age

name

id

Registration request

Name, state

http location

redirect uri

scope(read, write)

Authorization grant(refresh token, authorization code)

pkce (proof key for code exchange) csrf

state variable

Code verfier (A)

Code verfier challenge (B)

Challenge method (SHA-256)

cross site forgery request

Authorization server (OAuth2)

Authorization request

CID, secret, scope, state, code-challenge

Client id (public) : CID

Client secret: abcd123

Client application

User (Parul)

Resource server

(Parul’s data)

state

Client (Facebook)

ClientID: abc123

Secret: s3cr3t

0

Redirect endpoint

Code obtained

Code verifier

Register

Verifier challenge method

Code verifier challenge

5

4

2

1

Authorization request

OAuth2 (Authorization Server)

Response : 302 Found

Location : Login endpoint

Login endpoint

Token endpoint

Code endpoint

pwd

user

Resource Server (cloud)

User (Parul)

3

JWT Token obtained

[https://facebook.com/get\_authorization code/&response\_type=authorization\_code&code=dbehjer&timestamp=139839](https://facebook.com/get_authorization%20code/&response_type=authorization_code&code=dbehjer&timestamp=139839)&state=456789123

Server Side

Client Side

(browser)

response

request

facebook Application

<https://server.com/login>

facebook

RedirectURI

Token endpoint

Redirect Login endpoint

Redirect Login endpoint

Authorization Response

Redirect Login endpointt

Authorization Request

Resource Server

Oauth2

user (parul)

User Agent (browser)

Client (Facebook)

Server (OAuth2)