COLLEGE OF ENGINEERING AND COMPUTER SCIENCE

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CPSC 449 Web-Backend

Project 5 - Documentation

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1 How to run the Project?

Step 1: Start Dynamo locally on the computer using the following command. Open the terminal navigate to the directory where you extracted DynamoDBLocal.jar and type the below command:

```
java -Djava.library.path=./DynamoDBLocal_lib -jar DynamoDBLocal.jar -sharedDb
```

Step 2: Run the below command to initialise the database

```
flask init
```

Step 3: Run the below command to start the instances of app.py, timelines.py and DirectMessages.py

```
foreman start
```

Note:

Usersapi runs on 5000 Port
Timelinesapi runs on 5100 Port
DirectMessages runs on 5200 Port

2. Required Api in Users Microservice

File Name: app.py

***NOTE: Users Microservice Runs in 5100 Port. Mentioning create user api because, <mark>we can send direct messages only if the user is present in the Users Table</mark>. Create atleast 2 users using the below api

2.1 createUser API:

API Endpoint: /v1/createUser
Method: POST
Request Content Type: Application/JSON
Response Content Type: Application/JSON

Working:

    Send Request in the below format:

```
curl localhost:5000/v1/createUser -d '{"username": "Pranathi", "password": "Pass@123", "email": "ivpranathi@csu.fullerton.edu"}' -H 'Content-Type: application/json'
```

3. DirectMessages Microservice

File Name: DirectMessages.py

NOTE: DirectMessages Microservice Runs in 5200 PORT

2.1 sendDirectMessage API:

- This api is used to Send a direct message to a user. The user to whom the direct message is sent, and the user, who is sending the direct message should be in the users table. So, be sure to insert the users using Users Microservice.
- This is a POST Method – which requires to_username, from_username, and optionl message text, optional quick replies and optional inReplyTo.
- Here the request should be in JSON Format (as shown in the sample request). Response is also received in JSON Format.

API Endpoint:	**/v1/sendDirectMessage**
Method:	**POST**
Request Content Type:	**Application/JSON**
Response Content Type:	**Application/JSON**

Working:

Send Request in the below format: <mark>**With QuickReplies and Message Text**</mark>

```
curl localhost:5200/v1/sendDirectMessage -d '{"to_username": "Pranathi",
"from_username": "Dinesh", "message": "Hey!!How are you doing", "quickReplies":
{"0": "Great","1": "Awesome", "2": "Fantastic", "3": "Chilling"}}' -H 'Content-Type:
application/json'
```

Response:

```
student@tuffix-vm:~/Downloads$ curl localhost:5200/v1/sendDirectMessage -d '{"t
o_username": "Pranathi", "from_username":
> "Dinesh", "message": "Hey!!How are you doing", "quickReplies": {"0": "Great",
"1": "Awesome", "2": "Fantastic", "3": "Chilling"}}' -H 'Content-Type: applicat
ion/json'
{
  "ContentType": "application/json",
  "Message": "Message sent successfully",
  "StatusCode": 200,
  "messageId": 14099233279658509927
}
```

Send Request in the below format: **With InReplyTo and Message Text**

```
curl localhost:5200/v1/sendDirectMessage -d '{"to_username": "Dinesh",
"from_username": "Pranathi", "message": "Hey!!Shall we meet for lunch?",
"inReplyTo": 14099233279658509927}' -H 'Content-Type: application/json'
```

Response:

```
student@tuffix-vm:~/Downloads$ curl localhost:5200/v1/sendDirectMessage -d '{"t
o_username": "Dinesh", "from_username":
"Pranathi", "message": "Hey!!Shall we meet for lunch?", "inReplyTo": 1409923327
9658509927}' -H 'Content-Type: application/json'
{
  "ContentType": "application/json",
  "Message": "Message sent successfully",
  "StatusCode": 200,
  "messageId": 8632559345374285621
}
```

Send Request in the below format: <mark>With Only Message</mark>

curl localhost:5200/v1/sendDirectMessage -d '{"to_username": "Dinesh",
"from_username": "Pranathi", "message": "Whatsup!!"}' -H 'Content-Type:
application/json'

<mark>**Response:**</mark>

```
student@tuffix-vm:~/Downloads$ curl localhost:5200/v1/sendDirectMessage -d '{"t
o_username": "Dinesh", "from_username":
"Pranathi", "message": "Whatsup!!"}' -H 'Content-Type: application/json'
{
  "ContentType": "application/json",
  "Message": "Message sent successfully",
  "StatusCode": 200,
  "messageId": 14068697284479632194
}
```

2.2 replyDirectMessage API:

- This api is used to reply to a direct message – using a particular message id.

- This is a POST Method – which requires messageId, reply.

- Here the request should be in JSON Format (as shown in the sample request). Response is also received in JSON Format.

API Endpoint:	**/v1/replyDirectMessage**
Method:	**POST**
Request Content Type:	**Application/JSON**
Response Content Type:	**Application/JSON**

Working:

Send Request in the below format: <mark>With Quick Reply Id:</mark>

```
curl localhost:5200/v1/replyDirectMessage -d '{"messageId": 14099233279658509927, "quickReplyId": "2"}' -H 'Content-Type: application/json'
```

Response:

```
student@tuffix-vm:~/Downloads$ curl localhost:5200/v1/replyDirectMessage -d '{
"messageId": 14099233279658509927, "quickReplyId": "2"}' -H 'Content-Type: app
lication/json'
{
  "ContentLanguage": "en-US",
  "ContentType": "application/json",
  "Message": "Reply sent successfully",
  "StatusCode": 200
}
```

Send Request in the below format: <mark>**With Reply Text:**</mark>

> curl localhost:5200/v1/replyDirectMessage -d '{"messageId": 14099233279658509927, "reply": "I am awesome"}' -H 'Content-Type: application/json'

```
student@tuffix-vm:~/Downloads$ curl localhost:5200/v1/replyDirectMessage -d '{
"messageId": 14099233279658509927, "reply": "I am awesome"}' -H 'Content-Type:
 application/json'
{
  "ContentLanguage": "en-US",
  "ContentType": "application/json",
  "Message": "Reply sent successfully",
  "StatusCode": 200
}
```
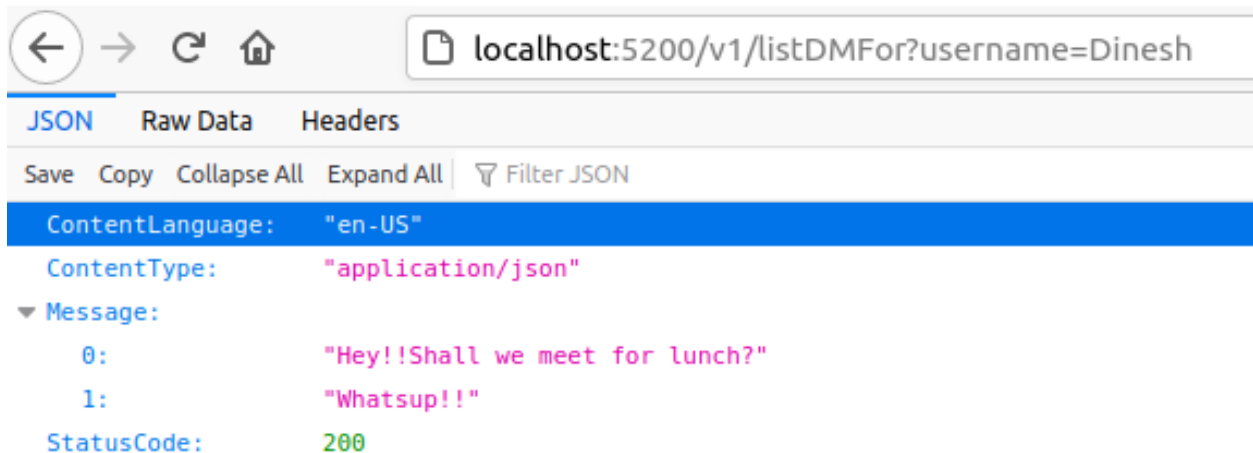
2.3 listDMFor API:

- This api is used to list to a direct message – of a particular username.

- This is a GET Method – which requires username.

- Here the request params should be sent as query params.

API Endpoint:	**/v1/listDMFor**
Method:	**GET**
Response Content Type:	**Application/JSON**

Send Request in the below format

http://localhost:5200/v1/listDMFor?username=Dinesh

RESPONSE:

2.4 listReplies API:

- This api is used to list to a replies– of a particular messageid.

- This is a GET Method – which requires MessageId.

- Here the request params should be sent as query params.

API Endpoint:	**/v1/ listReplies**
Method:	**GET**
Response Content Type:	**Application/JSON**

Send Request in the below format

http://localhost:5200/v1/listReplies?MessageId=14099233279658509927

RESPONSE: