

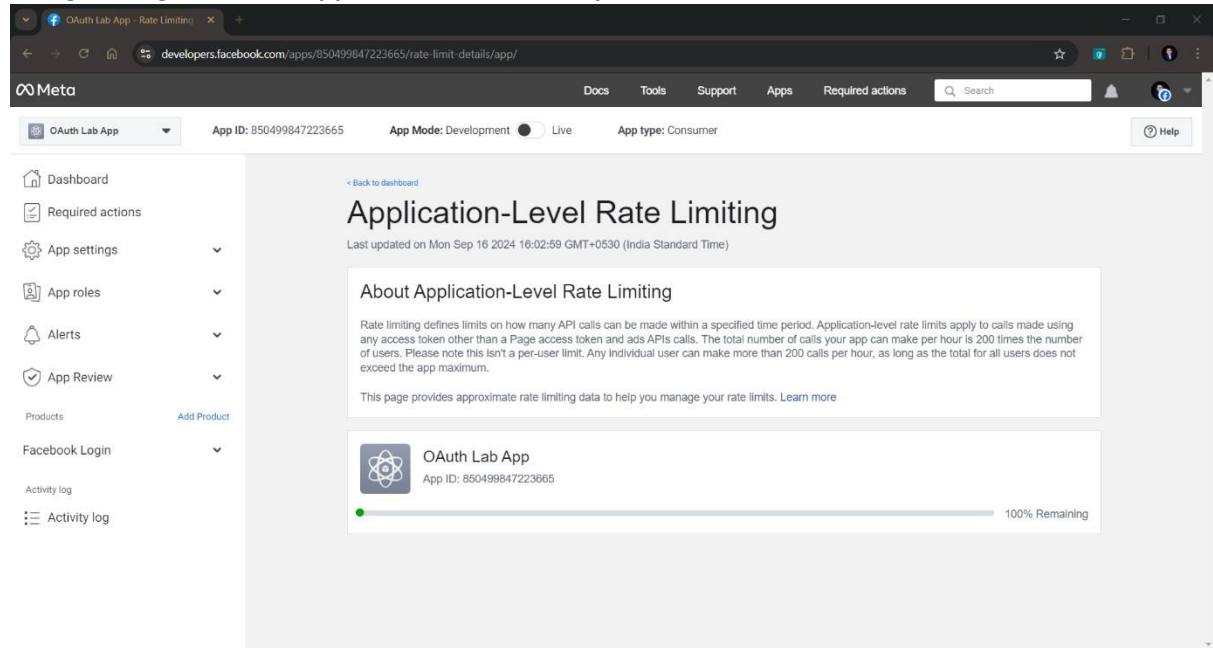
# **Secure Software Development**

## **SE3040**

### **LAB 07**

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## 1. Registering the Client App in Facebook Developer Website.

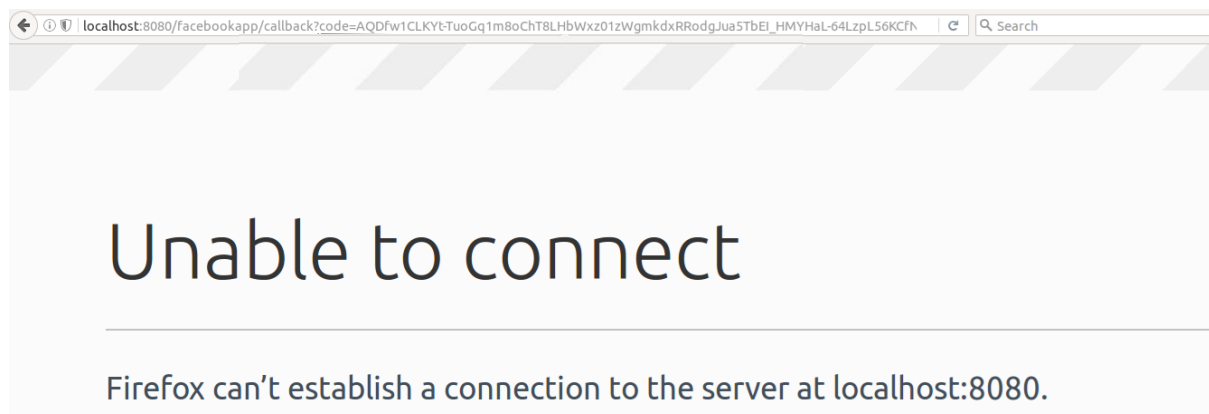


## 2. Obtaining the Authorization Code

<https://www.facebook.com/dialog/oauth>

Sample request:

[https://www.facebook.com/dialog/oauth?response\\_type=code&client\\_id=183994178774345&redirect\\_uri=http%3A%2F%2Flocalhost%3A8080%2Ffacebookapp%2Fcallback&scope=public\\_profile%20user\\_posts%20user\\_friends%20user\\_photos](https://www.facebook.com/dialog/oauth?response_type=code&client_id=183994178774345&redirect_uri=http%3A%2F%2Flocalhost%3A8080%2Ffacebookapp%2Fcallback&scope=public_profile%20user_posts%20user_friends%20user_photos)



[http://localhost:8080/facebookapp/callback?code=AQDfw1CLKYtTuoGq1m8oChT8LHbWxz01zWgmkdxRRodgJua5TbEI\\_HMYHaL-64LzpL56Kcfnz12Yt3WXlleep4t0Mc9VCQ9i7SPEIk7gPSmzy4m3fpNawmQCvtw5FEU6pM0ON8EMDv-6Vp1ty907V4Cnu5sp\\_\\_QTuJ2c9wz9Co1GlrOO3qEF2Vu9ruaKkMhZDSNAa0fgbd-5PLiivkN75nr7nsFCHIJEkadBfkIVddJTqd4AH7zc8KFXWta87KA3Kt3Taz7h0ITJff3wQuciWRqhvytOpE90snQPyNJkitpaQeX3VSLHeLd77QOKMNUGw2TnMr6B9d-Y6AZx1M-Of6MeQmeogsyhE0QzihAI6eQ#\\_=\\_](http://localhost:8080/facebookapp/callback?code=AQDfw1CLKYtTuoGq1m8oChT8LHbWxz01zWgmkdxRRodgJua5TbEI_HMYHaL-64LzpL56Kcfnz12Yt3WXlleep4t0Mc9VCQ9i7SPEIk7gPSmzy4m3fpNawmQCvtw5FEU6pM0ON8EMDv-6Vp1ty907V4Cnu5sp__QTuJ2c9wz9Co1GlrOO3qEF2Vu9ruaKkMhZDSNAa0fgbd-5PLiivkN75nr7nsFCHIJEkadBfkIVddJTqd4AH7zc8KFXWta87KA3Kt3Taz7h0ITJff3wQuciWRqhvytOpE90snQPyNJkitpaQeX3VSLHeLd77QOKMNUGw2TnMr6B9d-Y6AZx1M-Of6MeQmeogsyhE0QzihAI6eQ#_=_)

### 3. Obtain the access token

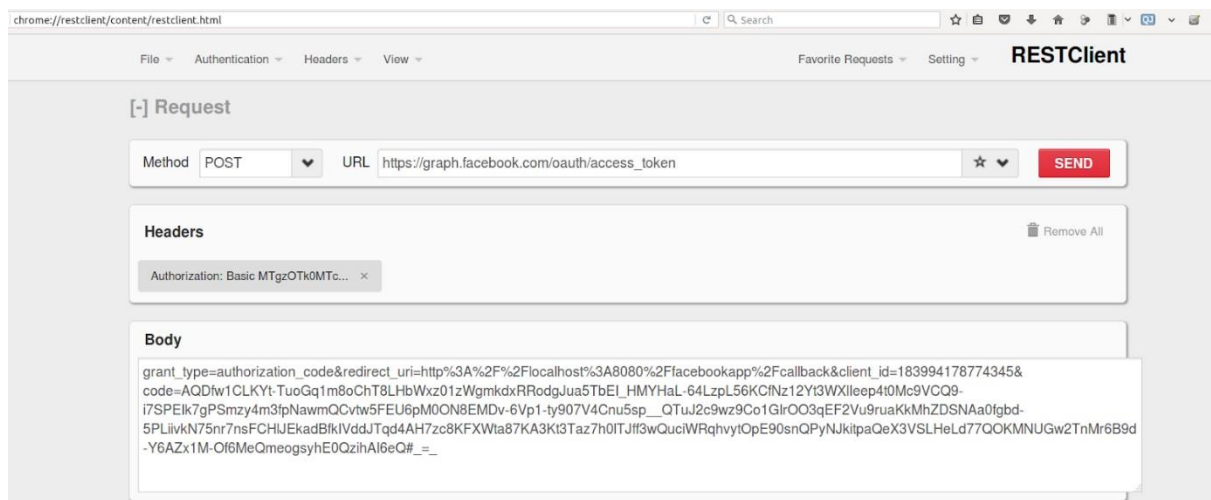
Authorization: Basic <Base64encode(AppID:AppSecret)>

URL Encoded Value `http%3A%2F%2Flocalhost%3A8080%2Ffacebookapp%2Fcallback`

AQDfw1CLKYt-TuoGq1m8oChT8LHbWxz01zWgmkdxRRodgJua5TbEI\_HMYHaL-64LzpL56Kcfnz12Yt3WXlleep4t0Mc9VCQ9i7SPEIk7gPSmzy4m3fpNawmQCvtw5FEU6pM0ON8EMDv-6Vp1ty907V4Cnu5sp\_\_QTuJ2c9wz9Co1GlrOO3qEF2Vu9ruaKkMhZDSNAa0fgbd-5PLiivkN75nr7nsFCHIJEkadBfkIVddJTqd4AH7zc8KFXWta87KA3Kt3Taz7h0ITJff3wQuciWRqhvytOpE90snQPyNJkitpaQeX3VSLHeLd77QOKMNUGw2TnMr6B9d-Y6AZx1M-Of6MeQmeogsyhE0QzihAI6eQ#\_=\_

**Authorization: Basic**

**MTgzOTk0MTc4Nzc0MzQ1OmRjMzIxZWJlYTl5MjgzY2Q0MDkyYjZiNDc2Y2NhZGJk**



## [-] Response

Response Headers

Response Body (Raw)

Response Body (Highlight)

Response Body (Preview)

```
1. {
2.   "access_token": "EAAcNv3uqpUkBAHtIfr6UKdZC8PR6zRUbQvA2jtyb3bxRbZBqyIUsmW8v6kLKZBRX388B0vjg
   eirmexZBC1UU1oK05QGCg08D2a8gkqHB1Ami8ZC6ZCQLNN2X9hy79zfv7pTU1gjZCu4m97NH8PoUdUJgoZCTdK6NeBQZD"
3. ,
4.   "token_type": "bearer",
5.   "expires_in": 5172406
}
```

curl -X POST --header "Authorization:

Basic MTgzOTk0MTc4Nzc0MzQ1OmRjMzlxZWJlYTl5MjgzY2Q0MDkyYjZiNDc2Y2NhZGJk" --data

"grant\_type=authorization\_code&redirect\_uri=http%3A%2F%2Flocalhost%3A8080%2Ffacebookapp%2Fcallback&client\_id=183994178774345&code=AQDfw1CLKYtTuoGq1m8oChT8LHbWxz01zWgmkdXRrodgJua5TbEI\_HMYHaL-

64LzpL56KcfNz12Yt3WXlIeep4t0Mc9VCQ9-

i7SPEIk7gPSmzy4m3fpNawmQCvtw5FEU6pM0ON8EMDv-

6Vp1ty907V4Cnu5sp\_\_QTuJ2c9wz9Co1GlrOO3qEF2Vu9ruaKkMhZDSNAa0fgbd5PLiiv

kN75nr7nsFCHlJEkadBfkIVddJTqd4AH7zc8KFXWta87KA3Kt3Taz7h0ITJff3wQuc

iWRqhvytOpE90snQPyNJkitpaQeX3VSLHeLd77QOKMNUGw2TnMr6B9d-

Y6AZx1MOf6MeQmeogsyhE0QzihAI6eQ#\_=\_"

[https://graph.facebook.com/oauth/access\\_token](https://graph.facebook.com/oauth/access_token)

```
thartndu@thartndu-pc:~$ curl -X POST --header "Authorization: Basic MTgzOTk0MTc4Nzc0MzQ1OmRjMzlxZWJlYTl5MjgzY2Q0MDkyYjZiNDc2Y2NhZGJk" --data "grant_type=authorization_code&redirect_uri=http%3A%2F%2Flocalhost%3A8080%2Ffacebookapp%2Fcallback&client_id=183994178774345&code=AQDfw1CLKYtTuoGq1m8oChT8LHbWxz01zWgmkdXRrodgJua5TbEI_HMYHaL-64LzpL56KcfNz12Yt3WXlIeep4t0Mc9VCQ9-i7SPEIk7gPSmzy4m3fpNawmQCvtw5FEU6pM0ON8EMDv-6Vp1ty907V4Cnu5sp__QTuJ2c9wz9Co1GlrOO3qEF2Vu9ruaKkMhZDSNAa0fgbd5PLiivkN75nr7nsFCHlJEkadBfkIVddJTqd4AH7zc8KFXWta87KA3Kt3Taz7h0ITJff3wQuciWRqhvytOpE90snQPyNJkitpaQeX3VSLHeLd77QOKMNUGw2TnMr6B9d-Y6AZx1M-Of6MeQmeogsyhE0QzihAI6eQ#_=_ " https://graph.facebook.com/oauth/access_token
```

```
{ "access_token": "EAAcNv3uqpUkBAHtIfr6UKdZC8PR6zRUbQvA2jtyb3bxRbZBqyIUsmW8v6kLKZBRX388B0vjgeirmexZBC1UU1oK05QGCg08D2a8gkqHB1Ami8ZC6ZCQLNN2X9hy79zfv7pTU1gjZCu4m97NH8PoUdUJgoZCTdK6NeBQZD", "token_type": "bearer", "expires_in": 5172406 }thartndu@thartndu-pc:~$
```

## 4. Retrieving User Resources from Facebook, providing

the Access Token

Authorization: Bearer <access token value> Retrieving

user's timeline posts

<https://graph.facebook.com/v2.8/me/feed?limit=25>

```
{
  "data":
  [
    {
      "message": "Mid night calls for the 3rd consecutive day. #FridayNight #SecurityTeam",
      "story": "Tharindu Edirisinghe with Prakash Sivakumar and 2 others at WS02.",
      "created_time": "2017-03-24T18:16:42+0000",
      "id": "10211676134766456_10211597302675703"
    },
    {
      "message": "Another friend at home.. #kalawedda.. It seemed to be blind in day light",
      "created_time": "2017-03-20T10:56:20+0000",
      "id": "10211676134766456_10211556857784606"
    },
    {
      "story": "CAKE LABS added a new photo – with Prakash Sivakumar and Tharindu Edirisinghe at Cake Labs.",
      "created_time": "2017-03-18T06:22:49+0000",
      "id": "610831692314505_1414989191898747"
    }
  ],
}
```

### Retrieving User's Photo Album Details

<https://graph.facebook.com/v2.8/me/albums>

The screenshot shows the RESTClient interface. The 'Request' tab is active, displaying a GET request to the URL `https://graph.facebook.com/v2.8/me/albums` with a Bearer token in the Authorization header. The 'Response' tab is also active, showing the JSON response from the API. The response contains an array of album details, including their names, creation times, and IDs.

**Request:**

- Method: GET
- URL: `https://graph.facebook.com/v2.8/me/albums`
- Headers: Authorization: Bearer EAACnV3uqp...

**Response:**

```
1. {
2.   "data":
3.   [
4.     {
5.       "created_time": "2009-10-02T12:39:42+0000",
6.       "name": "Timeline Photos",
7.       "id": "1223645158821"
8.     },
9.     {
10.      "created_time": "2011-12-20T12:25:06+0000",
11.      "name": "Mobile Uploads",
12.      "id": "2757566105886"
13.    },
14.    {
15.      "created_time": "2017-03-05T17:59:22+0000",
16.      "name": "Snorkeling in Kalpitiya",
17.      "id": "10211404592258063"
18.    }
19.  ],
20. }
```

### Retrieving Photos of an Album

[https://graph.facebook.com/v2.8/<album\\_id>/photos](https://graph.facebook.com/v2.8/<album_id>/photos)

RESTClient

File Authentication Headers View Favorite Requests Setting

### [ - ] Request

Method GET URL <https://graph.facebook.com/v2.8/1879179866779/photos> ☆

**Headers** Remove All

Authorization: Bearer EAACnV3uqp... x

**Body**

Request Body

### [ - ] Response

Response Headers Response Body (Raw) Response Body (Highlight) Response Body (Preview)

```
1. {
2.   "data":
3.   [
4.     {
5.       "created_time": "2011-04-03T13:31:10+0000",
6.       "id": "1879179986782"
7.     },
8.     {
9.       "created_time": "2011-04-03T13:31:21+0000",
10.      "id": "1879181746826"
11.    },
12.    {
13.      "created_time": "2011-04-03T13:31:31+0000",
14.      "id": "1879182106835"
15.    }
16.  ]
17. }
```

Retrieving a Photo by ID <https://graph.facebook.com/<photo ID>/picture>

[ - ] Request

Method GET URL <https://graph.facebook.com/1879179986782/picture> ☆

☒ Allow image preview (overrideMimeType with "text/xml; charset=x-user-defined")

**Headers** Remove All

Authorization: Bearer EAACnV3uqp... x

**Body**

Request Body

### [ - ] Response

