

Chat Service API Partial Documentation

Omar Hesham's endpoints **ONLY**

Base URL: <http://localhost:8083>

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Message Attributes

- `UUID senderId`: User ID of the sender
- `UUID receiverId`: User ID of the receiver
- `String content`: Content of the message. **Cannot be an empty string and must be between 1 and 500 characters.**
- `MessageType type`: Type of the message
- `UUID id`: Unique ID of the message (auto-generated.)
- `LocalDateTime timestamp`: Timestamp of when the message was sent. (Does not change when the message is updated)
- `MessageStatus status`: Status of the message
- `ReportType reportType`: Type of report (if any) associated with the message. **null if reported is false**
- `boolean reported`: Indicates if the message has been reported

Enums

```
enum MessageType {  
    TEXT,  
    IMAGE,  
    PRODUCT;  
}
```

```
enum MessageStatus {  
    SENT,  
    DELIVERED,  
    SEEN,  
    FAILED;  
}
```

Available Endpoints

1 GET /

This is the only endpoint that does not require authentication.

Default route to verify that the server is running. Returns a 200 status code with a message indicating that the server is running.

2 GET /messages/seed?count=number (Optional. Default: 50)

Query parameters: count = number

Route to the database seeder. Seeds the database with the specified number of messages. Returns a 200 status code with a message indicating that the database has been seeded with the specified number of messages and how long it took to seed the database. If no count is provided, the default value of 50 will be used.

3 GET /messages?size=number&pagingState=pagingState

Query parameters:

size = number: The number of messages per page (Optional. Default: 50)

pagingState = pagingState: The next pagingState to load (Optional. Default: null)

Returns a list of all messages along with a 200 status code. The response is paged and contains two fields: **messages**, which contains the messages, and **pagingState**, which contains the next pagingState.

To read the next page, the **pagingState** parameter must be provided with the value of the **nextPagingState** field in the response.

If there is no next page, the **nextPagingState** field will be null.

Requests with an invalid **size** parameter (i.e a negative number or a float number) will use the default value of 50 and succeed.

Requests with an invalid **pagingState** parameter will fail with a 400 status code.

Note that since both **size** and **pagingState** are optional, you can set either one of them or both or neither.

3.1 Sample Valid Request with no query parameters

Sample Request

```
GET http://localhost:8083/messages
```

Sample Response

```
HTTP/1.1 200 OK
Content-Type: application/json

{
  "messages": [
    {
      "senderId": "6ff18929-a1e0-4f69-9688-03575e6950b3",
      "receiverId": "72ec33c2-bcd5-4b08-82bb-4155f757e0d3",
      "content": "Check out this image!",
      "type": "IMAGE",
      "id": "0dc72aa6-af4e-46ec-88cb-99b268c6063f",
      "timestamp": "2025-04-27T14:28:41",
      "status": "FAILED",
      "reportType": "HARASSMENT",
      "reported": true
    },
    {
      "senderId": "b4686213-cfd5-4341-9690-4a8c31dee654",
      "receiverId": "8772ae76-4948-437d-92dd-73b3fe6654d0",
      "content": "I love this dish!",
      "type": "TEXT",
      "id": "f4a84926-710f-4d2e-b1f0-028555c5b9ff",
      "timestamp": "2025-04-24T01:37:25",
      "status": "FAILED",
      "reportType": null,
      "reported": false
    },
    {
      "senderId": "b8abba22-898e-48dc-8bb4-9888a2a31469",
      "receiverId": "30608af7-3dac-4e09-81cd-a7eefa51257d",
      "content": "Om Ahmad's molokhia is the best!",
      "type": "PRODUCT",
      "id": "530bf3f0-9842-4f73-a512-bbf0be85f6c1",
      "timestamp": "2025-04-20T11:35:08",
      "status": "FAILED",
      "reportType": null,
      "reported": false
    }
  ],
  "nextPagingState": "EFML8%2FCYQk9zpRK78L6F9sEA8H%2F%2F%2F%2FwA"
}
```

3.2 Sample Valid Request with query parameters

Sample Request

```
GET http://localhost:8083/messages?size=1&pagingState=EFML8%2FCYQk9zpRK78L6F9sEA8H%2F%2F%2F%2FwA
```

Sample Response

```
HTTP/1.1 200 OK
Content-Type: application/json

{
  "messages": [
    {
      "senderId": "06f23027-1b78-4ae7-ae65-871e71c52fa1",
      "receiverId": "91a61a1b-d47f-4099-8b49-9ffc3faaba36",
      "content": "Hello, how are you?",
      "type": "IMAGE",
      "id": "5b9afb7b-5992-49f1-ba0d-1627597eeab3",
      "timestamp": "2025-04-24T07:39:34",
      "status": "SENT",
      "reportType": "OTHER",
      "reported": true
    }
  ],
  "nextPagingState": "EFua%2B3tZkknxug0WJ1l%2B6rMA8H%2F%2F%2F%2FsA"
}
```

3.3 Sample Invalid Request with invalid pagingState

Sample Request

```
http://localhost:8083/messages?pagingState=Y2Fzc2FuZHJhLXJhbmdlLXBhc3MtMTIzNDU2
```

Sample Response

```
HTTP/1.1 400 Bad Request
Content-Type: text/plain; charset=UTF-8

ProtocolError: Invalid value for the paging state
```

4 GET /messages/[id](#)

Returns the message with the given id.

4.1 Sample Valid Request

Sample Request

```
GET http://localhost:8083/messages/987e6575-576c-4f1b-87e0-955931a98b01
```

Sample Response

```
HTTP/1.1 200 OK
Content-Type: application/json

{
  "senderId": "94d013a8-cb13-473b-98eb-90c9445f8669",
  "receiverId": "1bb62666-ab0f-4759-a5df-b73968795a15",
  "content": "Hello, how are you?",
  "type": "PRODUCT",
  "id": "987e6575-576c-4f1b-87e0-955931a98b01",
  "timestamp": "2025-05-08T00:39:59.354",
  "status": "DELIVERED",
  "reportType": "OTHER",
  "reported": true
}
```

4.2 Sample Invalid Request: Message not found

Sample Request

```
GET http://localhost:8083/messages/987e6575-576c-4f1b-87e0-955931a98b01
```

Sample Response

```
HTTP/1.1 404 Not Found
Content-Type: application/json

No message with id 007e6575-576c-4f1b-87e0-955931a98b01 found
```

5 POST /messages

Creates a new message.

Request Body:

Must be provided with a JSON body containing all of the following required fields:

- `receiverId` (UUID)
- `content` (String)
- `type` (MessageType)

The `senderId` will be set to the requesting user's `id` included in the JWT token.

Any other fields in the request body will be ignored. If one of the required fields is missing, the request will fail with a 400 error. The message will be created with the status `SENT` and the timestamp will be set to the current time. Note that the `senderId` and `receiverId` are allowed to be the same UUID. That is to say under the current implementation, a user can send a message to himself/herself.

Returns a `Location` response header with a URI to the created message, as well as the created message in the response body and a 201 status code.

5.1 Sample Valid Request

```
POST http://localhost:8083/messages
Content-Type: application/json

{
  "senderId": "e606ee69-6957-4fc6-a88f-ebadc45c5094",
  "receiverId": "613fcc40-16db-41d4-9a2a-00f517b088e3",
  "content": "This dish looks delicious!",
  "type": "TEXT"
}
```

Sample Response

```
HTTP/1.1 201 Created
Content-Type: application/json
Location: /messages/1e38e96c-8a9e-466d-95a9-6b61ef33743c

{
  "senderId": "e606ee69-6957-4fc6-a88f-ebadc45c5094",
  "receiverId": "613fcc40-16db-41d4-9a2a-00f517b088e3",
  "content": "This dish looks delicious!",
  "type": "TEXT",
  "id": "1e38e96c-8a9e-466d-95a9-6b61ef33743c",
  "timestamp": "2025-05-08T00:39:59.383",
  "status": "SENT",
  "reportType": null,
  "reported": false
}
```

5.2 Sample Bad Requests

5.2.1 Empty content

```
POST http://localhost:8083/messages
Content-Type: application/json

{
  "senderId": "e606ee69-6957-4fc6-a88f-ebadc45c5094",
  "receiverId": "613fcc40-16db-41d4-9a2a-00f517b088e3",
  "content": "",
  "type": "TEXT"
}
```

Response

```
HTTP/1.1 400 Bad Request
Content-Type: text/plain; charset=UTF-8

Validation failed for the following fields:
content: must not be blank
```

5.2.2 Missing required fields

```
POST http://localhost:8083/messages
Content-Type: application/json

{
  "senderId": "e606ee69-6957-4fc6-a88f-ebadc45c5094",
  "receiverId": "613fcc40-16db-41d4-9a2a-00f517b088e3",
  "content": "Thanks, the dish was great!"
}
```

Response

```
HTTP/1.1 400 Bad Request
Content-Type: text/plain; charset=UTF-8

Validation failed for the following fields:
type: must not be null
```

5.2.3 Required fields with null values

```
POST http://localhost:8083/messages
Content-Type: application/json
```

```
{
  "senderId": null,
  "receiverId": null,
  "content": "Test",
  "type": "IMAGE"
}
```

Response

```
HTTP/1.1 400 Bad Request
Content-Type: text/plain; charset=UTF-8

Validation failed for the following fields:
senderId: must not be null
receiverId: must not be null
```

5.2.4 Invalid type

```
POST http://localhost:8083/messages
Content-Type: application/json
```

```
{
  "senderId": "e606ee69-6957-4fc6-a88f-ebadc45c5094",
  "receiverId": "613fcc40-16db-41d4-9a2a-00f517b088e3",
  "content": "This dish looks delicious!",
  "type": "INVALID_TYPE"
}
```

Response

```
HTTP/1.1 400 Bad Request
Content-Type: text/plain; charset=UTF-8

Invalid value for enum type: INVALID_TYPE. Accepted values are: [TEXT,
  IMAGE, PRODUCT]
```


6 **DELETE** /messages/**id**

Deletes the message with the given ID.

6.1 Sample Valid Request

Sample Request

```
DELETE http://localhost:8083/messages/80e0bf1e-bff1-4571-b7e9-b2e24dbdcde8
```

Sample Response

```
HTTP/1.1 204 No Content
```

6.2 Sample Invalid Request: Message not found

Sample Request

```
DELETE http://localhost:8083/messages/ced4f1eb-52e5-4e50-9ae4-f95daf011404
```

Sample Response

```
HTTP/1.1 404 Not Found
Content-Type: text/plain; charset=UTF-8

No message with id ced4f1eb-52e5-4e50-9ae4-f95daf011404 found
```

7 PATCH /messages/id

Updates an existing message.

Request Body:

Must be provided with a JSON body containing any fields to be updated. Only fields for which values provided are not null will be updated.

Under the current implementation, updating a message does not change its **timestamp**. The timestamp does not change and represents when the message was first created (sent).

The following fields can be updated:

- **content**
- **type**
- **status**

If the message was updated successfully, the response will contain the updated message with a 200 status code.

If the message was not updated, either because no valid fields to update were provided, or because the provided values are the same as the current values, a 400 status code will be returned along with an empty response body.

7.1 Sample Valid Request

```
PATCH http://localhost:8083/messages/80e0bf1e-bff1-4571-b7e9-b2e24dbdcde8
{
  "content": "Updated Content",
  "type": "PRODUCT"
}
```

Response

```
HTTP/1.1 200 OK
Content-Type: application/json

{
  "senderId": "559588f3-5965-48fe-bfc7-23304bea87b2",
  "receiverId": "e7722912-538a-4663-8cc3-a11e9b63899c",
  "content": "Updated Content",
  "type": "PRODUCT",
  "id": "80e0bf1e-bff1-4571-b7e9-b2e24dbdcde8",
  "timestamp": "2025-05-08T01:51:47.521",
  "status": "SENT",
  "reportType": null,
  "reported": false
}
```

7.2 Sample Requests that do not update the message

7.2.1 No fields provided

```
PATCH http://localhost:8083/messages/80e0bf1e-bff1-4571-b7e9-b2e24dbdcde8
{
  "id": "80e0bf1e-bff1-4571-b7e9-b2e24dbdcde8",
  "senderId": "1fcb411f-c8fa-4999-a434-524d964a7572",
  "receiverId": "4d8e10a3-8b1a-4c66-ab14-702ef9fbd442"
}
```

Response

```
HTTP/1.1 400 Bad Request
Content-Type: text/plain; charset=UTF-8

No valid fields to update
```

7.2.2 No changes to the message

```
PATCH http://localhost:8083/messages/80e0bf1e-bff1-4571-b7e9-b2e24dbdcde8
{
  "content": "Updated Content",
  "type": "PRODUCT"
}
```

Response

```
HTTP/1.1 400 Bad Request
Content-Type: text/plain; charset=UTF-8

No valid fields to update
```

8 GET /messages/[id](#)/seen

Returns true if the message with the given ID has been seen, false otherwise.

Sample Requests

```
GET http://localhost:8083/messages/80e0bf1e-bff1-4571-b7e9-b2e24dbdcde8/seen
```

Response

```
HTTP/1.1 200 OK
Content-Type: application/json

true
```

```
GET http://localhost:8083/messages/93211957-555e-4be5-8d2a-875a481f9c66/seen
```

Response

```
HTTP/1.1 200 OK
Content-Type: application/json

false
```

9 PATCH /messages/**id**/seen

Marks the message with the given ID as seen.

Similar to update message endpoint in section 7. Returns a 200 status code with the updated message if the message was marked as seen successfully.

If the message was not marked as seen because it was already marked as seen, a 400 status code will be returned along with an empty response body.

9.1 Sample Valid Request

```
PATCH http://localhost:8083/messages/869a93e9-9a22-48e5-abf8-5983f313611f/seen
```

```
HTTP/1.1 200 OK
Content-Type: application/json

{
  "senderId": "f47e7de8-8b5a-4596-b21f-4270f67978f1",
  "receiverId": "00c5ac09-f93e-4cd7-8e59-b8b003e0ad05",
  "content": "Test content",
  "type": "IMAGE",
  "id": "869a93e9-9a22-48e5-abf8-5983f313611f",
  "timestamp": "2025-05-11T18:34:33.963",
  "status": "SEEN",
  "reportType": null,
  "reported": false
}
```

9.2 Sample Invalid Request: Message status already set to seen

```
PATCH http://localhost:8083/messages/869a93e9-9a22-48e5-abf8-5983f313611f/seen
```

Response

```
HTTP/1.1 400 Bad Request
Content-Type: text/plain; charset=UTF-8

Message with id 869a93e9-9a22-48e5-abf8-5983f313611f is already marked
as seen
```

10 DELETE /messages

Deletes all messages from the database.

10.1 Sample Valid Request

```
DELETE http://localhost:8083/messages/clear
```

Response

```
HTTP/1.1 204 No Content
```

10.2 Sample Invalid Request

```
DELETE http://localhost:8083/messages/clear
```

Response

```
HTTP/1.1 404 Not Found
Content-Type: text/plain; charset=UTF-8

No messages to delete
```