

## Implementing Web Application

Project Name	Personal Expense Tracker Application
Team ID	PNT2022TMID42840

### Create IBM Db2 And Connect With Python:

```
from flask import Flask, render_template, request, redirect, url_for, session
```

```
import ibm_db import re
```

```
app = Flask(__name__)
```

```
app.secret_key = 'a'
```

```
conn = ibm_db.connect("DATABASE=bludb;HOSTNAME=b70af05b-76e4-4bca-a1f5-  
23dbb4c6a74e.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud;PORT=32304;SECURITY=SSL;SSL  
ServerCertificate=DigiCertGlobalRootCA.crt;UID=jzc43091;PWD=PI8VtGRvZISVT65A","")
```

```
@app.route('/') def homer():
```

```
    return render_template('home.html')
```

```
@app.route('/login',methods =['GET', 'POST']) def
```

```
login():      global userid      msg = "
```

```
    if request.method == 'POST' : username  
        = request.form['username']
```

```
password = request.form['password'] sql = "SELECT * FROM users WHERE
```

```
username =? AND password=?" stmt = ibm_db.prepare(conn, sql)
```

```
ibm_db.bind_param(stmt,1,username) ibm_db.bind_param(stmt,2,password)
```

```
ibm_db.execute(stmt) account = ibm_db.fetch_assoc(stmt) print (account) if
```

```
account: session['loggedin'] = True      session['id']
```

```

= account['USERNAME']          userid=
account['USERNAME']      session['username'] =
account['USERNAME']      msg = 'Logged in
successfully !'

```

```

    msg = 'Logged in successfully !'

return render_template('dashboard.html', msg = msg) else:

```

```

    msg = 'Incorrect username / password !'
return render_template('login.html', msg = msg)

```

```

@app.route('/register', methods=['GET', 'POST']) def
register():      msg = " if request.method ==
'POST' : username = request.form['username']      email =
request.form['email'] password = request.form['password']
sql = "SELECT * FROM users WHERE username =?"
stmt = ibm_db.prepare(conn, sql)
ibm_db.bind_param(stmt,1,username) ibm_db.execute(stmt)
    account = ibm_db.fetch_assoc(stmt)
    print(account)  if account:
        msg = 'Account already exists !'      elif not
re.match(r'^@]+@^[^@]+\.[^@]+', email):
        msg = 'Invalid email address !'      elif
not re.match(r'[A-Za-z0-9]+', username):
        msg = 'name must contain only characters and numbers !'
else:
    insert_sql = "INSERT INTO users VALUES (?, ?, ?)"

```

```
prep_stmt = ibm_db.prepare(conn, insert_sql)
ibm_db.bind_param(prepare_stmt, 1, username)
ibm_db.bind_param(prepare_stmt, 2, email)
ibm_db.bind_param(prepare_stmt, 3, password)
ibm_db.execute(prepare_stmt)    msg = 'You have successfully
registered !'    elif request.method == 'POST':
    msg = 'Please fill out the form !'    return
render_template('register.html', msg = msg)

if __name__ == '__main__':
    app.run(host='0.0.0.0')
```