

Assignment -2
Web Programming

Assignment Date	19 September 2022
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Maximum Marks	2 Marks

Question :

1. Create a Flask App
2. Add the Home page, About Page
3. Add the Bootstrap
4. Add the Sign in page and add the Signup Page with database connectivity
5. Use IBM Db2 as Database

Solution :

```
# app.py
from flask import Flask, render_template, request, flash, redirect, url_for
import sqlite3 as sql

import ibm_db
con = ibm_db.connect("DATABASE=bludb;HOSTNAME=55fbc997-9266-4331-afd3-888b05e734c0.bs2io90l08kqb1od8lcg.databases.appdomain.cloud;PORT=31929;SECURITY=SSL;SSLServerCertificate=DigiCertGlobalRootCA.crt;UID=qlk23202;PWD=VRhF1Qo0AHQqWx6f", '', '')
print(con)
print("connection successful...")

app = Flask(__name__)

@app.route('/')
def home():
    return render_template('index.html')

@app.route('/add_record')
def add_record():
    return render_template('add_record.html')

@app.route("/addData", methods=["POST", "GET"])
def addData():
    if request.method == 'POST':
        try:
            name=request.form['name']
            address=request.form['address']
            contact=request.form['contact']
            mail=request.form['mail']
            insert_sql="INSERT INTO users values(?,?,?,?)"
            prep_stmt=ibm_db.prepare(con,insert_sql)
            ibm_db.bind_param(prep_stmt,1,name)
            ibm_db.bind_param(prep_stmt,2,address)
            ibm_db.bind_param(prep_stmt,3,contact)
            ibm_db.bind_param(prep_stmt,4,mail)
            ibm_db.execute(prep_stmt)
            print(name+address+contact+mail)

            flash("Record Added Successfully","success")
        except:
            flash("Error in Insert Operation","danger")
        finally:
            return redirect(url_for("home"))

@app.route('/view_record')
def view_record():
    users=[]
    sql="select * from users"
    stmt=ibm_db.exec_immediate(con,sql)
    dictionary=ibm_db.fetch_both(stmt)
    while dictionary != False:
        users.append(dictionary)
        dictionary=ibm_db.fetch_both(stmt)
```

```

        return render_template("view_record.html",data=users)

@app.route('/update_record/<string:id>',methods=["POST","GET"])
def update_record(id):
    insert_sql="SELECT * FROM users where contact=?"
    prep_stmt=ibm_db.prepare(con,insert_sql)
    ibm_db.bind_param(prepare_stmt,1,id)
    data=ibm_db.fetch_row(prepare_stmt)

    if request.method=='POST':
        try:
            name=request.form['name']
            address=request.form['address']
            contact=request.form['contact']
            mail=request.form['mail']

            insert_sql="UPDATE users SET name=?,address=?,mail=? where contact=?"
            prep_stmt=ibm_db.prepare(con,insert_sql)
            ibm_db.bind_param(prepare_stmt,1,name)
            ibm_db.bind_param(prepare_stmt,2,address)
            ibm_db.bind_param(prepare_stmt,3,mail)
            ibm_db.bind_param(prepare_stmt,4,contact)
            ibm_db.execute(prepare_stmt)

            flash("Update Successfully","success")
        except:
            flash("Error in Update Operation","danger")
        finally:
            return redirect(url_for("home"))
    print(data)
    return render_template('update_record.html',data=data)

@app.route('/delete_record/<string:id>')
def delete_record(id):
    try:
        insert_sql="DELETE FROM users where contact=?"
        prep_stmt=ibm_db.prepare(con,insert_sql)
        ibm_db.bind_param(prepare_stmt,1,id)
        ibm_db.execute(prepare_stmt)

        flash("Record Deleted Successfully","success")
    except:
        flash("Record Delete Failed","danger")
    finally:
        return redirect(url_for("home"))

if __name__ == '__main__':
    app.run(debug=True)

```

```

<!-- add_record.html -->
<html>
<head>
    <title>Registration</title>
    <link rel="stylesheet"
href="{{url_for('static',filename='css/bootstrap.min.css')}}">
    <link rel="stylesheet"
href="{{url_for('static',filename='myfont/css/all.min.css')}}">
    <script src="{{url_for('static',filename='js/jquery.min.js')}}"></script>
</head>
<body>
    <div class="container">
        <div class="col-md-offset-3 col-md-5">
            <form method="POST" action="/addData">
                <h2 class="page-header text-primary text-center">User Registration</h2>
                <div class="form-group">
                    <label>Name</label>
                    <input type="text" class="form-control" name="name" required>
                </div>
                <div class="form-group">
                    <label>Address</label>
                    <textarea class="form-control" name="address" required></textarea>
                </div>
                <div class="form-group">
                    <label>Contact</label>
                    <input type="text" class="form-control" name="contact" required>
                </div>
                <div class="form-group">
                    <label>Mail</label>
                    <input type="email" class="form-control" name="mail" required>
                </div>
                <br>
                <div class="form-group">
                    <input type="submit" class="btn btn-primary btn-block"
value="Submit" style="padding: 10px;">
                </div>
            </form>
        </div>
    </div>
</body>
</html>
<script>
    $(document).ready(function(){
        $("form").attr("autocomplete","off");
    });
</script>

```

```

<!-- index.html -->
<!DOCTYPE html>
<html lang="en">
<head>

```

```

<meta charset="UTF-8">
<title>Index</title>
<link rel="stylesheet"
href="{{url_for('static',filename='css/bootstrap.min.css')}}">
<link rel="stylesheet"
href="{{url_for('static',filename='myfont/css/all.min.css')}}">
<script src="{{url_for('static',filename='js/jquery.min.js')}}"></script>
</head>
<body>
<div class="container">
<div class="col-md-offset-1 col-md-10">
<h2 class="page-header text-info text-center">News Tracker Application</h2>
<div class="col-md-offset-3 col-md-5">
{% with messages = get_flashed_messages(with_categories=true) %}
{% if messages %}
{% for category,message in messages %}
<div class="alert alert-{{category}}">{{message}}</div>
{% endfor %}
{% endif %}
{% endwith %}
<br>
<center><a href="{{url_for('add_record')}}" class="btn btn-
primary">Add User</a></center><br>
<center><a href="{{url_for('view_record')}}" class="btn btn-
info">View User</a></center>
</div>
</div>
</div>
</body>
</html>
<script>
$(document).ready(function(){
    $(".alert").close()
});
</script>

```

```

<!-- update_record.html -->

```

```

<html>
<head>
<title>Update Record</title>
<link rel="stylesheet"
href="{{url_for('static',filename='css/bootstrap.min.css')}}">
<link rel="stylesheet"
href="{{url_for('static',filename='myfont/css/all.min.css')}}">
<script src="{{url_for('static',filename='js/jquery.min.js')}}"></script>
</head>
<body>
<div class="container">
<div class="row">

```

```

<div class="col-md-offset-3 col-md-5">
  <form method="POST" action="">
    <h2 class="page-header text-primary text-center">Update Record</h2>
    <div class="form-group">
      <label>Name</label>
      <input type="text" class="form-control" name="name"
value="{{data[0]}}">
    </div>
    <div class="form-group">
      <label>Address</label>
      <textarea class="form-control"
name="address">{{data[1]}}</textarea>
    </div>
    <div class="form-group">
      <label>Contact</label>
      <input type="text" class="form-control" name="contact"
value="{{data[2]}}">
    </div>
    <div class="form-group">
      <label>Mail</label>
      <input type="text" class="form-control" name="mail"
value="{{data[3]}}">
    </div>
    <br>
    <div class="form-group">
      <input type="submit" class="btn btn-primary btn-block"
value="Update" style="padding: 10px;">
    </div>
  </form>
</div>
</div>
</body>
</html>
<script>
  $("form").attr("autocomplete","off");
</script>

```

```

<!-- view_record.html -->
<!DOCTYPE html>
<html lang="en">
<head>
  <meta charset="UTF-8">
  <title>View Record</title>
  <link rel="stylesheet"
href="{{url_for('static',filename='css/bootstrap.min.css')}}">
  <link rel="stylesheet"
href="{{url_for('static',filename='myfont/css/all.min.css')}}">
</head>
<body>

```

```

<div class="container">
  <div class="col-md-offset-1 col-md-10">
    <h2 class="page-header text-primary text-center">List of users</h2>
    <table class="table table-bordered">
      <thead>
        <tr>
          <th>S.No</th>
          <th>Name</th>
          <th>Address</th>
          <th>Contact</th>
          <th>E-Mail</th>
          <th>Update</th>
          <th>Delete</th>
        </tr>
      </thead>
      <tbody>
        {% for res in data %}
          {% set i=loop.index %}
          <tr>
            <td>{{i}}</td>
            <td>{{res[0]}}</td>
            <td>{{res[1]}}</td>
            <td>{{res[2]}}</td>
            <td>{{res[3]}}</td>
            <td style="text-align:center"><a
href="{{url_for('update_record',id=res[2])}}" class="btn btn-primary">Update</a></td>
            <td style="text-align:center"><a
href="{{url_for('delete_record',id=res[2])}}" class="btn btn-danger">Delete</a></td>
          </tr>
        {% endfor %}
      </tbody>
    </table>
    <div>
      <a href="{{url_for('home')}}" class="btn btn-primary pull-right"> <-
Back to Home</a>
    </div>
  </div>
</div>
</body>
</html>

```

Screenshot 1:

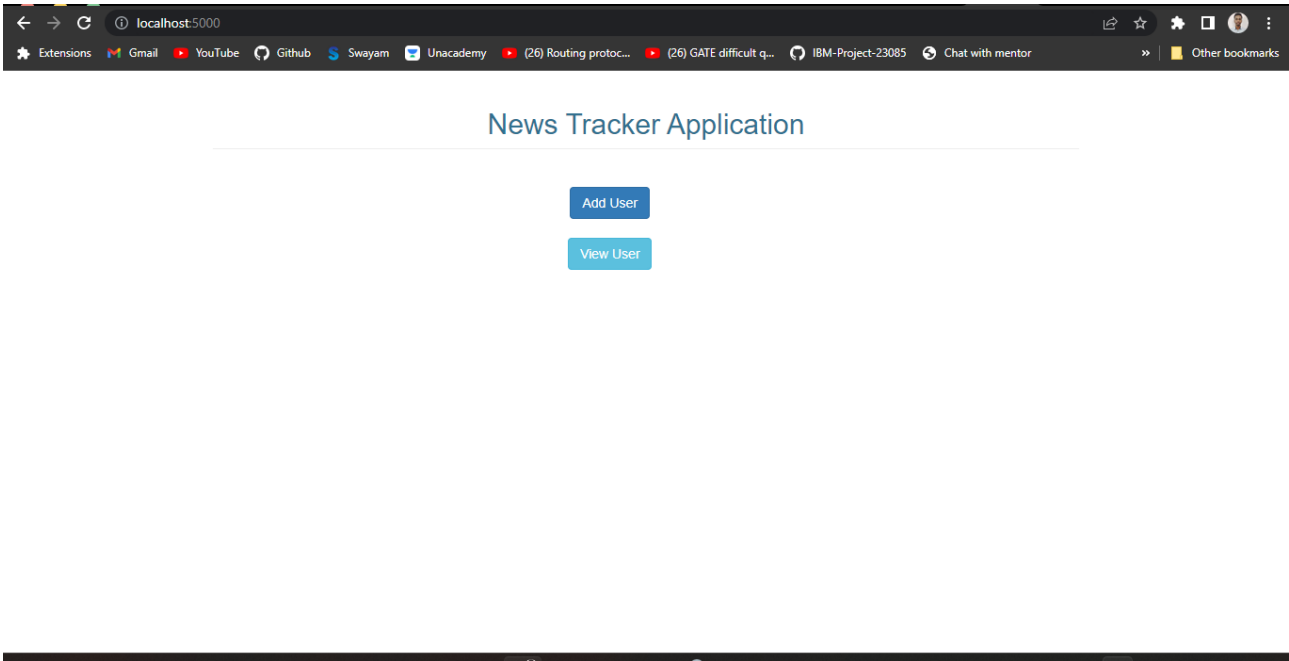


Fig: Home page

Screenshot 2:

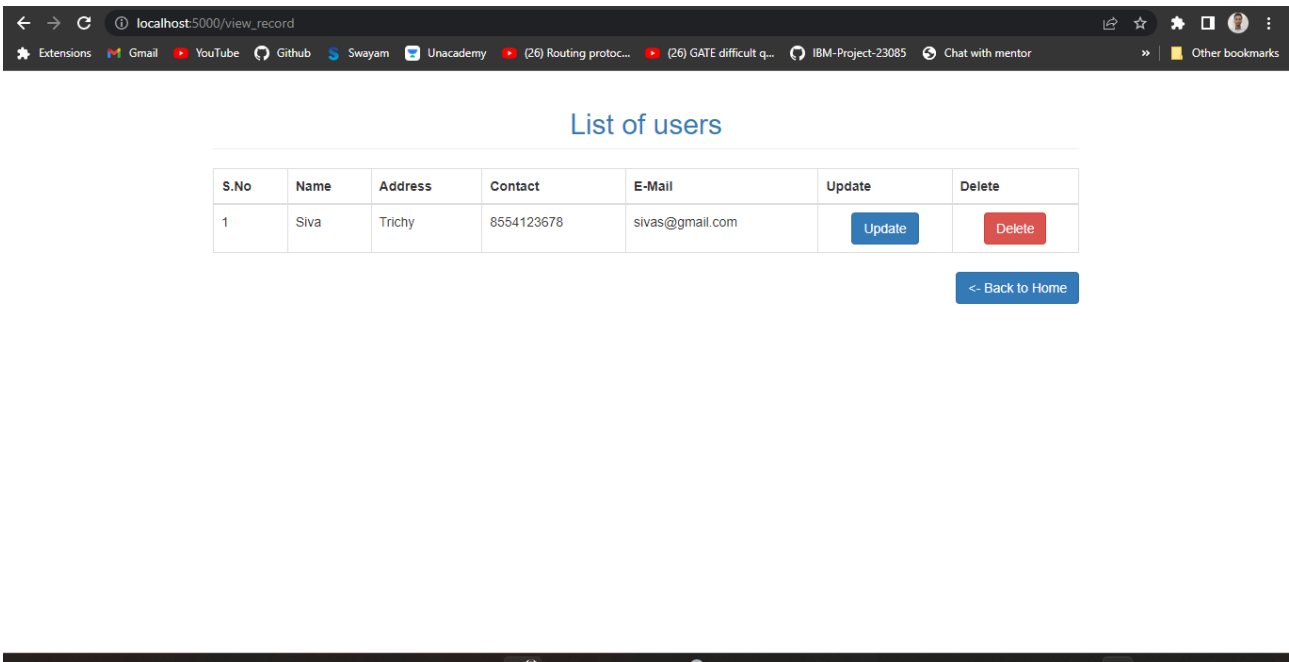


Fig: View users

Screenshot 3:

localhost:5000/add_record

User Registration

Name
Siva subramanian

Address
Trichy

Contact
3365412874

Mail
siva@gmail.com

Submit

Fig: Registration page

Screenshot 4:

localhost:5000/view_record

List of users

S.No	Name	Address	Contact	E-Mail	Update	Delete
1	siva subramanian	Trichy	8554123678	sivasubra@gmail.com	Update	Delete

<- Back to Home

Screenshot 5:

localhost:5000/add_record

User Registration

Name

Address

Contact

Mail

[Submit](#)

Fig: Registration

Screenshot 6:

localhost:5000/view_record

List of users

S.No	Name	Address	Contact	E-Mail	Update	Delete
1	siva subramanian	Trichy	8554123678	sivasubra@gmail.com	Update	Delete
2	rohith	Trichy	5447985122	rohiths@gmail.com	Update	Delete

[<- Back to Home](#)

Screenshot 7:

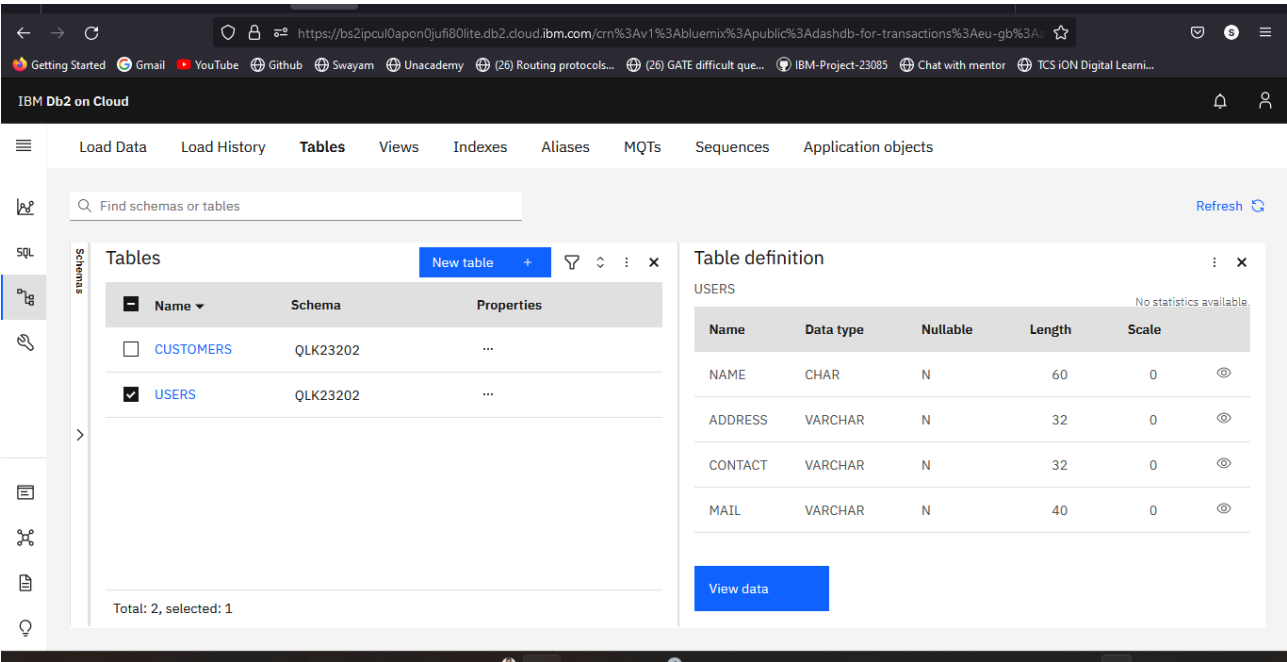


Fig: IBM Db2 Structure

Screenshot 8:

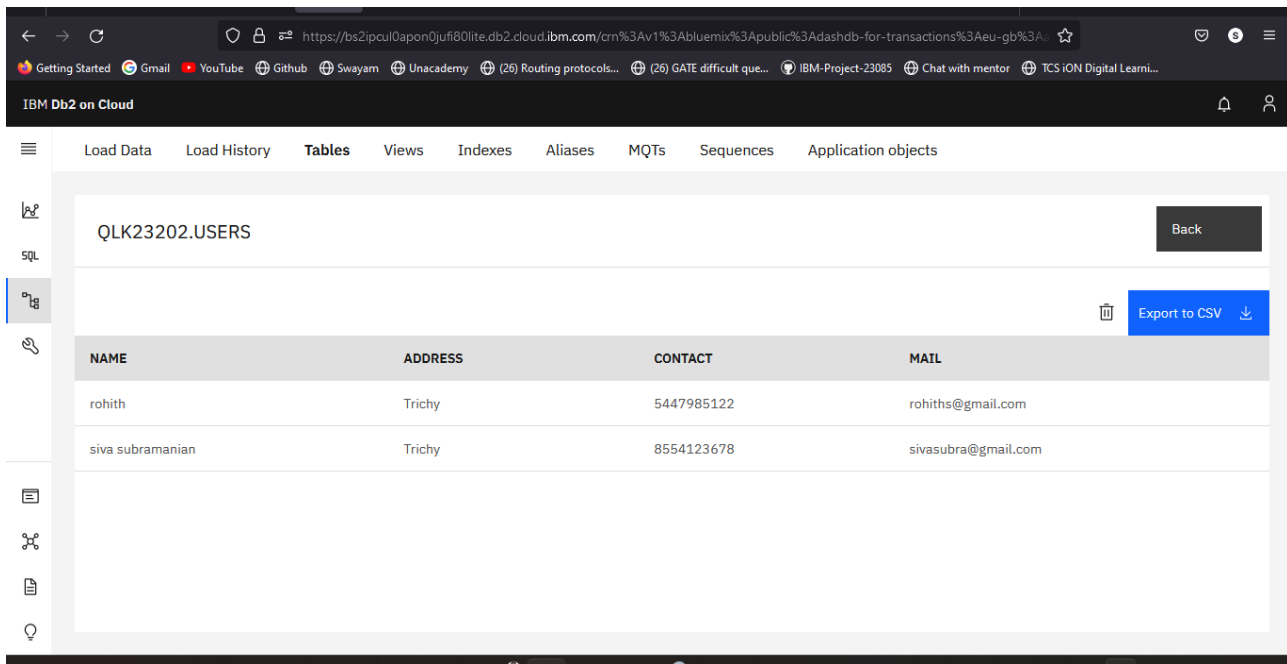


Fig: IBM Db2 database