

https://github.com/karyna-volokhatiuk/APZ_labs/tree/micro_mq

- Запустити три екземпляра **logging-service** (локально їх можна запустити на різних портах)

```
karyna@karyna: ~/Documents/APZ lab4/APZ_labs$ ./logging_service/cmake-build-release-gcc/logging_service 8083
karyna@karyna: ~/Documents/APZ lab4/APZ_labs$ ./logging_service/cmake-build-release-gcc/logging_service 8084
karyna@karyna: ~/Documents/APZ lab4/APZ_labs$ ./logging_service/cmake-build-release-gcc/logging_service 8085
```

- відповідно мають запуститись також три екземпляра Hazelcast

```
karyna@karyna: ~/Documents/APZ lab4/APZ_labs$ docker run -p 5701:5701 hazelcast/hazelcast
karyna@karyna: ~/Documents/APZ lab4/APZ_labs$ docker run -p 5702:5702 hazelcast/hazelcast
karyna@karyna: ~/Documents/APZ lab4/APZ_labs$ docker run -p 5703:5703 hazelcast/hazelcast
```

- Запустити два екземпляри **messages-service** (локально їх можна запустити на різних портах)

<pre>karyna@karyna: ~/Documents/APZ lab4/APZ labs 49x27 karyna@karyna:~/Documents/APZ_lab4/APZ_labs\$./messages_service/cmake-build-release-gcc/messages_service 8081</pre>	<pre>karyna@karyna: ~/Documents/APZ lab4/APZ labs 49x27 karyna@karyna:~/Documents/APZ_lab4/APZ_labs\$./messages_service/cmake-build-release-gcc/messages_service 8082</pre>
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- Через HTTP POST записати 10 повідомлень *msg1-msg10* через **facade-service**

```
karyna@karyna: ~/Documents/APZ_lab4/APZ_labs 101x27  
karyna@karyna:~/Documents/APZ_lab4/APZ_labs$ ./facade_service/cmake-build-release-gcc/facade_service
```

```
► POST http://127.0.0.1:8080/facade-service  
Content-Type: application/json  
"msg1"  
###
```

HTTP/1.1 200 OK

Date: Mon, 29 May 2023 23:27:44 GMT

Content-Type: text/plain

Content-Length: 0

<Response body is empty>

Response code: 200 (OK); Time: 149ms (149 ms); Content length: 0 bytes (0 B)

- Показати які повідомлення отримав кожен з екземплярів **logging-service** (це має бути видно у логах сервісу)

port 8083: msg3, msg8, msg9

```
[2023-05-29 19:34:38.162] [info] Received POST request by LoggingC
ontroller
[2023-05-29 19:34:38.162] [info] Add message to HazelcastLoggingSe
rvice: uuid = 6ffad691-3ae2-4cb6-9341-7a226e1ded87, text = "msg3"
[2023-05-29 19:34:38.164] [info] Message was added
[2023-05-29 19:34:38.164] [info] All content was added to a map
[2023-05-29 19:34:53.690] [info] Received POST request by LoggingC
ontroller
[2023-05-29 19:34:53.690] [info] Add message to HazelcastLoggingSe
rvice: uuid = 22f856df-3ed7-4202-8e24-11809f9953d0, text = "msg8"
[2023-05-29 19:34:53.692] [info] Message was added
[2023-05-29 19:34:53.692] [info] All content was added to a map
[2023-05-29 19:34:57.022] [info] Received POST request by LoggingC
ontroller
[2023-05-29 19:34:57.022] [info] Add message to HazelcastLoggingSe
rvice: uuid = d8fea4e6-5f73-40bc-94f6-9d61348b9d46, text = "msg9"
[2023-05-29 19:34:57.023] [info] Message was added
[2023-05-29 19:34:57.023] [info] All content was added to a map
```

- Показати які повідомлення отримав кожен з екземплярів **logging-service** (це має бути видно у логах сервісу)

port 8084: msg1, msg2, msg4, msg6, msg7, msg10

```
[2023-05-29 19:34:19.202] [info] Received POST request by LoggingC
ontroller
[2023-05-29 19:34:19.202] [info] Add message to HazelcastLoggingSe
rvice: uuid = e34aa58b-4e01-454f-a916-f7fef77595a6, text = "msg1"
[2023-05-29 19:34:19.320] [info] Message was added
[2023-05-29 19:34:19.320] [info] All content was added to a map
[2023-05-29 19:34:34.777] [info] Received POST request by LoggingC
ontroller
[2023-05-29 19:34:34.777] [info] Add message to HazelcastLoggingSe
rvice: uuid = 0d5fba0c-44e7-4002-bee2-769c193cb1a2, text = "msg2"
[2023-05-29 19:34:34.845] [info] Message was added
[2023-05-29 19:34:34.845] [info] All content was added to a map
[2023-05-29 19:34:41.248] [info] Received POST request by LoggingC
ontroller
[2023-05-29 19:34:41.249] [info] Add message to HazelcastLoggingSe
rvice: uuid = 1345c329-2e6b-46d5-9834-73142e39732f, text = "msg4"
[2023-05-29 19:34:41.252] [info] Message was added
[2023-05-29 19:34:41.252] [info] All content was added to a map
[2023-05-29 19:34:47.713] [info] Received POST request by LoggingC
ontroller
[2023-05-29 19:34:47.713] [info] Add message to HazelcastLoggingSe
rvice: uuid = 2f96ec30-4635-46c8-a8b7-43a86f31413a, text = "msg6"
[2023-05-29 19:34:47.715] [info] Message was added
[2023-05-29 19:34:47.715] [info] All content was added to a map
```

```
[2023-05-29 19:34:50.945] [info] Add message to HazelcastLoggingSe
rvice: uuid = 64d9941e-03ee-4d06-a78d-1aa8b38de7f2, text = "msg7"
[2023-05-29 19:34:50.947] [info] Message was added
[2023-05-29 19:34:50.947] [info] All content was added to a map
[2023-05-29 19:35:00.103] [info] Received POST request by LoggingC
ontroller
[2023-05-29 19:35:00.103] [info] Add message to HazelcastLoggingSe
rvice: uuid = ca3ee8f7-186a-4e6c-acda-c43416ff746e, text = "msg10"
[2023-05-29 19:35:00.104] [info] Message was added
[2023-05-29 19:35:00.104] [info] All content was added to a map
```

- Показати які повідомлення отримав кожен з екземплярів **logging-service** (це має бути видно у логах сервісу)

port 8085: msg5

```
ne-never, connected server version=3.12.2]
[2023-05-29 19:34:44.887] [info] Received POST request by LoggingC
ontroller
[2023-05-29 19:34:44.887] [info] Add message to HazelcastLoggingSe
rvice: uuid = 02317fd2-feb2-46e4-bf57-8b8e0f4b42f1, text = "msg5"
[2023-05-29 19:34:44.893] [info] Message was added
[2023-05-29 19:34:44.893] [info] All content was added to a map
```


- Показати які повідомлення отримав кожен з екземплярів **messages-service** (це має бути видно у логах сервісу)

port 8081: msg2, msg4, msg6, msg8, msg10

```
[2023-05-29 19:34:34.778] [info] Message service took new msg from queue: "msg2"  
[2023-05-29 19:34:41.250] [info] Message service took new msg from queue: "msg4"  
[2023-05-29 19:34:47.714] [info] Message service took new msg from queue: "msg6"  
[2023-05-29 19:34:53.691] [info] Message service took new msg from queue: "msg8"  
[2023-05-29 19:35:00.103] [info] Message service took new msg from queue: "msg10"
```


- Показати які повідомлення отримав кожен з екземплярів **messages-service** (це має бути видно у логах сервісу)

port 8081: msg1, msg3, msg5, msg7, msg9

```
[2023-05-29 19:34:19.207] [info] Message service took new msg from queue: "msg1"  
[2023-05-29 19:34:38.163] [info] Message service took new msg from queue: "msg3"  
[2023-05-29 19:34:44.888] [info] Message service took new msg from queue: "msg5"  
[2023-05-29 19:34:50.946] [info] Message service took new msg from queue: "msg7"  
[2023-05-29 19:34:57.023] [info] Message service took new msg from queue: "msg9"
```

- Декілька разів викликати HTTP GET на **facade-service** та отримати об'єднані дві множини повідомлень
- це мають бути повідомлення з **logging-service** та **messages-service**

Запуск 1: <відповідь від logging service> : <відповідь від messages service>

```
▶ GET http://127.0.0.1:8080/facade-service
  Accept: text/html
  ###
```

```
GET http://127.0.0.1:8080/facade-service
```

Show Request

```
HTTP/1.1 200 OK
```

```
Date: Mon, 29 May 2023 23:41:04 GMT
```

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

```
Content-Length: 110
```

```
"msg4" "msg10" "msg1" "msg8" "msg6" "msg5" "msg7" "msg9" "msg3" "msg2" : "msg2" "msg4" "msg6" "msg8" "msg10"
```

```
Response code: 200 (OK); Time: 40ms (40 ms); Content length: 110 bytes (110 B)
```

- Декілька разів викликати HTTP GET на **facade-service** та отримати об'єднані дві множини повідомлень
- це мають бути повідомлення з **logging-service** та **messages-service**

Запуск 2: <відповідь від logging service> : <відповідь від messages service> (результат як і при запуску 1)

```
▶ GET http://127.0.0.1:8080/facade-service
  Accept: text/html
  ###
```

```
GET http://127.0.0.1:8080/facade-service
Show Request

HTTP/1.1 200 OK
Date: Mon, 29 May 2023 23:42:01 GMT
Content-Type: text/plain
Content-Length: 110

"msg4" "msg10" "msg1" "msg8" "msg6" "msg5" "msg7" "msg9" "msg3" "msg2" : "msg2" "msg4" "msg6" "msg8" "msg10"

Response code: 200 (OK); Time: 12ms (12 ms); Content length: 110 bytes (110 B)
```

- Декілька разів викликати HTTP GET на **facade-service** та отримати об'єднані дві множини повідомлень
- це мають бути повідомлення з **logging-service** та **messages-service**

Запуск 3: <відповідь від logging service> : <відповідь від messages service> (результат відмінний від запусків 1 і 2)

```
▶ GET http://127.0.0.1:8080/facade-service
  Accept: text/html
  ###
```

```
GET http://127.0.0.1:8080/facade-service
```

Show Request

```
HTTP/1.1 200 OK
```

```
Date: Mon, 29 May 2023 23:42:16 GMT
```

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

```
Content-Length: 109
```

```
"msg4" "msg10" "msg1" "msg8" "msg6" "msg5" "msg7" "msg9" "msg3" "msg2" : "msg1" "msg3" "msg5" "msg7" "msg9"
```

```
Response code: 200 (OK); Time: 12ms (12 ms); Content length: 109 bytes (109 B)
```