

**DB :**

- tables:  
Users : to make auth for user and save access tokens of facebook, twitter and google.  
social\_media: to save retrieved data from social media
- implemented by JDBC .

**Scenario :**

- Ask user for his name and his access tokens of his social media
- check if access token of facebook and twitter is found or not :

if not found user :

- 1) login in system by insert name , facebook access token , twitter access token , google access token , and login time.
- 2) Retrieve data from facebook , twitter and google and save useful info like email in db.
- 3) Print welcome msg to user.

If found : update login time in db

**Note that:**

- twitter api don't retrieve Email because user can sign up using number phone instead of email address and for restricted role If you're interested in a user's email address, you'll have to ask the user for it within your own application as a completely distinct act.
- I don't need merge system in my app because I use one table to save all social media information in social\_media table so user has one account for all his data.

**Library and jar files used are:**

- facebook4j → for fb connection
- twitter4j → for twitter connection
- google-api-java-client → for google connection

**classes:**

- JDBC : java class to connect java to mysql database and it has db configuration.
- FacebookConf : java class for configuration facebook API and define some helper functions.
- TwitterConf: java class for configuration twitter API and define some helper functions.
- GoogleConf: java class for configuration twitter API and define some helper functions.