Assignment-3

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PROJECTNAME	SMART FASHION RECOMMENDER APPLICATION
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1. Create User table with user with email, username, roll number, password.

CREATE TABLE user(email varchar(50) not null, username varchar(20) not null, roll_number int not null, password varchar(20) not null)

INSERT INTO user(email, username, roll_number, password)

VALUES('balamurugan@gmail.com','bala','4008','bala')

2.Perform UPDATE, DELETE Queries with user table

UPDATE user SET username='bala' WHERE email='balamurugan@gmail.com'
DELETE FROM user WHERE username = 'bala'

3. Connect python code to db2.

 $conn = ibm_db.connect("DATABASE=bludb;HOSTNAME=6667d8e9-9d4d-4ccb-ba32-21da3bb5aafc.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud;PORT=30376;Security=SSL;SSLServerCertificate=DigiCertGlobalRootCA.crt;UID=xhq48211;PWD=OAodZfPFgMXysOs5;",",")$

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.

login.html

```
<html>
      <head>
             <meta charset="UTF-8">
             <title> Login </title>
             k rel="stylesheet" href="{{ url_for('static', filename='style.css') }}">
      </head>
      <body></br></br></br>
             <div align="center">
             <div align="center" class="border">
                    <div class="header">
                          <h1 class="word">Login</h1>
                    </div></br></br>
                    <h2 class="word">
                          <form action="{{ url_for('login') }}" method="post">
                          <div class="msg">{{ msg }}</div>
                                 <input id="username" name="username" type="text"
placeholder="Enter Your Username" class="textbox"/></br>
                                 <input id="password" name="password"
type="password" placeholder="Enter Your Password" class="textbox"/></br></br>
                                 <input type="submit" class="btn" value="Sign</pre>
In"></br>
                          </form>
                    </h2>
                    Don't have an account? <a class="bottom"</pre>
href="{{url_for('register')}}"> Sign Up here</a>
             </div>
```

```
</div>
       </body>
</html>
register.html:
<html>
       <head>
              <meta charset="UTF-8">
              <title> Register </title>
              k rel="stylesheet" href="{{ url_for('static', filename='style.css') }}">
       </head>
       <body></br></br></br>
              <div align="center">
             <div align="center" class="border">
                     <div class="header">
                            <h1 class="word">Register</h1>
                     </div></br></br>
                     <h2 class="word">
                            <form action="{{ url_for('register') }}" method="post">
                            <div class="msg">{{ msg }}</div>
                                   <input id="username" name="username" type="text"</pre>
placeholder="Enter Your Username" class="textbox"/></br>
                                   <input id="password" name="password"</pre>
type="password" placeholder="Enter Your Password" class="textbox"/></br>
                                   <input id="email" name="email" type="text"</pre>
placeholder="Enter Your Email ID" class="textbox"/></br>
                                   <input type="submit" class="btn" value="Sign</pre>
Up"></br>
                            </form>
                     </h2>
```

```
Already have an account? <a class="bottom"</pre>
href="{\{url\_for('login')\}}"> Sign In here</a>
             </div>
             </div>
      </body>
</html>
index.html:
<html>
      <head>
             <meta charset="UTF-8">
             <title> Index </title>
             k rel="stylesheet" href="{{ url_for('static', filename='style.css') }}">
      </head>
      <body></br></br></br>
             <div align="center">
             <div align="center" class="border">
                    <div class="header">
                           <h1 class="word">Index</h1>
                    </div></br></br>
                           <h1 class="bottom">
                                 Hi {{session.username}}!!</br>></br>> Welcome to Our
page...
                           </h1></br></br>
                           <a href="{{ url_for('logout') }}" class="btn">Logout</a>
             </div>
             </div>
      </body>
</html>
```

```
app.py:
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=6667d8e9-9d4d-4ccb-ba32-
21da3bb5aafc.c1ogj3sd0tgtu0lqde00.databases.appdomain.cloud;PORT=30376;Security=SS
L;SSLServerCertificate=DigiCertGlobalRootCA.crt;UID=xhq48211;PWD=OAodZfPFgMX
ysOs5;",",")
@app.route('/')
@app.route('/login', methods =['GET', 'POST'])
def login():
  msg = "
  if request.method == 'POST' and 'username' in request.form and 'password' in
request.form:
    username = request.form['username']
    password = request.form['password']
    stmt = ibm\_db.prepare(conn, SELECT * FROM users WHERE username = ? AND
password = ?'
    ibm_db.bind_param(stmt,1,username)
    ibm_db.bind_param(stmt,2,password)
    ibm_db.execute(stmt)
    account = ibm_db.fetch_assoc(stmt)
    if account:
      session['loggedin'] = True
      session['username'] = account['USERNAME']
      msg = 'Logged in successfully!'
      return render_template('index.html', msg = msg)
```

```
else:
       msg = 'Incorrect username / password !'
  return render_template('login.html', msg = msg)
@app.route('/logout')
def logout():
  session.pop('loggedin', None)
  session.pop('id', None)
  session.pop('username', None)
  return redirect(url_for('login'))
@app.route('/register', methods =['GET', 'POST'])
def register():
  msg = "
  if request.method == 'POST' and 'username' in request.form and 'password' in request.form
and 'email' in request.form:
     username = request.form['username']
     password = request.form['password']
     email = request.form['email']
     stmt = ibm_db.prepare(conn, 'SELECT * FROM users WHERE username = ?')
     ibm_db.bind_param(stmt,1,username)
     ibm_db.execute(stmt)
     account = ibm_db.fetch_assoc(stmt)
     if account:
       msg = 'Account already exists!'
     elif not re.match(r'[^{\alpha}]+@[^{\alpha}]+\.[^{\alpha}]+\., email):
       msg = 'Invalid email address!'
     elif not re.match(r'[A-Za-z0-9]+', username):
       msg = 'Username must contain only characters and numbers!'
     elif not username or not password or not email:
       msg = 'Please fill out the form!'
```

```
else:

prep_stmt = ibm_db.prepare(conn,"INSERT INTO users VALUES(?, ?, ?)")

ibm_db.bind_param(prep_stmt, 1, username)

ibm_db.bind_param(prep_stmt, 2, email)

ibm_db.bind_param(prep_stmt, 3, password)

ibm_db.execute(prep_stmt)

msg = 'You have successfully registered!'

elif request.method == 'POST':

msg = 'Please fill out the form!'

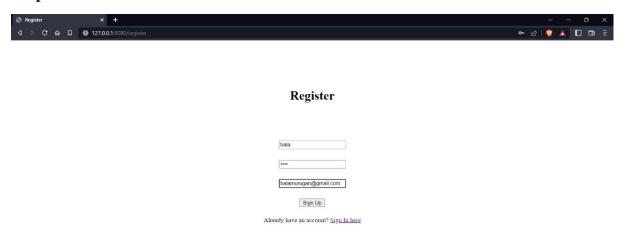
return render_template('register.html', msg = msg)

if __name__ == '__main__':

app.debug = True

app.run(host='0.0.0.0',port=8080)
```

Output:







Login



Don't have an account? Sign Up here



Index

Hi bala!!

Welcome to Our page...

Logout



