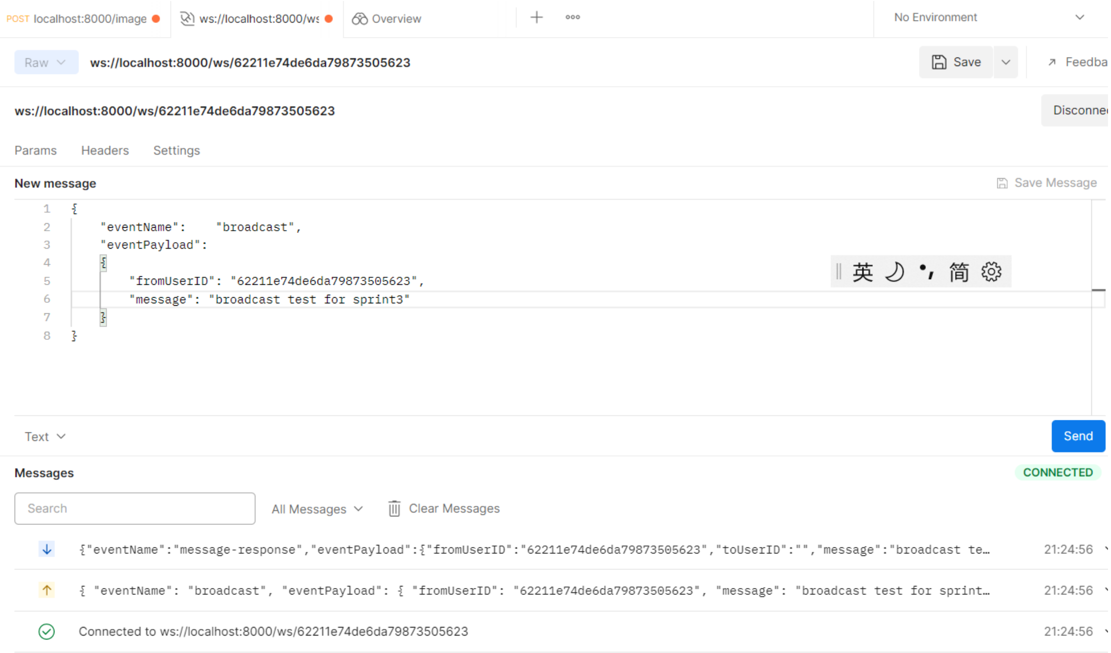
1. Broadcast:

a) send broadcast message



ws://localhost:8000/ws/62211e74de6da79873505623

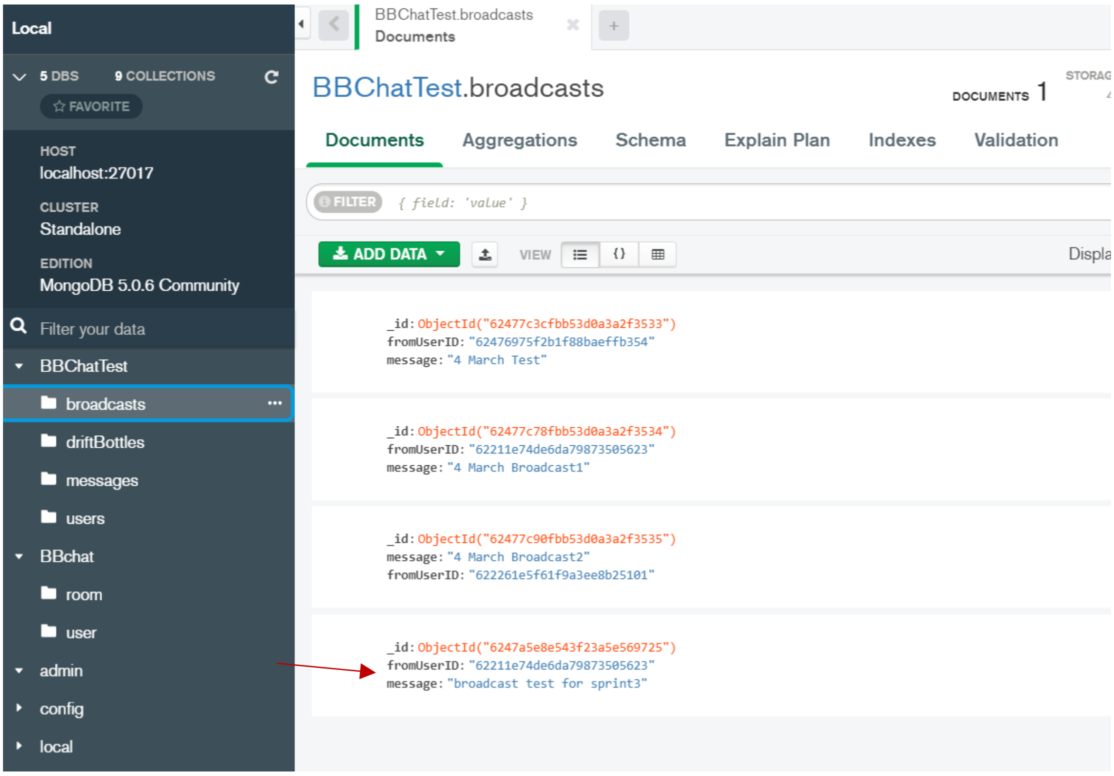
ws://localhost:8000/ws/62211e74de6da79873505623

New message

```
{
    "eventName":    "broadcast",
    "eventPayload":
    {
        "fromUserID": "62211e74de6da79873505623",
        "message": "broadcast test for sprint3"
    }
}
```

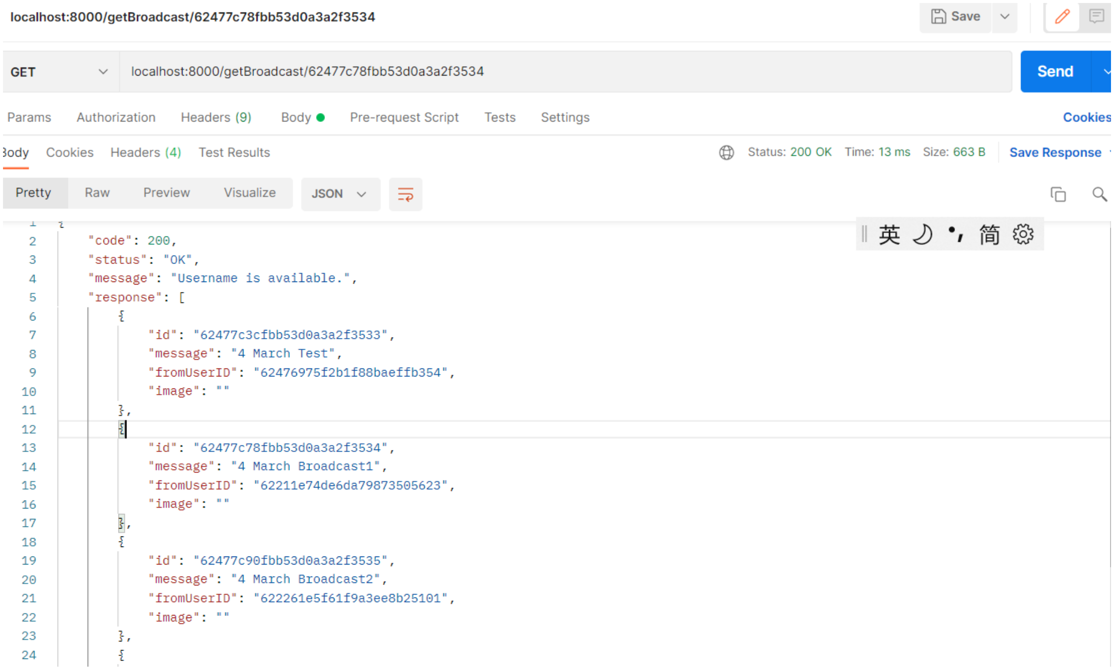
Messages

```
{"eventName":"message-response","eventPayload":{"fromUserID":"62211e74de6da79873505623","toUserID":"","message":"broadcast te…   21:24:56
{ "eventName": "broadcast", "eventPayload": { "fromUserID": "62211e74de6da79873505623", "message": "broadcast test for sprint…   21:24:56
Connected to ws://localhost:8000/ws/62211e74de6da79873505623   21:24:56
```



```
_id: ObjectId("62477c3cfbb53d0a3a2f3533")
fromUserID: "62476975f2b1f88baeffb354"
message: "4 March Test"

_id: ObjectId("62477c78fbb53d0a3a2f3534")
fromUserID: "62211e74de6da79873505623"
message: "4 March Broadcast1"

_id: ObjectId("62477c90fbb53d0a3a2f3535")
message: "4 March Broadcast2"
fromUserID: "622261e5f61f9a3ee8b25101"

_id: ObjectId("6247a5e8e543f23a5e569725")
fromUserID: "62211e74de6da79873505623"
message: "broadcast test for sprint3"
```

b) get broadcast message



localhost:8000/getBroadcast/62477c78fbb53d0a3a2f3534

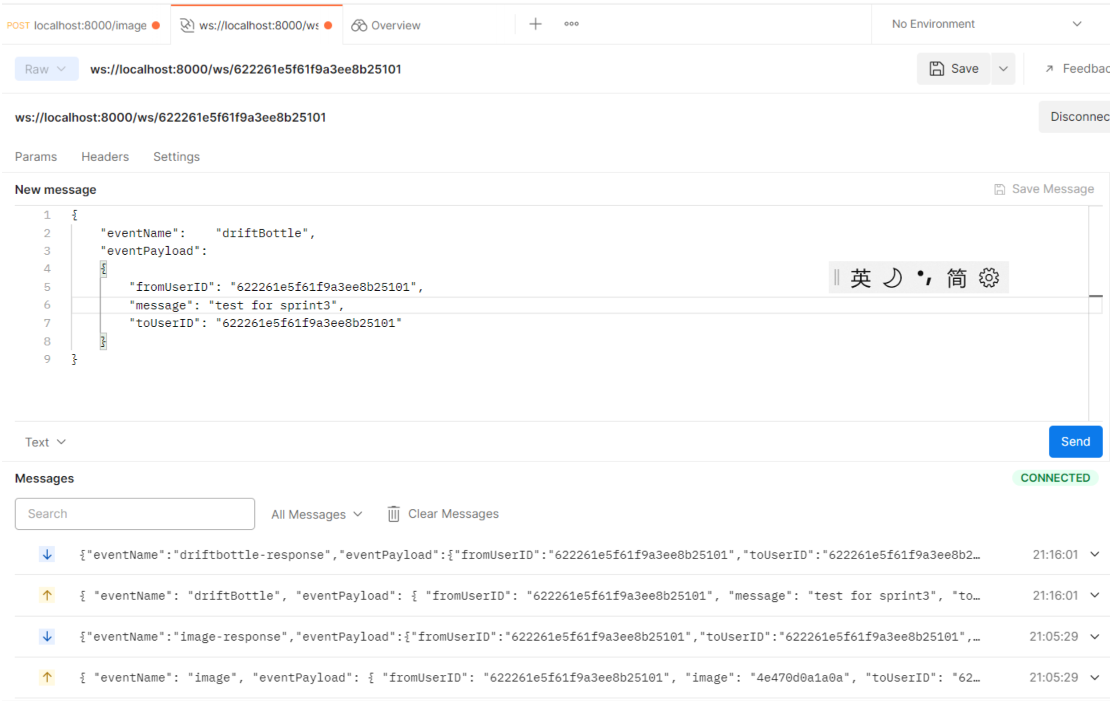
GET localhost:8000/getBroadcast/62477c78fbb53d0a3a2f3534

Status: 200 OK Time: 13 ms Size: 663 B

```
{
    "code": 200,
    "status": "OK",
    "message": "Username is available.",
    "response": [
        {
            "id": "62477c3cfbb53d0a3a2f3533",
            "message": "4 March Test",
            "fromUserID": "62476975f2b1f88baeffb354",
            "image": ""
        },
        {
            "id": "62477c78fbb53d0a3a2f3534",
            "message": "4 March Broadcast1",
            "fromUserID": "62211e74de6da79873505623",
            "image": ""
        },
        {
            "id": "62477c90fbb53d0a3a2f3535",
            "message": "4 March Broadcast2",
            "fromUserID": "622261e5f61f9a3ee8b25101",
            "image": ""
        },
        {
```

2. DriftBottle

a) send driftbottle message to a random user



ws://localhost:8000/ws/622261e5f61f9a3ee8b25101

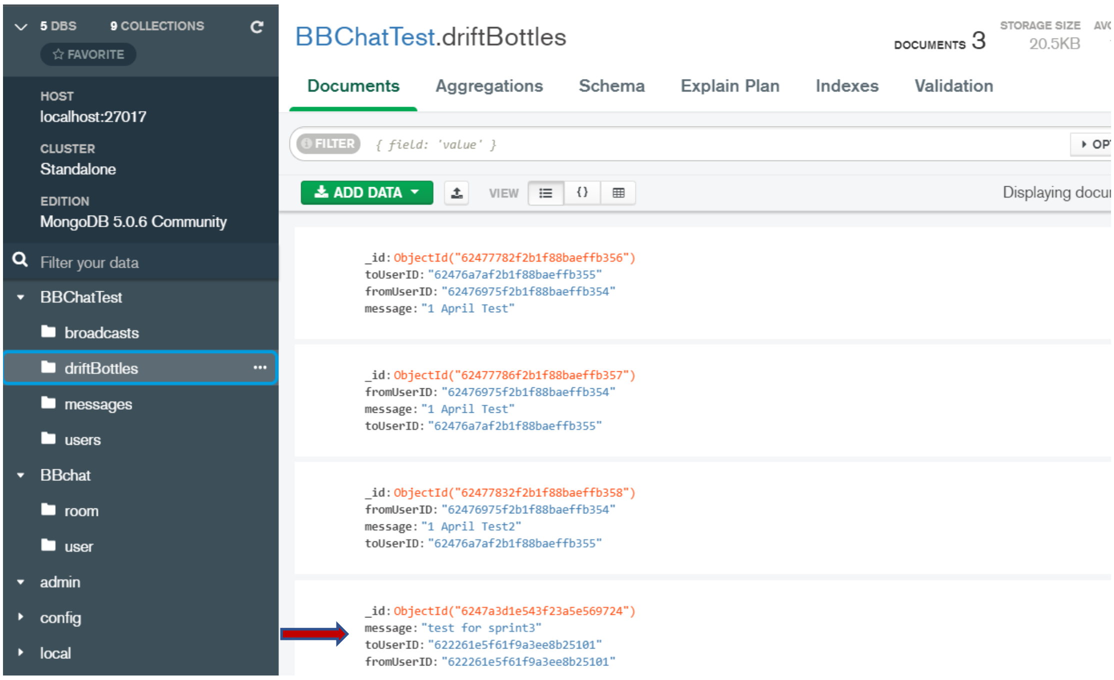
ws://localhost:8000/ws/622261e5f61f9a3ee8b25101

New message

```
{
    "eventName":    "driftBottle",
    "eventPayload":
    {
        "fromUserID": "622261e5f61f9a3ee8b25101",
        "message": "test for sprint3",
        "toUserID": "622261e5f61f9a3ee8b25101"
    }
}
```

Messages CONNECTED

```
↓ {"eventName":"driftbottle-response","eventPayload":{"fromUserID":"622261e5f61f9a3ee8b25101","toUserID":"622261e5f61f9a3ee8b2…   21:16:01
↑ { "eventName": "driftBottle", "eventPayload": { "fromUserID": "622261e5f61f9a3ee8b25101", "message": "test for sprint3", "to…   21:16:01
↓ {"eventName":"image-response","eventPayload":{"fromUserID":"622261e5f61f9a3ee8b25101","toUserID":"622261e5f61f9a3ee8b25101",…   21:05:29
↑ { "eventName": "image", "eventPayload": { "fromUserID": "622261e5f61f9a3ee8b25101", "image": "4e470d0a1a0a", "toUserID": "62…   21:05:29
```



HOST
localhost:27017

CLUSTER
Standalone

EDITION
MongoDB 5.0.6 Community

- BBChatTest
  - broadcasts
  - driftBottles
  - messages
  - users
- BBchat
  - room
  - user
- admin
- config
- local

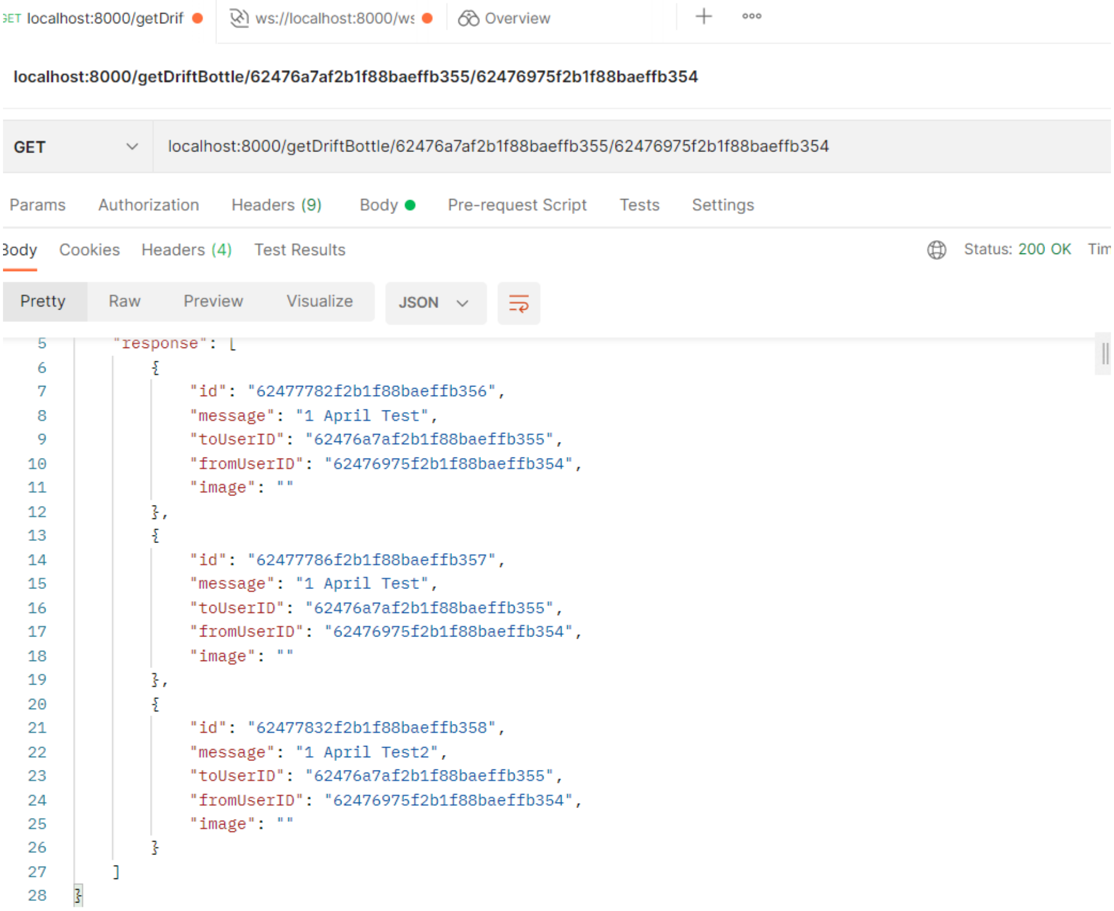
BBChatTest.driftBottles

DOCUMENTS 3 STORAGE SIZE 20.5KB

```
_id: ObjectId("62477782f2b1f88baeffb356")
toUserID: "62476a7af2b1f88baeffb355"
fromUserID: "62476975f2b1f88baeffb354"
message: "1 April Test"

_id: ObjectId("62477786f2b1f88baeffb357")
fromUserID: "62476975f2b1f88baeffb354"
message: "1 April Test"
toUserID: "62476a7af2b1f88baeffb355"

_id: ObjectId("62477832f2b1f88baeffb358")
fromUserID: "62476975f2b1f88baeffb354"
message: "1 April Test2"
toUserID: "62476a7af2b1f88baeffb355"

_id: ObjectId("6247a3d1e543f23a5e569724")
message: "test for sprint3"
toUserID: "622261e5f61f9a3ee8b25101"
fromUserID: "622261e5f61f9a3ee8b25101"
```

b) user get driftbottle messages

although here we could see the from and to user ID, but they will not be showed in front end. The ToUserID will be randomly picked up by the front side codes.



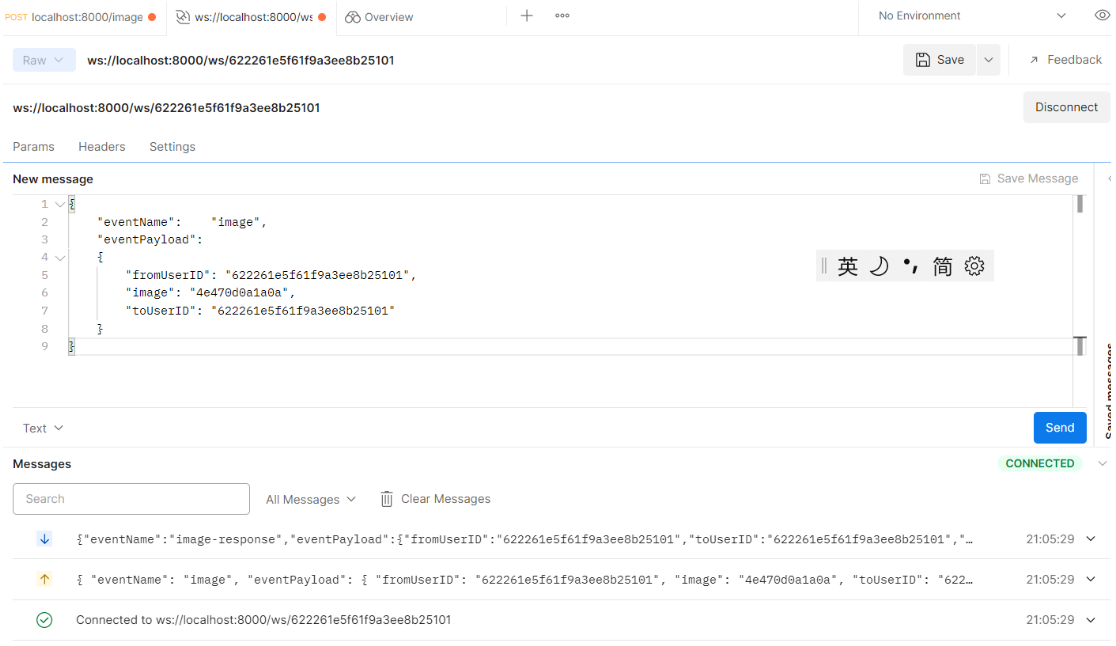
localhost:8000/getDriftBottle/62476a7af2b1f88baeffb355/62476975f2b1f88baeffb354

GET localhost:8000/getDriftBottle/62476a7af2b1f88baeffb355/62476975f2b1f88baeffb354

```
    "response": [
        {
            "id": "62477782f2b1f88baeffb356",
            "message": "1 April Test",
            "toUserID": "62476a7af2b1f88baeffb355",
            "fromUserID": "62476975f2b1f88baeffb354",
            "image": ""
        },
        {
            "id": "62477786f2b1f88baeffb357",
            "message": "1 April Test",
            "toUserID": "62476a7af2b1f88baeffb355",
            "fromUserID": "62476975f2b1f88baeffb354",
            "image": ""
        },
        {
            "id": "62477832f2b1f88baeffb358",
            "message": "1 April Test2",
            "toUserID": "62476a7af2b1f88baeffb355",
            "fromUserID": "62476975f2b1f88baeffb354",
            "image": ""
        }
    ]
}
```

3. image

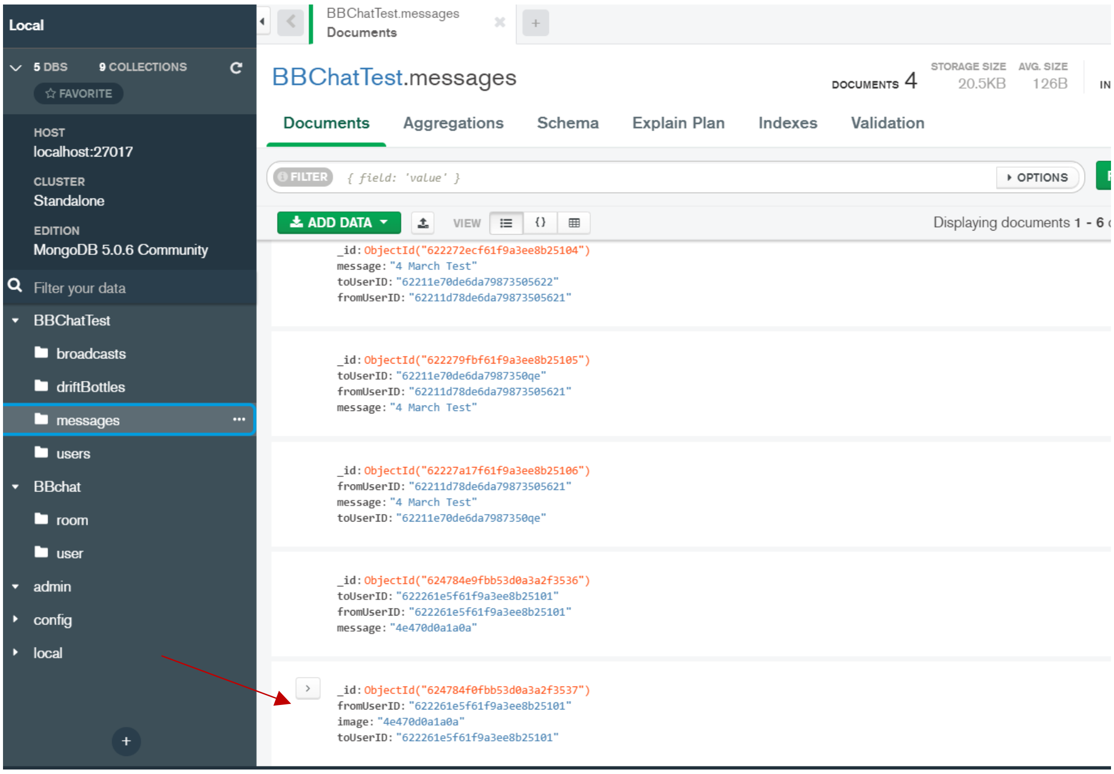
frontend send image as binary files and backend stores image in the message collection in binary format.



ws://localhost:8000/ws/622261e5f61f9a3ee8b25101

```
{
    "eventName":    "image",
    "eventPayload":
    {
        "fromUserID": "622261e5f61f9a3ee8b25101",
        "image": "4e470d0a1a0a",
        "toUserID": "622261e5f61f9a3ee8b25101"
    }
}
```

```
{"eventName":"image-response","eventPayload":{"fromUserID":"622261e5f61f9a3ee8b25101","toUserID":"622261e5f61f9a3ee8b25101","…   21:05:29
{ "eventName": "image", "eventPayload": { "fromUserID": "622261e5f61f9a3ee8b25101", "image": "4e470d0a1a0a", "toUserID": "622…   21:05:29
Connected to ws://localhost:8000/ws/622261e5f61f9a3ee8b25101   21:05:29
```



HOST
localhost:27017

CLUSTER
Standalone

EDITION
MongoDB 5.0.6 Community

BBChatTest.messages

DOCUMENTS 4 STORAGE SIZE 20.5KB AVG. SIZE 126B

Displaying documents 1 - 6

```
_id: ObjectId("622272ecf61f9a3ee8b25104")
message: "4 March Test"
toUserID: "62211e70de6da79873505622"
fromUserID: "62211d78de6da79873505621"

_id: ObjectId("622279fbf61f9a3ee8b25105")
toUserID: "62211e70de6da7987350qe"
fromUserID: "62211d78de6da79873505621"
message: "4 March Test"

_id: ObjectId("62227a17f61f9a3ee8b25106")
fromUserID: "62211d78de6da79873505621"
message: "4 March Test"
toUserID: "62211e70de6da7987350qe"

_id: ObjectId("624784e9fbb53d0a3a2f3536")
toUserID: "622261e5f61f9a3ee8b25101"
fromUserID: "622261e5f61f9a3ee8b25101"
message: "4e470d0a1a0a"

_id: ObjectId("624784f0fbb53d0a3a2f3537")
fromUserID: "622261e5f61f9a3ee8b25101"
image: "4e470d0a1a0a"
toUserID: "622261e5f61f9a3ee8b25101"
```