

# CSE 6332-002 Cloud Computing & Big Data

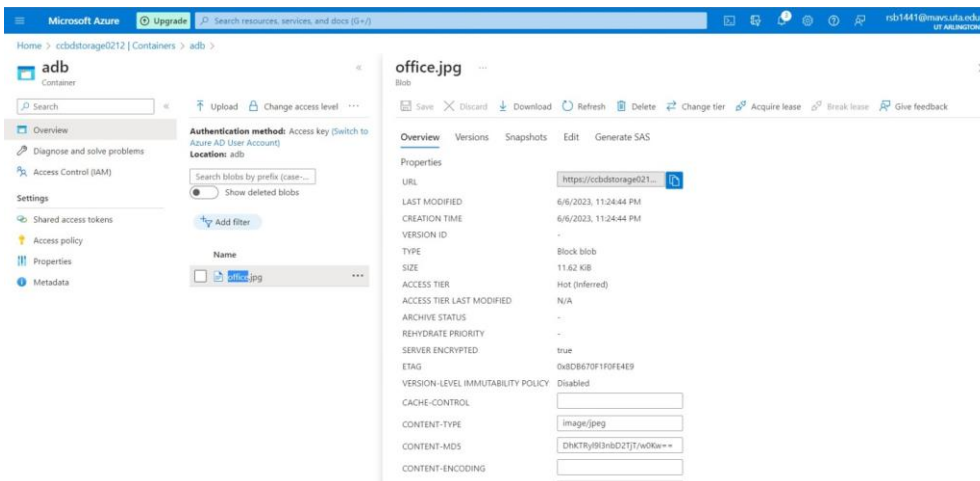
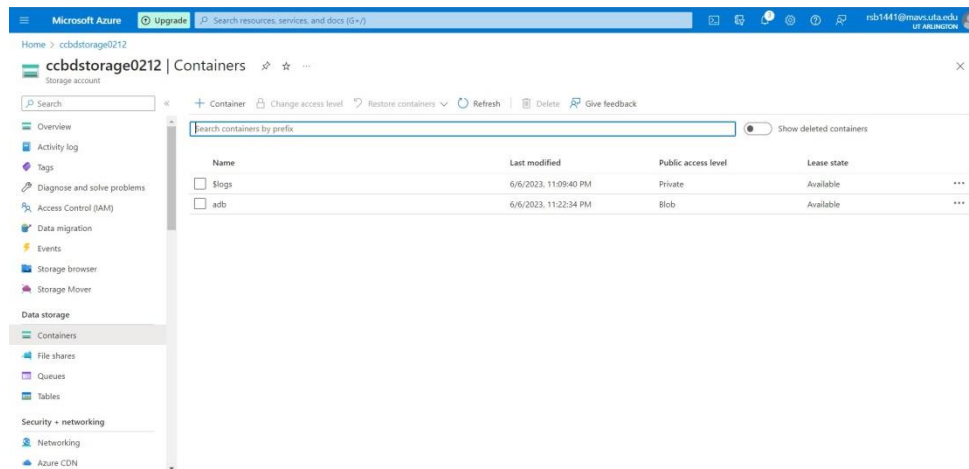
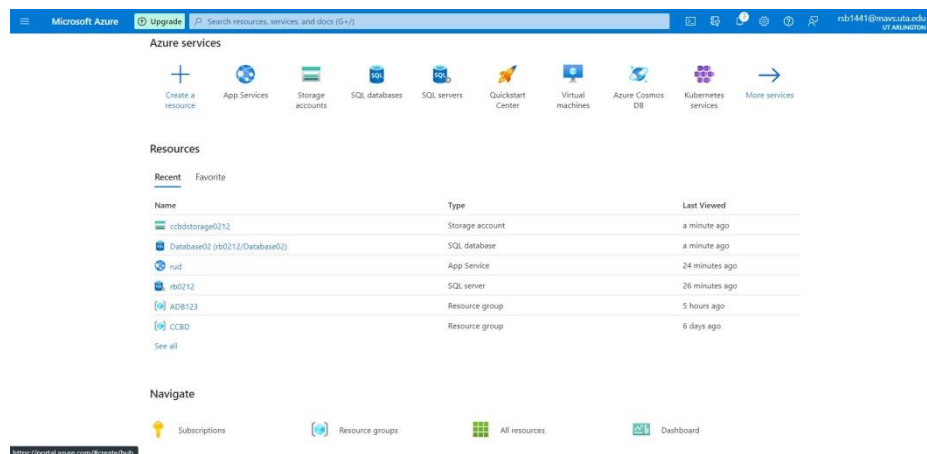
Name – Rudviq Sunil Bhavsar

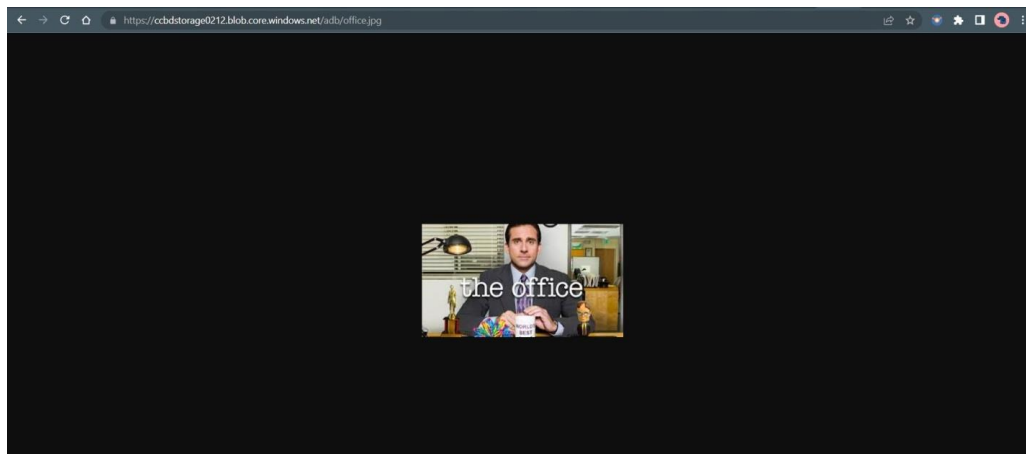
UTA ID – 1002091441

Email – rsb1441@mavs.uta.edu

## Assignment 1

### Part 1:





Part 2 & Part 3:

Snapshots-



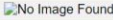

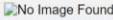



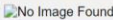

1) Home Page

**Cloud Computing and Big Data**  
**Assignment 1**  
**Rudviq Bhavsar [1002091441]**



[Click here to see all the people's details](#)  
[Search any individual with name](#)  
[Update a Keyword using individual's name](#)  
[Delete a record using individual's name](#)  
[Check records based on Salary range](#)  
[Update Salary using individual's name](#)  
[Add a Image using individual's name](#)

2) Records of all users


Rudviq Bhavsar [1002091441]								
<a href="#">Main Page</a>								
Name	State	Salary	Grade	Room	Telephone Number	Image Name	Image	Keywords
Dhruvi	TX	99099	100	550	1000010	dhru.jpg		Dhruvi is cool
Chuck	TX	1000	98	420	None	chuck.jpg		Chuck is amazing
Meena	TX	125000	99	None	None	None		Meena is outa here
Dave	NN	20	40	525	0	dave.jpg		Who is this
Tuan	CA	None	80	-1	None	None		Tuan is gone
Tavo	CA	220200	None	None	None	tavo.jpg		Tavo works very hard
Nora	TX	-2	80	520	808	None		None
Sue	NN	None	79	0	2723785	upset.jpg		Sue isn't Susan
Susan	OK	255000	84	101	911	None		Susan is very smart
Darwin	TN	25	100	None	1009	dar.jpg		Darwin is very creative

### 3) Searching the user

Rudviq Bhavsar [1002091441]
[Main Page](#)

Name





Rudviq Bhavsar [1002091441]
[Main Page](#)

Dhruvi


#### 4) Update the keyword

**Rudviq Bhavsar [1002091441]**  
[Home Page](#)  
Input name   
New keyword

**Rudviq Bhavsar [1002091441]**  
[Main Page](#)

Name	State	Salary	Grade	Room	Telephone Number	Image Name	Image	Keywords
Dhruvi	TX	99099	100	550	1000010	dhru.jpg		not so nice anymore
Chuck	TX	1000	98	420	None	chuck.jpg		Chuck is amazing
Meena	TX	125000	99	None	None	None		Meena is outa here
Dave	NN	20	40	525	0	dave.jpg		Who is this


#### 5) Display Salary

**Rudviq Bhavsar [1002091441]**  
[Home Page](#)  
Salary range


Rudviq Bhavsar [1002091441]

[Main Page](#)

Dave



Nora



6) Update the salary

Rudviq Bhavsar [1002091441]

[Home Page](#)

Input name

dhruvi



New Salary

5500

Submit

Rudviq Bhavsar [1002091441]

[Main Page](#)

Name	State	Salary	Grade	Room	Telephone Number	Image Name	Image	Keywords
Dhruvi	TX	5500	100	550	1000010	dhru.jpg		not so nice anymore
Chuck	TX	1000	98	420	None	chuck.jpg		Chuck is amazing

7) Delete records



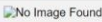
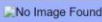

# Rudviq Bhavsar [1002091441]

[Home Page](#)

Enter name

# Rudviq Bhavsar [1002091441]

[Main Page](#)

Name	State	Salary	Grade	Room	Telephone Number	Image Name	Image	Keywords
Dhruvi	TX	5500	100	550	1000010	dhru.jpg		not so nice anymore
Chuck	TX	1000	98	420	None	chuck.jpg		Chuck is amazing
Meena	TX	125000	99	None	None	None		Meena is outa here
Tuan	CA	None	80	-1	None	None		Tuan is gone
Tavo	CA	220200	None	None	None	tavo.jpg		Tavo works very hard

## Python source code –

```

from flask import Flask, render_template, request
import pyodbc

app = Flask(__name__)

#To route to home page
@app.route('/')
def toHome():
    return render_template('homepage.html')

#To route to the webpage for entering users name for searching
@app.route('/search_name')
def search():
    return render_template('search_name.html')

#To route to update page
@app.route('/updatekeyword')
def updatemain():
    return render_template('updatekey.html')

```

```

#To route to update salary page
@app.route('/changeSal')
def updatemainsal():
    return render_template('changeSal.html')

#To route to delete page
@app.route('/deleterec')
def deletemain():
    return render_template('delete_rec.html')

#To route to salary range page
@app.route('/salrng')
def checksalrange():
    return render_template('chkSalRange.html')

#To route to addpicture page
@app.route('/addImage')
def addImg():
    return render_template('addImage.html')

#To connect the database and user credentials to Microsoft Azure
driver = '{ODBC Driver 18 for SQL Server}'
database = 'Database02'
server = 'tcp:rb0212.database.windows.net,1433'
username = "rsb1441"
password = "Rb#azure02"
conn=
pyodbc.connect('DRIVER='+driver+';SERVER='+server+';DATABASE='+database+';UID='+username+';PWD
='+ password)
cursor = conn.cursor() #cursor

#To search the record from the table by using name
@app.route('/searchuser', methods=['POST','GET'])
def list():
    field=str(request.form['name'])
    query="Select * from people WHERE Name ='"+field+"'"
    cursor.execute(query)
    rows = cursor.fetchall()
    return render_template("getImage.html",rows = rows)

#To retrieve all the data from table
@app.route('/showList', methods=['POST','GET'])
def fulllist():

```

```

query="Select * from people "
cursor.execute(query)
rows = cursor.fetchall()
return render_template("completelist.html",rows = rows)

#To update keyword of the record from the table by using name
@app.route('/key_update',methods=['POST','GET'])
def update():
    if (request.method=='POST'):
        name= str(request.form['name'])
        keyword= str(request.form['keyword'])
        query="UPDATE people SET keywords = '"+keyword+"' WHERE Name ='"+name+"' "
        cursor.execute(query)
        conn.commit()
        query2="Select * from people "
        cursor.execute(query2)
        rows = cursor.fetchall()
        return render_template("completelist.html",rows = rows)

#To add picture to the record from the table by using name
@app.route('/addImg',methods=['POST','GET'])
def addpicture():
    if (request.method=='POST'):
        name= str(request.form['name1'])
        pic= str(request.form['pic1'])
        query="UPDATE people SET Picture = '"+pic+"' WHERE Name ='"+name+"' "
        cursor.execute(query)
        conn.commit()
        query2="Select * from people "
        cursor.execute(query2)
        rows = cursor.fetchall()
        return render_template("completelist.html",rows = rows)

#To update salary of the record from the table by using name
@app.route('/salaryupdate',methods=['POST','GET'])
def chnagesal():
    if (request.method=='POST'):
        name= str(request.form['name'])
        keyword= str(request.form['sal'])
        query="UPDATE people SET salary = '"+keyword+"' WHERE Name ='"+name+"' "
        cursor.execute(query)
        conn.commit()
        query2="Select * from people "
        cursor.execute(query2)
        rows = cursor.fetchall()

```



```

        return render_template("completelist.html",rows = rows)

#To delete the record from the table by using name
@app.route('/recdelete', methods=['GET', 'POST'])
def deleterecord():
    if (request.method=='POST'):
        name= str(request.form['name'])
        query="DELETE FROM people WHERE Name = '"+name+"' "
        cursor.execute(query)
        conn.commit()
        query2="Select * from people "
        cursor.execute(query2)
        rows = cursor.fetchall()
        return render_template("completelist.html",rows = rows)

#To retrieve the record which is in the given range from the table by using max and min salary
@app.route('/sal', methods=['GET', 'POST'])
def notmatch():
    if (request.method=='POST'):
        salrange= (request.form['range'])
        query="select * from people WHERE Salary < '"+salrange+"'"
        cursor.execute(query)
        rows = cursor.fetchall()
        return render_template("getImage.html",rows = rows)

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

```

HTML source codes -

### 1) homepage.html -> Main Page

```

<!doctype html>
<html>
    <head>
        <style>
            h1{text-align: center;}
            div{text-align: center;}
            a{font-size: 20px;}
            img{align-self: center;}
        </style>
    </head>
    <body style="background-color:#9eb1ff;">

```

```

<h1> Cloud Computing and Big Data</h1>
<h1>Assignment 1 </h1>
<h1>Rudviq Bhavsar [1002091441] </h1>
<br>
<div></div>
<div class='container'>
  <a href="/showList">Click here to see all the people's details</a><br><br>
  <a href="/search_name">Search any individual with name</a><br><br>
  <a href="/updatekeyword">Update a Keyword using individual's name</a><br><br>
  <a href="/deleterec">Delete a record using individual's name</a><br><br>
  <a href="/salrng">Check records based on Salary range</a><br><br>
  <a href="/changeSal">Update Salary using individual's name</a><br><br>
  <a href="/addImage">Add a Image using individual's name</a><br><br>
</div>
</html>

```

## 2) completeList.html -> Displaying all the records

```

<!doctype html>
<html>
  <head>
    <style>
      #customers {
        font-family: Arial, Helvetica, sans-serif;
        border-collapse: collapse;
        width: 100%;
      }

      #customers td, #customers th {
        border: 1px solid #ddd;
        padding: 8px;
      }

      #customers tr:nth-child(even){background-color: #f2f2f2;}

      #customers tr:hover {background-color: #ddd;}

      #customers th {
        padding-top: 12px;
        padding-bottom: 12px;
        text-align: left;
        background-color: #436283;
        color: white;
      }

      h1{text-align: center;}
    
```

```

        div{text-align: center;}
</style>
</head>
<body style="background-color:#9eb1ff;">
    <h1 >Rudviq Bhavsar [1002091441] </h1>
    <br>
    <div>
        <a href="/">Main Page</a>
    </div>
<br> <br>
<br> <br>
<div>
    <table id='customers'>
        <tr>
            <td><b>Name</b></td>
            <td><b>State</b></td>
            <td><b>Salary</b></td>
            <td><b>Grade</b></td>
            <td><b>Room</b></td>
            <td><b>Telephone Number</b></td>
            <td><b>Image Name</b></td>
            <td><b>Image</b></td>
            <td><b>Keywords</b></td>
        </tr>
        {% for col in rows %}
        <tr>
            <td>{{col[0]}}</td>
            <td>{{col[1]}}</td>
            <td> {{ col[2]}}</td>
            <td>{{col[3]}}</td>
            <td> {{col[4]}}</td>
            <td>{{col[5]}}</td>
            <td>{{col[6]}}</td>
            <td></td>
            <td>{{col[7]}}</td>
        </tr>
        {% endfor %}
    </table>
</div>
<br>

</body>
</html>

```

### 3) search\_name.html -> Searching the user

```
<!DOCTYPE html>
<html lang="en">
<head>
  <style>
    h1{text-align: center;}
    div{text-align: center;}
    b{font-size: 18px; margin-right: 8px;}
    form,input[type="text"]{margin-bottom: 5px;
      font-size: 16px;
      margin-top: 5px;
      border: none;
      height:25px;}
    input[type="submit"]{background-color:#2e57fb;
      border: none;
      color: white;
      padding: 15px 32px;
      text-align: center;
      text-decoration: none;
      display: inline-block;
      font-size: 16px;
      margin-top: 5px;}
  </style>
</head>
<body style="background-color:#9eb1ff;">
  <h1 >Rudviq Bhavsar [1002091441] </h1>
  <br>
  <div>
    <a href="/">Main Page</a>
  </div>
  <br> <br>
  <div>
    <form method='POST' action="/searchuser">
      <b>Name</b> <input type="text" name="name"><br>
      <input type="submit" >
    </form>
  </div>
</body>
</html>
```

### 4) updatekeyword.html -> Updating the keyword using the name of the user

```

<!DOCTYPE html>
<html lang="en">
<head>
  <style>
    h1{text-align: center;}
    div{text-align: center;}
    form,input[type="text"]{margin-bottom: 5px;
      font-size: 16px;
      margin-top: 5px;
      border: none;
      height:25px;}
    b{font-size: 18px; margin-right: 8px;}
    input[type="submit"]{background-color:#2e57fb;
      border: none;
      color: white;
      padding: 15px 32px;
      text-align: center;
      text-decoration: none;
      display: inline-block;
      font-size: 16px;
      margin-top: 5px;}
  </style>
</head>
<body style="background-color:#9eb1ff;">
  <h1 >Rudviq Bhavsar [1002091441] </h1>
  <br>
  <div>
    <a href="/">Home Page</a>
  </div>
  <br> <br>
  <div>
    <form method="POST" action="/key_update" >
      <b>Input name</b><input type = "text" name = "name" /><br>
      <b>New keyword</b><input type = "text" name = "keyword" /><br>
      <input type = "submit" name = "keyupdate"/>
    </form>
  </div>
</body>
</html>

```

5) chkSalRange.html -> Displaying records having salary less than input value

```

<!DOCTYPE html>
<html lang="en">
<head>
  <style>
    h1{text-align: center;}
    div{text-align: center;}
    form,input[type="text"]{margin-bottom: 5px;
      font-size: 16px;
      margin-top: 5px;
      border: none;
      height:25px;}
    input[type="submit"]{background-color:#2e57fb;
      border: none;
      color: white;
      padding: 15px 32px;
      text-align: center;
      text-decoration: none;
      display: inline-block;
      font-size: 16px;
      margin-top: 5px;}
    b{font-size: 18px; margin-right: 8px;}
  </style>
</head>
<body style="background-color:#9eb1ff;">
  <h1 >Rudviq Bhavsar [1002091441] </h1>
  <br>
  <div>
    <a href="/">Home Page</a>
  </div>
  <br> <br>
  <div>
    <form method="POST" action="/sal" >
      <b>Salary range</b><input type = "text" name = "range" /><br>
      <input type = "submit" name = "notmatch"/>
    </form>
  </div>
</body>
</html>

```

6) updatesal.html -> Changing the amount of salary of a particular user

```

<!DOCTYPE html>

```

```

<html lang="en">
<head>
  <style>
    h1{text-align: center;}
    div{text-align: center;}
    b{font-size: 18px; margin-right: 8px;}
    form,input[type="text"]{margin-bottom: 5px;
      font-size: 16px;
      margin-top: 5px;
      border: none;
      height:25px;}
    input[type="submit"]{background-color:#2e57fb;
      border: none;
      color: white;
      padding: 15px 32px;
      text-align: center;
      text-decoration: none;
      display: inline-block;
      font-size: 16px;
      margin-top: 5px;}

  </style>
</head>
<body style="background-color:#9eb1ff;">
  <h1 >Rudviq Bhavsar [1002091441] </h1>
    <br>
    <div>
      <a href="/">Home Page</a>
    </div>
    <br> <br>
    <div>
      <form method="POST" action="/salaryupdate" >
        <b>Input name</b> <input type = "text" name = "name" />
        <br>
        <b>New Salary</b> <input type = "text" name = "sal" />
        <br>
        <input type = "submit" name = "Update"/>
      </form>
    </div>
</body>
</html>

```

7) addImage.html -> Adding new image in the record

```

<!DOCTYPE html>
<html lang="en">
<head>
  <style>
    h1{text-align: center;}
    div{text-align: center;}
    b{font-size: 18px; margin-right: 8px;}
    form,input[type="text"],input[type="file"]{margin-bottom: 5px;
      font-size: 16px;
      margin-top: 5px;
      border: none;
      height:25px;}
    input[type="submit"]{background-color:#2e57fb;
      border: none;
      color: white;
      padding: 15px 32px;
      text-align: center;
      text-decoration: none;
      display: inline-block;
      font-size: 16px;
      margin-top: 5px;}
  </style>
</head>
<body style="background-color:#9eb1ff;">
  <h1 >Rudviq Bhavsar [1002091441] </h1>

  <br>
  <div>
    <a href="/">Main Page</a>
  </div>
  <br> <br>
  <div>
    <form method="POST" action="/addImg" >
      <b>Input name</b><input type = "text" name = "name1" /><br>
      <!-- Picture Name<input type = "text" name = "pic" /> -->
      <input type="file" accept="static/*" name = "pic1"/><br><br>
      <input type = "submit" name = "Update"/>
    </form>
  </div>
</body>
</html>

```

8) delete\_rec.html -> Deleting record using users name



```

<!DOCTYPE html>
<html lang="en">
<head>
  <style>
    h1{text-align: center;}
    div{text-align: center;}
    b{font-size: 18px; margin-right: 8px;}
    form,input[type="text"]{margin-bottom: 5px;
      font-size: 16px;
      margin-top: 5px;
      border: none;
      height:25px;}
    input[type="submit"]{background-color:#2e57fb;
      border: none;
      color: white;
      padding: 15px 32px;
      text-align: center;
      text-decoration: none;
      display: inline-block;
      font-size: 16px;
      margin-top: 5px;}
  </style>
</head>
<body style="background-color:#9eb1ff;">
  <h1 >Rudvii Bhavsar [1002091441] </h1>

  <br>
  <div>
    <a href="/">Home Page</a>
  </div>
  <br> <br>
  <div>
    <form method="POST" action="/recdelete" >
      <b>Enter name</b> <input type = "text" name = "name" /><br>
      <input type = "submit" name = "Delete"/>
    </form>
  </div>
</body>
</html>

```

Link - <https://rud.azurewebsites.net/>