [140191624857280] hz.client_1[dev] [5.1.0]
cated with server Address[172.17.0.3:5701]:3efe0c67-0e98-4510-b9b3-4bc7b
server version: 5.2.2, local address: Address[172.17.0.1:48812]. Connect
e=1, connection id=3, remote endpoint=Address[172.17.0.3:5701], last_read
23/04/2023 18:35:08.320, last_write_time=2023-04-23 18:35:08.319, closedTi
connected server version=5.2.2}
[2023-04-23 18:35:08.323] [info] Service at /MessageService started
[2023-04-23 18:35:48.639] [info] Service: Pulled element from MQ: msg2
[2023-04-23 18:35:53.892] [info] Service: Pulled element from MQ: msg4
[2023-04-23 18:35:59.718] [info] Service: Pulled element from MQ: msg6
[2023-04-23 18:36:05.451] [info] Service: Pulled element from MQ: msg8
[2023-04-23 18:36:10.905] [info] Service: Pulled element from MQ: msg10
```

Як бачимо, повідомлення порівну розподілилося по двох інстансах MessageService.

3. GET Запити

Нам потрібно щоб FacadeService звернувся до обох MessageService .

- GET запит



- Response 1

```
http://localhost:8080/FacadeService

HTTP/1.1 200 OK
Date: Sun, 23 Apr 2023 15:39:09 GMT
Content-Type: text/plain
Content-Length: 79

msg6 msg9 msg7 msg2 msg3 msg8 msg10 msg5 msg1 msg4 |msg2 msg4 msg6 msg8 msg10 |

Response code: 200 (OK); Time: 44ms (44 ms); Content length: 79 bytes (79 B)
```

- Як бачимо тут(по повідомленнях), ми звернулися до MessageService на порті 8085. Логи Facade та MessageServices це підтверджують.

```
[2023-04-23 18:39:09.054] [info] Controller: Received GET from: 127.0.0.1:54968
[2023-04-23 18:39:09.054] [info] Service: Sending GET to: http://localhost:8083/LoggingService
[2023-04-23 18:39:09.095] [info] Service: GET STATUS: 200
[2023-04-23 18:39:09.095] [info] Service: Sending GET to: http://localhost:8085/MessageService
[2023-04-23 18:39:09.095] [info] Service: GET STATUS: 200
```

```
connected server version=5.2.2}
[2023-04-23 18:35:08.323] [info] Service at /MessageService started
[2023-04-23 18:35:48.639] [info] Service: Pulled element from MQ: msg2
[2023-04-23 18:35:53.892] [info] Service: Pulled element from MQ: msg4
[2023-04-23 18:35:59.718] [info] Service: Pulled element from MQ: msg6
[2023-04-23 18:36:05.451] [info] Service: Pulled element from MQ: msg8
[2023-04-23 18:36:10.905] [info] Service: Pulled element from MQ: msg10
[2023-04-23 18:39:09.095] [info] Controller: Received GET from: 127.0.0.1:43688
```

- Request 2 знов звернувся до MessageService:8085 тому показую Response3.

```
http://localhost:8080/FacadeService

HTTP/1.1 200 OK
Date: Sun, 23 Apr 2023 15:43:05 GMT
Content-Type: text/plain
Content-Length: 78

msg6 msg9 msg7 msg2 msg3 msg8 msg10 msg5 msg1 msg4 |msg1 msg3 msg5 msg7 msg9 |

Response code: 200 (OK); Time: 11ms (11 ms); Content length: 78 bytes (78 B)
```

```
[2023-04-23 18:43:05.471] [info] Controller: Received GET from: 127.0.0.1:43718
[2023-04-23 18:43:05.471] [info] Service: Sending GET to: http://localhost:8083/LoggingService
[2023-04-23 18:43:05.480] [info] Service: GET STATUS: 200
[2023-04-23 18:43:05.480] [info] Service: Sending GET to: http://localhost:8084/MessageService
[2023-04-23 18:43:05.480] [info] Service: GET STATUS: 200
```

```
[2023-04-23 18:35:05.896] [info] Service at /MessageService started
[2023-04-23 18:35:26.149] [info] Service: Pulled element from MQ: msg1
[2023-04-23 18:35:51.255] [info] Service: Pulled element from MQ: msg3
[2023-04-23 18:35:56.090] [info] Service: Pulled element from MQ: msg5
[2023-04-23 18:36:03.073] [info] Service: Pulled element from MQ: msg7
[2023-04-23 18:36:07.846] [info] Service: Pulled element from MQ: msg9
[2023-04-23 18:43:05.480] [info] Controller: Received GET from: 127.0.0.1:53401
```