

DirectMessaging Microservice

Creation of tables –

Just running the command “flask init” it calls the `create_directMessages_table()` i.e, responsible for creating the DynamoDB table and `create_items()` puts some items into the active table. The `init_db()` also checks if table is already existing. If exists it deletes the existing one. Finally, a new table named “**directMessages**” is created and is populated with sample data.

Rest Apis -

- **sendDirectMessage (to, messageFrom, message, quickReplies=None)**

Description: This api is for sending direct message to a user registration. If all the parameters i.e, to, messageFrom and message are passed successfully and are not null then we get a success message with status code 200. If null or empty value is passed for to or messageFrom or message, then we get 400 statusCode with Bad Request error.

Endpoint: /sendDirectMessage

Method: POST

Parameters: to, from, message, timestamp, messageId

Sample JSON Request:

```
{
    'messageId': '102',
    'to': 'Pavani',
    'from': 'Sam',
    'timestamp': '2020-10-06 06:04:47.986880',
    'message': ' Hey Sam! The hydroponics vegetation idea that you took up is really inspiring!'
}
```

Success Response:

http://localhost:5000/

POST http://localhost:5000/sendDirectMessage

Authorization Headers (1) Body Pre-request Script Tests

form-data x-www-form-urlencoded raw binary

| Key | Value | Description |
|---|----------------------------------|-------------|
| <input checked="" type="checkbox"/> messageId | 2 | |
| <input checked="" type="checkbox"/> to | Pavani | |
| <input checked="" type="checkbox"/> from | Sam | |
| <input checked="" type="checkbox"/> timestamp | 2020-10-06 06:04:47.986880 | |
| <input checked="" type="checkbox"/> message | Thank you so much Pavani! | |
| <input type="checkbox"/> quick-replies | ['hey', 'working on my project'] | |
| New key | Value | Description |

Body Cookies Headers (4) Test Results Status: 200 OK Time: 127 ms

Pretty Raw Preview

```
{ "ResponseMetadata": { "HTTPHeaders": { "content-length": "2", "content-type": "application/x-amz-json-1.0", "server": "Jetty(8.1.12.v20130726)", "x-amz-crc32": "2745614147", "x-amzn-requestid": "15fcb442-ee9f-493b-b453-8956653e6b30" }, "HTTPStatusCode": 200, "RequestId": "15fcb442-ee9f-493b-b453-8956653e6b30", "RetryAttempts": 0 } }
```

Error Response:

```
{  
  "statusCode": 400,  
  "error": "Bad Request",  
  "message": "Invalid parameter(s)"  
}
```

In the below picture I removed the fields “to and “from” and then tried to hit the api and as expected we see the error message.

http://localhost:5000/ + ...

POST ▼ http://localhost:5000/sendDirectMessage

Authorization Headers (1) **Body** ● Pre-request Script Tests

☒ form-data ☐ x-www-form-urlencoded ☐ raw ☐ binary

| | Key | Value |
|-------------------------------------|---------------|----------------------------------|
| <input checked="" type="checkbox"/> | messageId | 2 |
| <input type="checkbox"/> | to | Pavani |
| <input type="checkbox"/> | from | Sam |
| <input checked="" type="checkbox"/> | timestamp | 2020-10-06 06:04:47.986880' |
| <input checked="" type="checkbox"/> | message | Thank you so much Pavani! |
| <input type="checkbox"/> | quick-replies | ['hey', 'working on my project'] |
| | New key | Value |

Body Cookies Headers (4) Test Results

Pretty Raw Preview

```
{ "error": "Bad Request", "message": "Invalid parameter(s)", "statusCode": 400 }
```

● **replyToDirectMessage (messageId, reply)**

Description: This api is for sending reply to a direct message. The reply parameter may either be a text message or a quick-reply value.

Endpoint: /replyToDirectMessage

Method: POST

Parameters: in-reply-to, reply, timestamp, messageId

Sample JSON Request:

```
{
  "messageId": '102',
  "in-reply-to": '101',
  "timestamp": '2020-10-06 06:04:47.986880',
  "reply": 'Thank you so much!'
}
```

http://localhost:5000/ No Environment

POST http://localhost:5000/replyToDirectMessage Params Send Save

Authorization Headers (1) Body Pre-request Script Tests Code

form-data x-www-form-urlencoded raw binary

| Key | Value | Description | ... | Bulk Edit |
|---|----------------------------|-------------|-----|-----------|
| <input checked="" type="checkbox"/> messageid | 2 | | | |
| <input type="checkbox"/> to | Pavani | | | |
| <input type="checkbox"/> from | Sam | | | |
| <input checked="" type="checkbox"/> timestamp | 2020-10-06 06:04:47.986880 | | | |
| <input checked="" type="checkbox"/> reply | Thank you so much Pavani! | | | |
| <input checked="" type="checkbox"/> in-reply-to | 108 | | | |
| New key | Value | Description | | |

Body Cookies Headers (4) Test Results Status: 200 OK Time: 46 ms

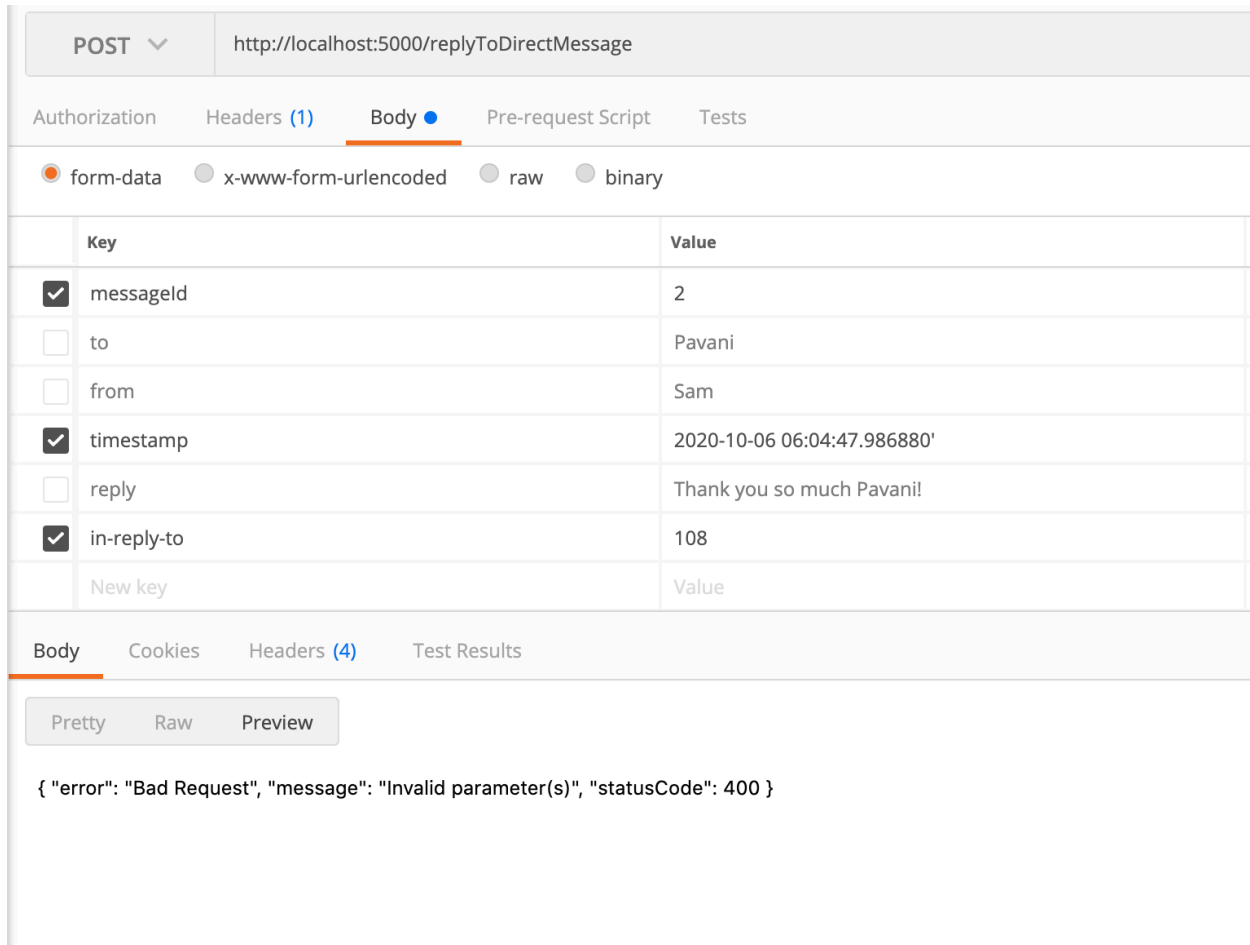
Pretty Raw Preview

```
{ "ResponseMetadata": { "HTTPHeaders": { "content-length": "2", "content-type": "application/x-amz-json-1.0", "server": "Jetty(8.1.12.v20130726)", "x-amz-crc32": "2745614147", "x-amzn-requestid": "22962db8-b12f-4f31-b426-9b80f33f3116" }, "HTTPStatusCode": 200, "Requestid": "22962db8-b12f-4f31-b426-9b80f33f3116", "RetryAttempts": 0 } }
```

Error Response:

```
{
  "statusCode": 400,
  "error": "Bad Request",
  "message": "Invalid parameter(s)"
}
```

In the below screenshot, I am trying to make a POST request removing the “reply” parameter and as expected we see an error response.



● listDirectMessagesFor(username)

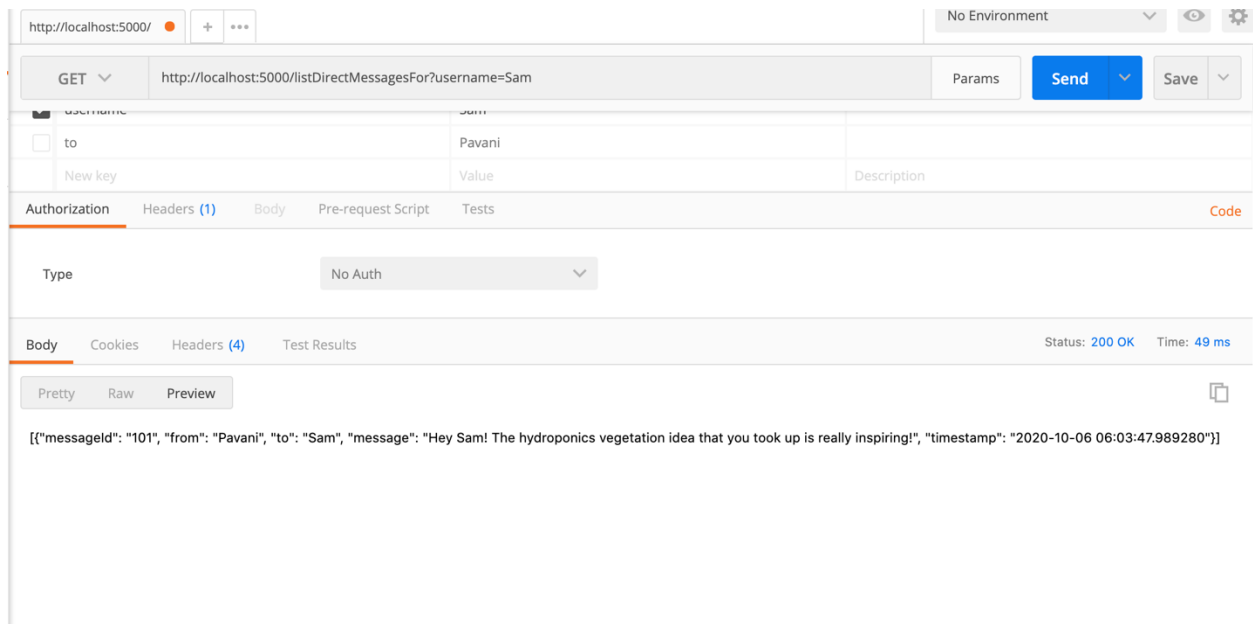
Description: This api is listing a user’s direct Messages.

Endpoint: /listDirectMessagesFor

Method: GET

Parameters: username

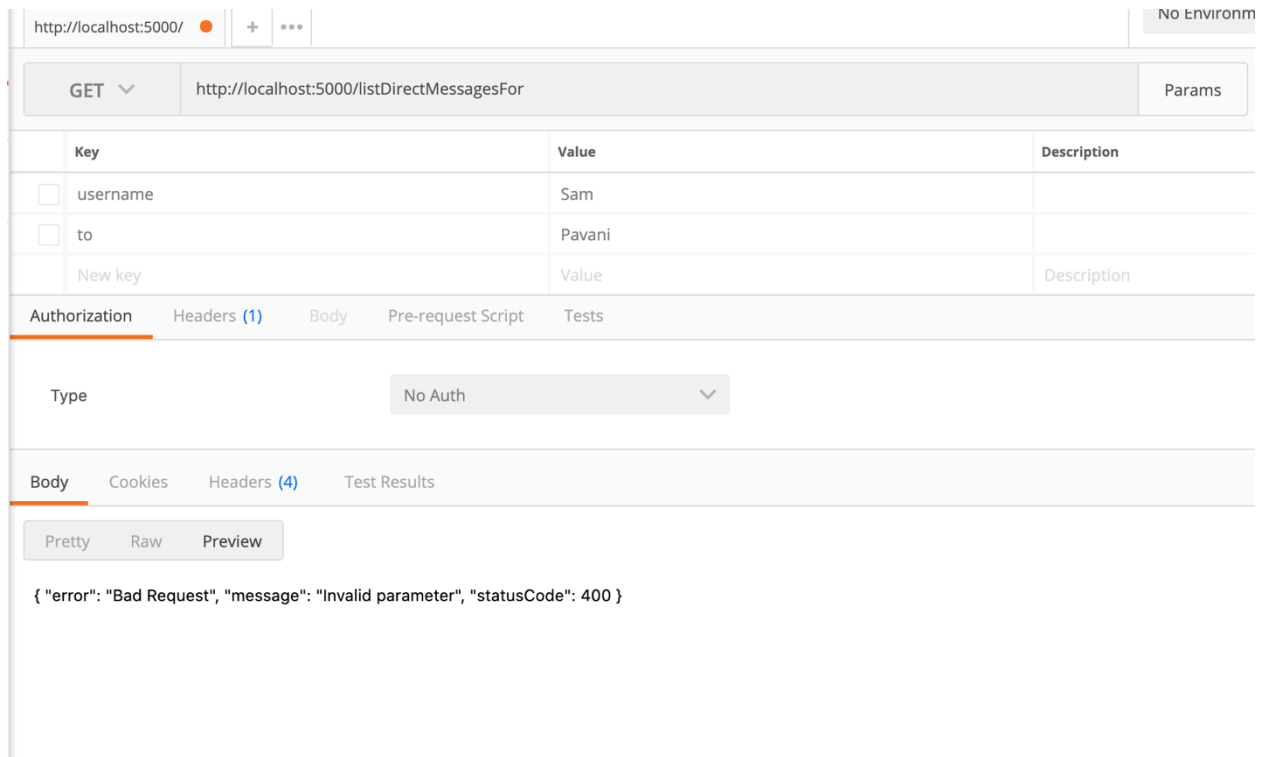
The following screenshot shows all the direct Messages for the user “Sam”.



Error Response:

```
{  
  "statusCode": 400,  
  "error": "Bad Request",  
  "message": "Invalid parameter(s)"  
}
```

In the below screenshot, I am trying to make a POST request removing the “username” parameter and as expected we see an error response.



- listRepliesTo(messageId)

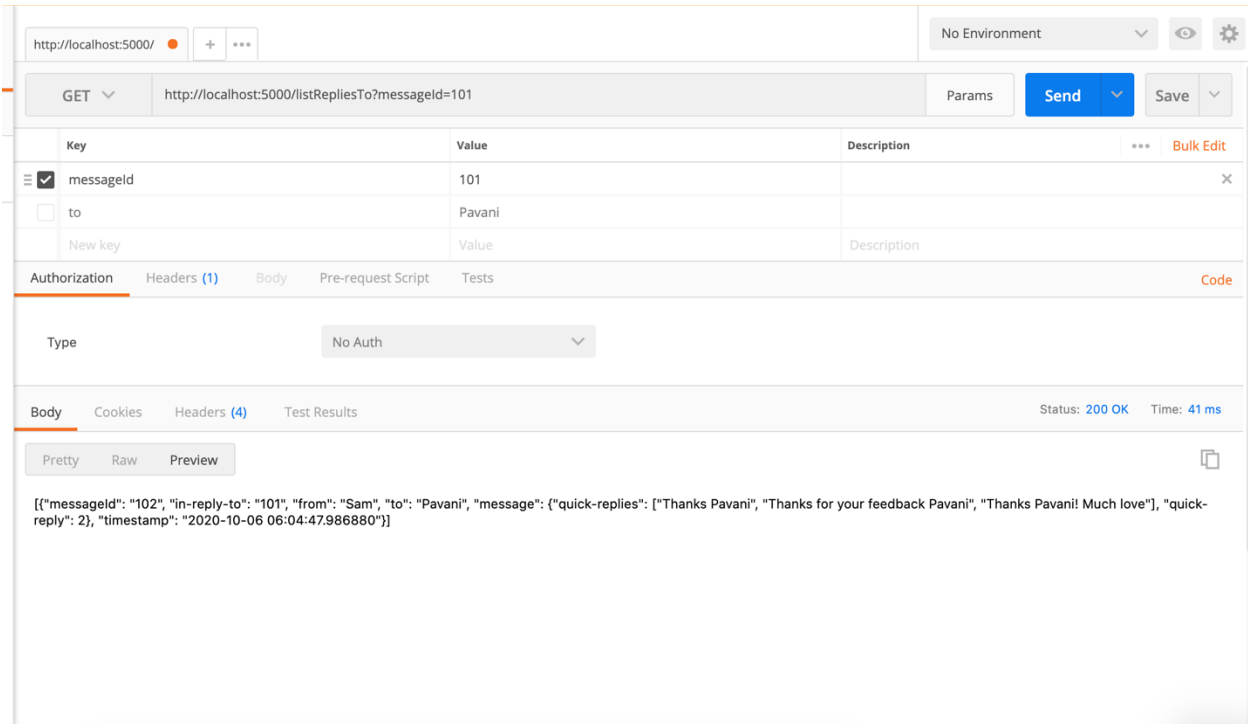
Description: This api is listing a user's direct Messages.

Endpoint: /listRepliesTo

Method: GET

Parameters: messageId

The following screenshot shows all the replies to a direct message.



In the below screenshot, I am trying to make a POST request removing the “messageId” parameter and as expected we see an error response.

