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19BCS077

Nalaiya Thiran IBM Assignment – 02

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

The screenshot shows the IBM Db2 on Cloud console interface. The top navigation bar includes 'Load Data', 'Load History', 'Tables', 'Views', 'Indexes', 'Aliases', 'MQTs', 'Sequences', and 'Application objects'. The 'Tables' tab is selected, displaying the table 'WTW30669.USERS'. The table structure is as follows:

USERNAME	EMAIL	ROLLNUMBER	PASSWORD
Abi	abi@gmail.com	18BMC077	Mahe
Anu	anu@gmail.com	18BFT077	anu
Meena	meenu@gmail.com	19BME077	Sindhu
Paramesh	6666@gmail.com	10BMC077	TAM6666
Sibi	sibi@gmail.com	19BCE077	Ajith

The interface also includes a 'Back' button, an 'Export to CSV' button, and a sidebar with various tool icons. The bottom status bar shows the temperature as 25°C Cloudy and the time as 23:20 on 10-10-2022.

2. Performing update & delete queries

The screenshot shows the IBM Db2 on Cloud console interface after performing an update query. The table 'WTW30669.USERS' is displayed, and the 'Abi' user record has been removed. The table structure is as follows:

USERNAME	EMAIL	ROLLNUMBER	PASSWORD
Anu	anu@gmail.com	18BFT077	anu
Meena	meenu@gmail.com	19BME077	Sindhu
Paramesh	paramu@gmail.com	10BMC077	TAM6666
Sibi	sibi@gmail.com	19BCE077	Ajith

The interface also includes a 'Back' button, an 'Export to CSV' button, and a sidebar with various tool icons. The bottom status bar shows the temperature as 25°C Cloudy and the time as 23:28 on 10-10-2022.

```

insert into Users values('Abi','abi@gmail.com','18BMC077','Mahe');

insert into Users values('Sibi','sibi@gmail.com','19BCE077','Ajith');

insert into Users values('Meena','meenu@gmail.com','19BME077','Sindhu');

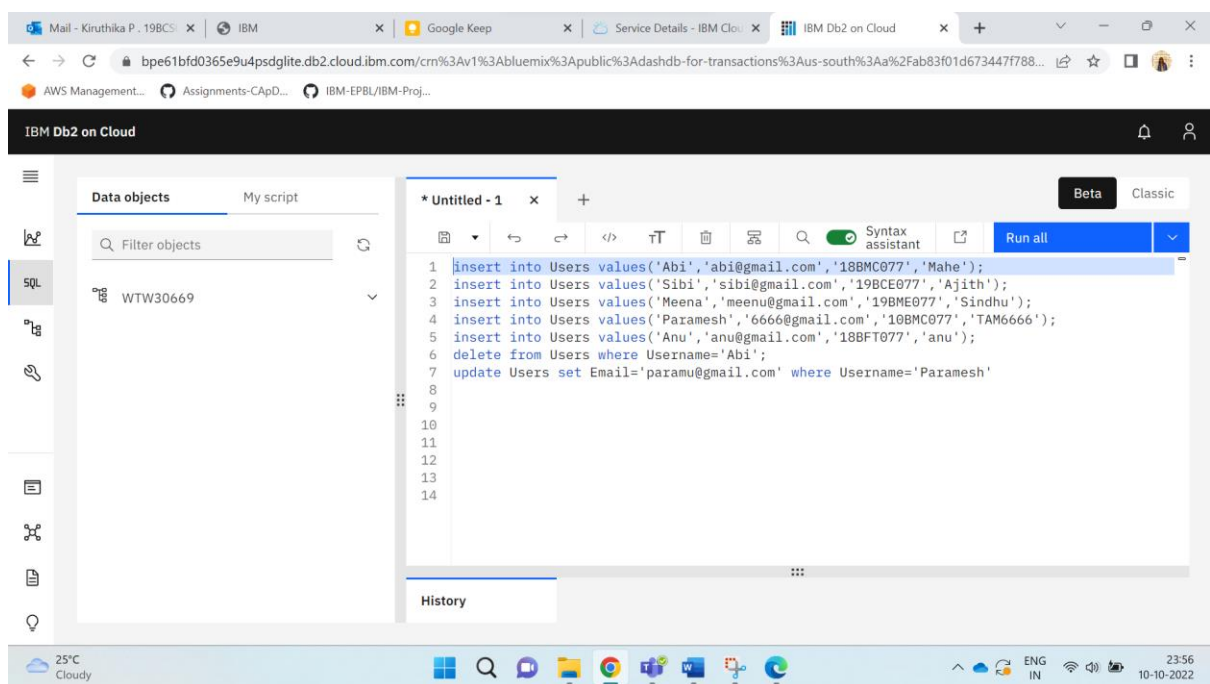
insert into Users values('Paramesh','6666@gmail.com','10BMC077','TAM6666');

insert into Users values('Anu','anu@gmail.com','18BFT077','anu');

delete from Users where Username='Abi';

update Users set Email='paramu@gmail.com' where Username='Paramesh'

```



### 3. Connect python code to db2

```

conn = ibm_db.connect("DATABASE=bludb;"
    "HOSTNAME=b70af05b-76e4-4bca-a1f5-23dbb4c6a74e.clogj3sd0tgtu01qde00.databases.appdomain.cloud;"
    "PORT=32716;"
    "SECURITY=SSL;"
    "SSLServerCertificate=C:/Users/DELL/Downloads/DigiCertGlobalRootCA.crt;"
    "UID=wtw30669;"
    "PWD=Q6BpxIorRdGrfsdD;", "", "")

```

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

## App.py

```
from flask import Flask, render_template, request, redirect, url_for, session
import ibm_db
import re
app = Flask(__name__)
app.secret_key = 'Zenik'
conn = ibm_db.connect("DATABASE=bludb;"
    "HOSTNAME=b70af05b-76e4-4bca-alf5-23dbb4c6a74e.clogj3sd0tgtu0lqde00.databases.appdomain.cloud;"
    "PORT=32716;"
    "SECURITY=SSL;"
    "SSLServerCertificate=C:/Users/DELL/Downloads/DigiCertGlobalRootCA.crt;"
    "UID=wtw30669;"
    "PWD=Q6BpxIorRdGrfsdD;", "", "")
@app.route('/')
@app.route('/home')
def home():
    return render_template('home.html', title='Home', msg=" ")
@app.route('/dashboard')
def dashboard():
    sql = "SELECT * FROM USERS WHERE username =?"
    stmt = ibm_db.prepare(conn, sql)
    ibm_db.bind_param(stmt, 1, session['username'])
    ibm_db.execute(stmt)
    account = ibm_db.fetch_assoc(stmt)
    return render_template('dashboard.html', title='Dashboard',
account=account)
@app.route('/logout')
def logout():
    session.pop('Loggedin', None)
    session.pop('id', None)
    session.pop('username', None)
    return redirect('/')
@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']
            return redirect('/dashboard')
        else:
            msg = "Incorrect login credentials"
    return render_template('login.html', title='Login', 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']
    password1 = request.form['password1']
    rollno = request.form['rollno']
    sql = "SELECT * FROM USERS WHERE username =? or email=? "
    stmt = ibm_db.prepare(conn, sql)
    ibm_db.bind_param(stmt, 1, username)
    ibm_db.bind_param(stmt, 2, email)
    ibm_db.execute(stmt)
    account = ibm_db.fetch_assoc(stmt)
    print(account)
    if account:
        msg = "Account already exists"
    elif password1 != password:
        msg = "re-entered password doesnt match"
    elif not re.match(r'[A-Za-z0-9]+', username):
        msg = "Username should be only alphabets and numbers"
    else:
        sql = "INSERT INTO USERS VALUES (?, ?, ?, ?)"
        stmt = ibm_db.prepare(conn, sql)
        ibm_db.bind_param(stmt, 1, username)
        ibm_db.bind_param(stmt, 2, email)
        ibm_db.bind_param(stmt, 3, rollno)
        ibm_db.bind_param(stmt, 4, password)
        ibm_db.execute(stmt)
        return redirect('/login')
return render_template('register.html', msg=msg, title="Register")
if __name__ == '__main__':
    app.run()

```

## home.html

```

<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
</head>
<body>
{% extends "layout.html" %}
{% block content %}
<p><h3>Welcome to Kiruthika's Assignment</h3></p>
<a href="/login">Login</a><br>
<a href="/register">Register</a>
{% endblock content %}
</body>
</html>

```

## Register.html

```

<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
</head>
<body>
<a href="/login">Login Instead</a><br>

```

```

<form method="post">
  <label for="username">username</label>
  <input required type="text" name="username"
    placeholder="USERNAME"
    value="{{ request.form['username'] }}" />
  <br>
  <label for="password">password</label>
  <input type="password" name="password"
    placeholder="PASSWORD"
    value="{{ request.form['password'] }}" />
  <br>
  <label for="password1">re enter password</label>
  <input required type="password" name="password1"
    placeholder="RE-ENTER PASSWORD"
    value="{{ request.form['password1'] }}" />#{{#deal with this
later#}}{#
  <br>
  <label for="email">email</label>
  <input required type="email" name="email"
    placeholder="EMAIL"
    value="{{ request.form['email'] }}" />
  <br>
  <label for="rollno">roll no</label>
  <input required type="text" name="rollno"
    placeholder="ROLL NUMBER"
    value="{{ request.form['rollno'] }}" />
  <br>
  <button type="submit">Submit</button>
</form>
</body>
</html>

```

## Dashboard.html

```

<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
</head>
<body>
  {% extends "layout.html" %}
  {% block content %}
    <section class="vh-100" style="background-color: #eee;"> <div
class="container h-100"> <div class="card text-black" style="border-
radius: 25px;"> <div class="card-body p-md-5"> <div class="row
d-flex justify-content-center align-items-center h-100"> <p
class="text-center h1 fw-bold mb-5 mx-1 mx-md-4 mt-4">DashBoard</p>
{% if session.username %}
      {#<div class="divider d-flex align-items-center my-
4">#}
      <p class="text-center h3 fw-bold mb-5 mx-1 mx-md-4 mt-
4">Welcome {{ session.username }}</p><br>{#
      <h3>Welcome {{ session.username }}</h3><br>#}
      Name : {{ account['USERNAME'] }}<br>
      Email : {{ account['EMAIL'] }}<br>
      <p class="small fw-bold mt-2 pt-1 mb-0"><a href="/logout"
style="color: black">Log out</a></p> {% else %}
      You are not logged in.
      <a href="/login">login</a>.
    {% endif %}
  {% endblock %}

```

```

        {#</div>#}
    </div>    </div>    </div>    </div>
</section>{#<h1>Dashboard</h1>    {% if session.username %}
    Welcome {{ session.username }}    Name : {{ account['USERNAME']
}}<br>    Email : {{ account['EMAIL'] }}<br>    Roll No. : {{
account['rollno.'] }}<br>    <a href="/logout">logout</a>.
    {% else %}
    You are not logged in.
    <a href="/login">login</a>.
    {% endif %}#}
{% endblock content %}
</body>
</html>

```

## Login.html

```

<!DOCTYPE html>
<html lang="en">
<head>
    <meta charset="UTF-8">
</head>
<body>
<form method="post">
    <label for="username">username</label>
    <input type="text" name="username"
        placeholder="USERNAME"
        value="{{ request.form['username'] }}" />
    <br>
    <label for="password">password</label>
    <input type="password" name="password"
        placeholder="PASSWORD"
        value="{{ request.form['password'] }}" />
    <br>
    <button type="submit">Submit</button>
</form>

</body>
</html>

```

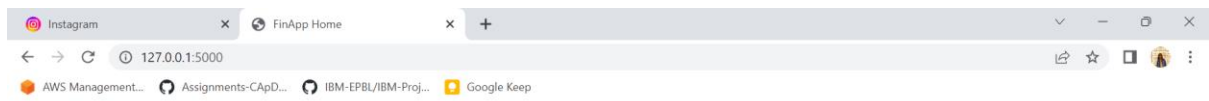
## Layout.html

```

<!DOCTYPE html>
<html lang="en"><head>
    <meta charset="utf-8">
    <meta name="viewport" content="width=device-width, initial-scale=1">
    <title>FinApp {{ title }}</title>
    <link
href="https://cdn.jsdelivrivr.net/npm/bootstrap@5.2.1/dist/css/bootstrap.min.c
ss" rel="stylesheet" integrity="sha384-
iYQeCzEYFbKjA/T2uDLTpKwGzCiq6soy8tYaI1GyVh/UjpbCx/TYkiZhlZB6+fzT"
crossorigin="anonymous"></head>
<body>{% block content %}
{% endblock content %}
<script
src="https://cdn.jsdelivrivr.net/npm/bootstrap@5.2.1/dist/js/bootstrap.bundle.
min.js" integrity="sha384-
u10knCvxWvY5kfmNBILK2hRnQC3Pr17a+RTT6rIHI7NnikvbZlHgTPOOmMi466C8"
crossorigin="anonymous"></script>
</body></html>

```

Output:



Welcome to Kiruthika's Assignment

[Login](#)  
[Register](#)

