

Assignment 2

Team ID	PNT2022TMID13848
Project Name	Personal Expense Tracker Application

Question:

1. Create User table with user with email, username, roll number, password.
2. Perform UPDATE, DELETE Queries with user table
3. Connect python code to db2.
4. Create a flask app with registration page, login page and welcome page. By default, load the registration page once the user enters all the fields store the data in database and navigate to login page authenticate user username and password. If the user is valid show the welcome page.

1. Create User table with user with email, username, roll number, password.

Solution:

```
CREATE TABLE USER(  
    USER_ID INT GENERATED BY DEFAULT AS IDENTITY NOT  
    NULL,  
    EMAIL_ID VARCHAR(150) NOT NULL,  
    USER_NAME VARCHAR(255) NOT NULL,  
    ROLL_NUMBER VARCHAR(100) NOT NULL,  
    PASSWORD VARCHAR(100) NOT NULL,  
    PRIMARY KEY (USER_ID)  
);  
INSERT INTO USER(EMAIL_ID,  
USER_NAME,ROLL_NUMBER,PASSWORD)  
VALUES('rk9166771@gmail.com','Rajeshkumar  
S','19CS123','9787234640');  
  
INSERT INTO USER(EMAIL_ID,  
USER_NAME,ROLL_NUMBER,PASSWORD)  
VALUES('ramachandramoorthykb@gmail.com','Ramachandramoorthy K  
B','19CS124','9912346578');
```

The screenshot shows the IBM Db2 Cloud console interface. On the left, a SQL script is displayed with the following content:

```
1 CREATE TABLE USER(  
2 USER_ID INT GENERATED BY DEFAULT AS IDENTITY NOT NULL,  
3 EMAIL_ID VARCHAR(150) NOT NULL,  
4 USER_NAME VARCHAR(255) NOT NULL,  
5 ROLL_NUMBER VARCHAR(100) NOT NULL,  
6 PASSWORD VARCHAR(100) NOT NULL,  
7 PRIMARY KEY (USER_ID)  
8 );  
9  
10 INSERT INTO USER(EMAIL_ID,USER_NAME,ROLL_NUMBER,PASSWORD)  
11 VALUES('rk9166771@gmail.com','Rajeshkumar S','19CS123','9787234640');  
12  
13 INSERT INTO USER(EMAIL_ID, USER_NAME,ROLL_NUMBER,PASSWORD)  
14 VALUES('ramachandramoorthykb@gmail.com','Ramachandramoorthy K B','19CS124','991  
15  
16 SELECT * FROM USER;  
17  
18 UPDATE USER SET EMAIL_ID='dev.rajeshkumars@gmail.com' WHERE USER_NAME='Rajeshkumar S';  
19  
20 SELECT * FROM USER;  
21  
22 DELETE FROM USER WHERE USER_NAME = 'Rajeshkumar S';  
23  
24 SELECT * FROM USER;  
25  
26 DROP TABLE USER;  
27
```

On the right, the results of the 'SELECT * FROM USER' query are shown. The run time is 0.008 s. The results are displayed in a table with the following data:

USER_ID	EMAIL_ID	USER_NAME	ROLL_NU
1	rk9166771@gmail.com	Rajeshkumar S	19CS123
2	ramachandramoorthykb@gmail.com	Ramachandramoorthy K B	19CS124

2. Perform UPDATE, DELETE Queries with user table.

Solution:

UPDATE:

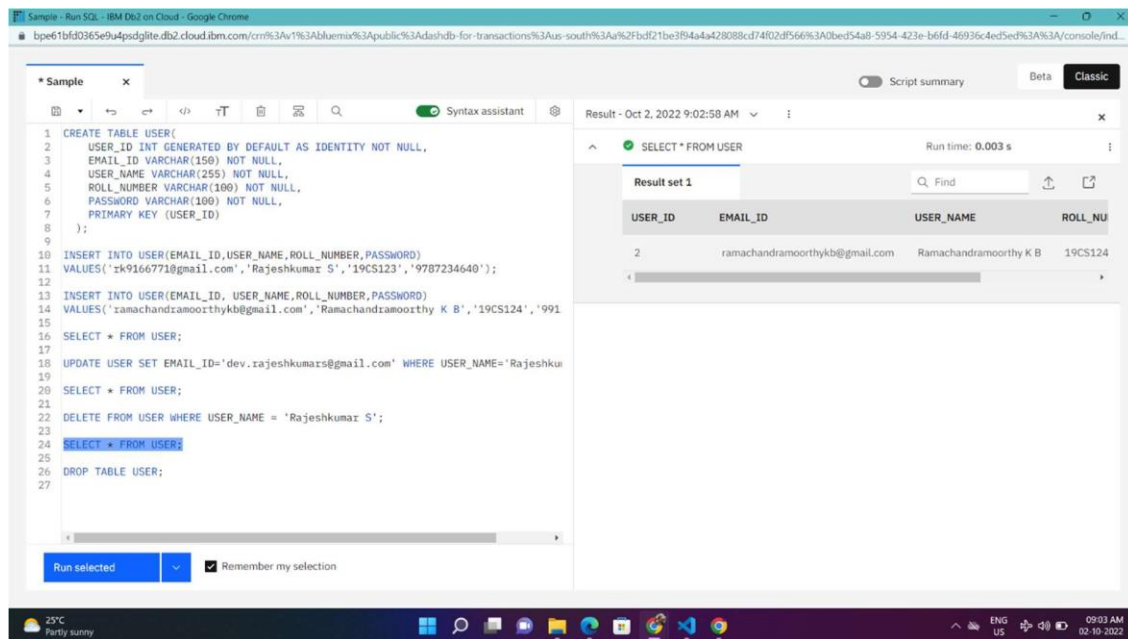
UPDATE USER SET EMAIL_ID='dev.rajeshkumars@gmail.com' WHERE USER_NAME='Rajeshkumar S';

The screenshot shows the IBM Db2 Cloud console interface. On the left, the SQL script is the same as in the previous screenshot, but the 'UPDATE' query is now highlighted. On the right, the results of the 'SELECT * FROM USER' query are shown. The run time is 0.016 s. The results are displayed in a table with the following data:

USER_ID	EMAIL_ID	USER_NAME	ROLL_NU
1	dev.rajeshkumars@gmail.com	Rajeshkumar S	19CS123
2	ramachandramoorthykb@gmail.com	Ramachandramoorthy K B	19CS124

DELETE:

DELETE FROM USER WHERE USER_NAME = 'Rajeshkumar S';



3. Connect python code to db2.

Solution:

```

def Connection():
    try:
        conn = ibm_db.connect("DATABASE=bludb;HOSTNAME=21fecfd8-47b7-4937-840d-d791d0218660.bs2io90l08kqb1od8lcg.databases.appdomain.cloud;PORT=31864;SECURITY=SSL;SSLServerCertificate=DigiCertGlobalRootCA.crt;UID=xjk42376;PWD=liEWs4fS57ABi3h1", "", "")

        print ("Database Connected Successfully !")

        return conn

    except:
        print ("Unable to connect: ", ibm_db.conn_errormsg())

```

4. Create a flask app with registration page, login page and welcome page. By default, load the registration page once the user enters all the fields store the data in database and navigate to login page authenticate user username and password. If the user is valid show the welcome page.

```
def Create(email,name,phone,password,conn):

    columns = "UNAME","UEMAIL","UPHONE","UPASSWORD"
    val = ""+name+"",""+email+"",""+phone+"",""+password+"
    sql = 'Insert into XJK42376.USER(' + columns + ') values('+val+')'
    try:
        stmt = ibm_db.prepare(conn, sql)
        ibm_db.execute(stmt)
        print ("added :-")
        return 1
    except:
        print("Error While Adding the User ! ")
        return 0

def Signin(email,password,conn):

    sql = "SELECT * FROM XJK42376.USER"
    try:
        result = ibm_db.exec_immediate(conn,sql)
        tuple = ibm_db.fetch_tuple(result)
        while tuple != False:
            if str(tuple[1]) == email and str(tuple[3]) == password:
                res = [str(tuple[0]),str(tuple[1]),str(tuple[2])]
                return res
            tuple = ibm_db.fetch_tuple(result)
        print("Fetch Success :-")
        return 0
    except:
        print("fetch not found !")
        return 0
```

Output:

Signup Page:

Sign Up

SIGN UP

Already Have an Account ! [Login](#)

Login Page:

Sign In

SIGN IN

Don't Have an Account ! [Sign Up](#)

When Email or password is Invalid:

Sign In

Invalid Email or Password

Email

Password

SIGN IN

Don't Have an Account ! [Sign Up](#)

Table:

XJK42376.USER

Back

Export to CSV

UNAME	UEMAIL	UPHONE	UPASSWORD
Rajeshkumar	rk9166771@gmail.com	9787234640	123456789
Ramachandramoorthy K B	ramchandramoorthykb@gmail.com	1029384756	123456
Ramya s	ramya@gmail.com	123456788	1234567890
Umapathi K	umapathik@gmail.com	8765432211	1234567890

Home Page:

DashBoard

Welcome Rajeshkumar !