

### ASSIGNMENT-3

**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,  
                    password varchar(20) not null)
```

```
INSERT INTO user(email, username, password)  
VALUES('kec@gmail.com',kec,'12345')
```

**2. Perform UPDATE,DELETE Queries with user table**

```
UPDATE user SET username='ganesan' WHERE  
email=kec@gmail.com'  
DELETE FROM user WHERE username = 'ram'
```

**3. Connect python code to db2.**

```
conn = ibm_db.connect("DATABASE=bludb;HOSTNAME=8e359033-a1c9-4643-82ef-  
8ac06f5107eb.bs2io90l08kqb1od8lcg.databases.appdomain.cloud;PORT=30120;Security=SSL;SSLServerCert  
ificate=DigiCertGlobalRootCA.crt;UID=yyz96800;PWD=auolSxhi3dEXD1nP;","")
```

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 = 'a'
```

```
conn = ibm_db.connect("DATABASE=bludb;HOSTNAME=8e359033-a1c9-4643-82ef-8ac06f5107eb.bs2io90l08kqb1od8lcg.databases.appdomain.cloud;PORT=30120;Security=SSL;SSLServerCertificate=DigiCertGlobalRootCA.crt;UID=yyz96800;PWD=auoISxhi3dEXD1nP;","")
```

```
@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'^@]+@[^@]+\.[^@]+', 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(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.debug = True

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

## INDEX.HTML

```
<html>

    <head>

        <meta charset="UTF-8">

        <title> Index </title>

        <link rel="stylesheet" href="{{ url_for('static', filename='style.css')
    }}">

    </head>

    <body></br></br></br></br></br>
```

```
<div align="center">

<div align="center" class="border">

    <div class="header">

        <h1 class="word">Index</h1>

    </div></br></br></br>

    <h1 class="bottom">

        Hi {{session.username}}!!</br></br> Welcome to
the index page...

    </h1></br></br></br>

    <a href="{{ url_for('logout') }}" class="btn">Logout</a>

</div>

</div>

</body>

</html>
```

## REGISTER.HTML

```
<html>

    <head>

        <meta charset="UTF-8">

        <title> Register </title>

        <link rel="stylesheet" href="{{ url_for('static', filename='style.css')
}}">
```

```

</head>

<body></br></br></br></br>

    <div align="center">

        <div align="center" class="border">

            <div class="header">

                <h1 class="word">Register</h1>

            </div></br></br></br>

            <h2 class="word">

                <form action="{{ url_for('register') }}" method="post">

                    <div class="msg">{{ msg }}</div>

                        <input id="username" name="username"
type="text" placeholder="Enter Your Username" class="textbox"/></br></br>

                        <input id="password" name="password"
type="password" placeholder="Enter Your Password"
class="textbox"/></br></br>

                        <input id="email" name="email" type="text"
placeholder="Enter Your Email ID" class="textbox"/></br></br>

                        <input type="submit" class="btn" value="Sign
Up"></br>

                    </form>

                </h2>

                <p class="bottom">Already have an account? <a
class="bottom" href="{{url_for('login')}}"> Sign In here</a></p>

            </div>

```

```
        </div>

    </body>

</html>
```

## LOGIN.HTML

<!-- Store this code in 'login.html' file inside the 'templates' folder -->

```
<html>

    <head>

        <meta charset="UTF-8">

        <title> Login </title>

        <link rel="stylesheet" href="{{ url_for('static', filename='style.css')
    }}">

    </head>

    <body></br></br></br></br></br>

        <div align="center">

            <div align="center" class="border">

                <div class="header">

                    <h1 class="word">Login</h1>

                </div></br></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></br>

<input id="password" name="password"
type="password" placeholder="Enter Your Password"
class="textbox"/></br></br></br>

<input type="submit" class="btn" value="Sign
In"></br></br>

</form>

</h2>

<p class="bottom">Don't have an account? <a class="bottom"
href="{{url_for('register')}}"> Sign Up here</a></p>

</div>

</div>

</body>

</html>
```

## STYLE.CSS

/\* Store this code in 'style.css' file inside the 'static' folder\*/

```
.header{

padding: 0px 120px;

width: 150px;

height: 50px;

background-color: #4a7acc;
```

```
border-radius: 20px;
```

```
padding-bottom: 5px;
```

```
}
```

```
.border{
```

```
padding: 80px 50px;
```

```
width: 400px;
```

```
height: 450px;
```

```
border: 1px solid #58238e;
```

```
border-radius: 50px;
```

```
background-color: #6683ed;
```

```
}
```

```
.btn {
```

```
padding: 10px 40px;
```

```
background-color: #10161c;
```

```
color: #FFFFFF;
```

```
font-style: oblique;
```

```
font-weight: bold;
```

```
border-radius: 10px;
```

```
padding-bottom: 5px;
```

```
}
```

```
.textbox{  
    padding: 10px 40px;  
    background-color: #5db4d4;  
    text-color: #78dbe4;  
    border-radius: 10px;  
    height: 70px;  
    width: 400px;  
    font-weight: bold;  
    font-size: 15px;  
}
```

```
::placeholder {  
    color: #FFFFFF;  
    opacity: 1;  
    font-style: oblique;  
    font-weight: bold;  
}
```

```
.word{  
    color: #FFFFFF;  
    font-style: oblique;  
    font-weight: bold;  
}
```

```
.bottom{  
    color: #d5dee2;  
    font-style: oblique;  
    font-weight: bold;  
}  
  
body{  
    background-color: rgba(189, 215, 162, 0.2);  
}
```

## SCREENSHOTS/OUTPUT





