# Assignment -2 User Table Creation

Project Date	OCTOBER 2022
Team ID	PNT2022TMID08097
Project Name	Containment Zone Alerting Application

- 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

Solution:

### **Table Creation:**

#### Base.html:

```
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <meta http-equiv="X-UA-Compatible"content="IE=edge">
  <meta name="viewport" content="width=device-width, initial-</pre>
scale=I.0">
  <title>{% block title %H% endblock %}</title>
  <style>
    @import
url('https://fonts.googleapis.com/css2?family=Michroma&di splay=swap');
  link rel="stylesheet" href="{{ url_for('static', filename='css/style.css')}
}}"/>
</head>
<body>
  <!-- Nav Bar -->
  <nav>
    <div>
      <h3>User Registration Assignment</h3>
    </div>
  </nav>
  {% with messages = get_flashed_messages(with_categories=true) %}
    {%ifmessages %}
```

```
{% for category, message in messages %}
       {% if category == "error" %}
         <div class="flash-div">
           <h4>{{ message }}</h4>
         </div>
       {% else %}
         <div class="flash-div success">
           <h4>{{ message }}</h4>
         </div>
       {% endif %}
     {% endfor %}
   {% endif %}
 {% endwith %}
  <div class=" main-div">
   {% block main %}
   {% endblock %}
 </div>
</body>
</html>
Dashboard.html:
{% extends 'base.html' %}
{% block title %}
  Dashboard
{% endblock %}
{% block main %}
 <divclass="form-main-div">
   <div class="table-div">
     <h2>Your Details</h2>
     Welcome
       Email
        {{ account['EMAIL'] }}
       UserName
        {{ account['USERNAME'] }}
       Register Number
```

```
{{account['NUMBER']}}
       Password
         {{ account['PASSWORD'] }}
       </div>
  </div>
{% endblock %}
Login.html:
{% extends 'base.html' %}
{% block title %}
  Login
{% endblock %}
{% block main %}
  <divclass="form-main-div">
   <div class="form-div">
     <h3>Login</h3>
     <form method="POST">
       <label>Email</label> <br>
       <input class="inputs" type="text" placeholder="Enter your
email" name="email"/>
       <label>Password</label> <br>
       <input class="inputs" type="password" placeholder="Enter your
password" name="password"/>
       <button class="submit">Login</button>
       <div>
         <a href="/register">Don't have an account? Create one</a>
       </div>
     </form>
   </div>
  </div>
{% endblock %}
```

# Register.html:

{% extends 'base.html' %}

```
{% block title %}
  Signup
{% endblock %}
{% block main %}
  <div class="form-main-div">
    <div class="form-div">
      <h3>Enter all the details</h3>
      <form method="POST">
        <label>Email</label> <br>
        <input class="inputs" type="text" placeholder="Enter your email"
name="email"/>
        <label>Username</label> <br>
        <input class="inputs" type="text" placeholder="Enter your
username" name="username"/>
        <label>Register Number
        <input class="inputs" type="number" placeholder="Enter your
email" name="number"/>
        <label>Password</label> <br>
        <input class="inputs" type="password" placeholder="Enter your</pre>
password" name="password"/>
        <input class="submit" type="submit"/>
        <div>
          <a href="/">Already have an account? Login</a>
        </div>
      </form>
    </div>
  </div>
{% endblock %}
```

### \_init\_.py:

from flask import Flask

```
def create_app():
    app = Flask(_name_)
```

```
app.config['SECRET_KEY'] = "PHqtYfAN2v"
  # registering the blue print witg the app
  from .views import blue print
  app.register_blueprint(blue_print, url_prefix="/")
  return app
Views.py:
from flask import Blueprint, redirect, render template, request, flash
import ibm_db
import re # regular expression
blue_print = Blueprint("blue_print", "_name_")
conn = ibm_db.connect(' DATABASE=bludb; HOSTNAME=54a2f15b-Sc0f-46df-8954-
7e38e612c2bd.clogj3sd0tgtu01qde00.databases.appdomai n.cloud;PORT=32733;SECU RITY=SSL;SSLS
erverCertificate=DigiCertGlobal RootCA.crt; UID=tyb34892; PWD=QqSGdhZKREQI 1/2rc', ", ")
@blue print.route('/', methods = ['GET', 'POST'])
def home():
  if request.method == 'POST':
    # getting the data entered by the user
    email = request.form.get('email')
    password = request.form.get('password')
    # validating the inputs
    if len(email) < 10:
      flash("Email must be atleast 10 characters long", category="error")
```

flash("Password must be atleast 6 characters long", category="error")

elif len(password) < 6:

```
else:
    # checking whether the user with the email exists in the database
    sql_check_query="SELECT*FROMuserWHEREemail=?"
    stmt = ibm_db.prepare(conn, sql_check_query)
    ibm_db.bind_param(stmt, 1,email)
    ibm_db.execute(stmt)
    account=ibm db.fetch assoc(stmt)
    print(account)
    if account:
      # email id exists
      # checking if the password is correct
      ifnotaccount['PASSWORD'] == password:
        flash('Invalid password', category='error')
      else:
        # user entered the correct password
        # redirecting the user to the dashboard
        return render_template('dashboard.html', account=account)
    else:
      # email id does not exist in the database
      flash('Email invalid... Try Again', category='error')
  return render template('login.html')
return render_template('login.html')
```

```
@blue print.route('/register', methods = ['GET', 'POST'])
def register():
  if request.method == 'POST':
    # getting the data entered by the user
    username = request.form.get('username')
    email = request.form.get('email')
    number = request.form.get('number')
    password = request.form.get('password')
    # validating the data entered by the user
    if(len(number) < 12):
      flash("Reg. No must be 12 numbers long", category="error")
    elif not re.match(r'"[a-zA-Z]*$', username):
      flash("Use only alphabets in username", category="error")
    elif len(username) < 6:
      flash("Username must be atleast 6 characters long", category="error")
    elif len(password) < 6:
      flash("Password must be atleast 6 characters long", category="error")
    elif len(email) < 10:
      flash("Email must be atleast 10 characters long", category="error")
    else:
      # checking whether the user table contains an entry with the email already
      sql_check_query="SELECT*FROMuserWHEREemail=?"
      stmt = ibm db.prepare(conn, sql check query)
      ibm db.bind param(stmt, 1,email)
      ibm_db.execute(stmt)
```

```
account = ibm_db.fetch_assoc(stmt)
      # email id does not exist in the database
      if not account:
        # inserting the data into the database
        sql insert query = "INSERT INTO user (username, email, password, number) VALUES (?,?,
?, ?)"
        stmt = ibm_db.prepare(conn, sql_insert_query)
         ibm_db.bind_param(stmt, 1, username)
         ibm_db.bind_param(stmt, 2, email)
         ibm_db.bind_param(stmt, 3, password)
         ibm_db.bind_param(stmt, 4, str(number))
         ibm_db.execute(stmt)
        # user data has been inserted into the database
        # showing login page to the user
        flash('User created successfully! Please Login', category='success')
         return redirect('/')
      else:
        flash('Email id already exists! Try another one', category='error')
    return render template('register.html')
  return render template('register.html')
@blue_print.route('/dashboard')
def dashboard():
  return render_template('dashboard.html')
```

# App.py:

```
from registration import create_app
```

```
app = create_app()

if name_ " main_"

app.run(debug=True)
```

# **Output:**















