

IBM ASSIGNMENT 3

Team ID	Team ID: PNT2022PMID49593
Project Name	Project – PLASMA DONOR APPLICATION
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1. Create user table with user with email, username, roll number, password.

```
MySQL 8.0 Command Line Client
Enter password: ****
Welcome to the MySQL monitor.  Commands end with ; or \g.
Your MySQL connection id is 17
Server version: 8.0.30 MySQL Community Server - GPL

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owners.

Type 'help;' or '\h' for help. Type '\c' to clear the current input statement.

mysql> create database ibm;
Query OK, 1 row affected (0.01 sec)

mysql> create table user(username varchar(15),email varchar(25),rollnumber int(10),password int(15));
ERROR 1046 (3D000): No database selected
mysql> use database ibm;
ERROR 1049 (42000): Unknown database 'database'
mysql> use ibm;
Database changed
mysql> create table user(username varchar(15),email varchar(25),rollnumber int(10),password int(15));
Query OK, 0 rows affected, 2 warnings (0.03 sec)

mysql> desc user;
+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+
| username | varchar(15) | YES | | NULL | |
| email | varchar(25) | YES | | NULL | |
| rollnumber | int | YES | | NULL | |
| password | int | YES | | NULL | |
+-----+-----+-----+-----+-----+
4 rows in set (0.00 sec)

mysql>
```

2.Perform UPDATE, DELETE Queries with user table.

```
MySQL 8.0 Command Line Client
mysql> create table user(username varchar(15),email varchar(25),rollnumber int(10),password int(15));
Query OK, 0 rows affected, 2 warnings (0.03 sec)

mysql> desc user;
+-----+-----+-----+-----+-----+-----+
| Field | Type | Null | Key | Default | Extra |
+-----+-----+-----+-----+-----+-----+
| username | varchar(15) | YES | | NULL | |
| email | varchar(25) | YES | | NULL | |
| rollnumber | int | YES | | NULL | |
| password | int | YES | | NULL | |
+-----+-----+-----+-----+-----+-----+
4 rows in set (0.00 sec)

mysql> insert into user values('evangelin','evangelin252002@gmail.com',25,07);
Query OK, 1 row affected (0.01 sec)

mysql> insert into user values('darsha','darsha1508@gmail.com',15,34);
Query OK, 1 row affected (0.00 sec)

mysql> select*from user;
+-----+-----+-----+-----+
| username | email | rollnumber | password |
+-----+-----+-----+-----+
| evangelin | evangelin252002@gmail.com | 25 | 7 |
| darsha | darsha1508@gmail.com | 15 | 34 |
+-----+-----+-----+-----+
2 rows in set (0.00 sec)

mysql> update user set username='darshagayathri' where password=34;
Query OK, 1 row affected (0.01 sec)
Rows matched: 1 Changed: 1 Warnings: 0

mysql> select*from user;
+-----+-----+-----+-----+
| username | email | rollnumber | password |
+-----+-----+-----+-----+
| evangelin | evangelin252002@gmail.com | 25 | 7 |
| darshagayathri | darsha1508@gmail.com | 15 | 34 |
+-----+-----+-----+-----+
2 rows in set (0.00 sec)

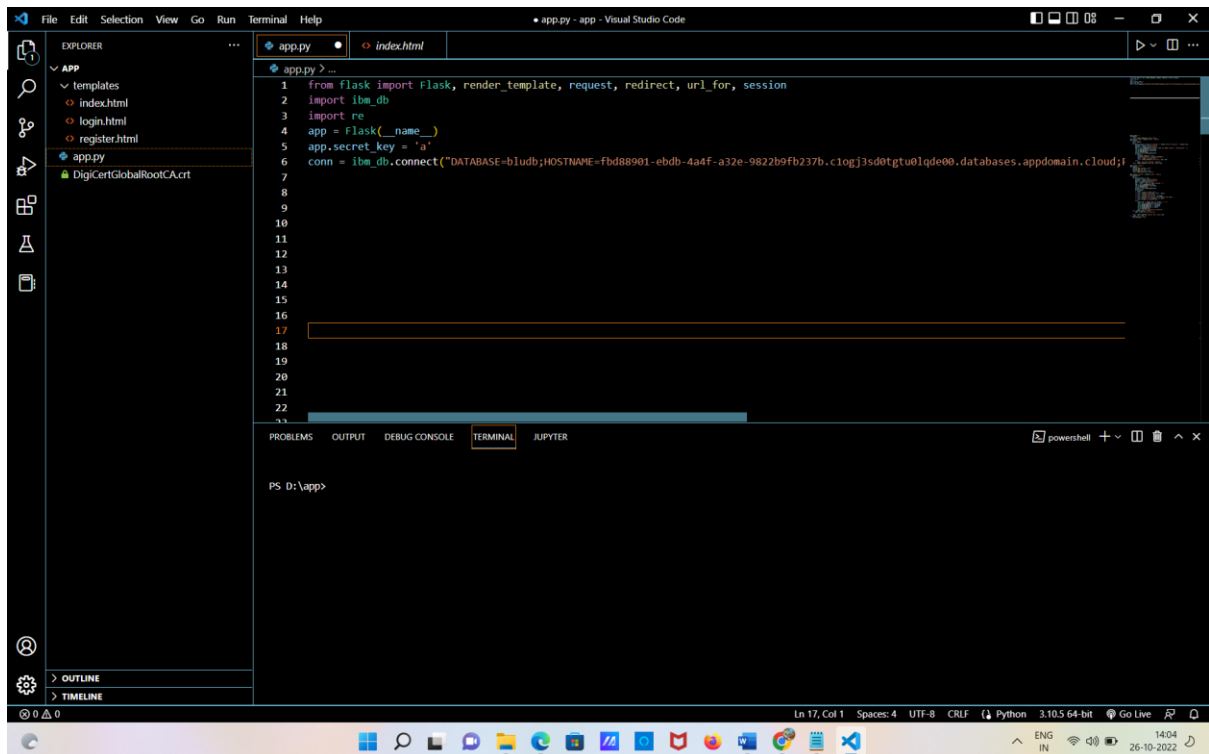
mysql> delete from user where rollnumber=15;
Query OK, 1 row affected (0.01 sec)

mysql> select*from user;
+-----+-----+-----+-----+
| username | email | rollnumber | password |
+-----+-----+-----+-----+
| evangelin | evangelin252002@gmail.com | 25 | 7 |
+-----+-----+-----+-----+
1 row in set (0.00 sec)

mysql>
```

3.Connect python code to db2.

App.py:



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:

```
1 from flask import Flask, render_template, request, redirect, url_for, session
2 import ibm_db
3 import re
4 app = Flask(__name__)
5 app.secret_key = 'a'
6 conn = ibm_db.connect("DATABASE=bludb;HOSTNAME=fbd88901-ebdb-4a4f-a32e-9822b9fb237b.c1ogj3s0tgtu0lqde00.databases.appdomain.cloud;f
7 @app.route('/')
8 def home():
9     return render_template('register.html')
10 @app.route('/login', methods = ['GET', 'POST'])
11 def login():
12     global userid
13     msg = ''
14     if request.method == 'POST' and 'username' in request.form and 'password' in request.form:
15         username = request.form['username']
16         password = request.form['password']
17         stmt = ibm_db.prepare(conn, 'SELECT * FROM user WHERE username = ? AND password = ?')
18         ibm_db.bind_param(stmt, 1, username)
19         ibm_db.bind_param(stmt, 2, password)
20         ibm_db.execute(stmt)
21         account = ibm_db.fetch_assoc(stmt)
22         if account:
23             session['loggedin'] = True
24             session['username'] = account['USERNAME']
25             msg = 'Logged in successfully !'
26             return render_template('index.html', msg = msg)
27         else:
28             msg = 'Incorrect username / password !'
29     return render_template('login.html', msg = msg)
30
31 @app.route('/logout')
32 def logout():
33     session.pop('loggedin', None)
34     session.pop('id', None)
35     session.pop('username', None)
36     return redirect(url_for('login'))
37
38 @app.route('/register', methods = ['GET', 'POST'])
39 def register():
40     msg = ''
41     if request.method == 'POST':
```

```
42     if request.method == 'POST':
43         username = request.form['username']
44         password = request.form['password']
45         email = request.form['email']
46         sql = "SELECT * FROM user WHERE username = ?"
47         stmt = ibm_db.prepare(conn, sql)
48         ibm_db.bind_param(stmt, 1, username)
49         ibm_db.execute(stmt)
50         account = ibm_db.fetch_assoc(stmt)
51         print(account)
52         if account:
53             msg = 'Account already exists !'
54         elif not re.match(r'^(.+)@(.+)\.(.+)$', email):
55             msg = 'Invalid email address !'
56         elif not re.match(r'[A-Za-z0-9]+', username):
57             msg = 'Username must contain only characters and numbers !'
58         elif not username or not password or not email:
59             msg = 'Please fill out the form !'
60         else:
61             insert_sql = "INSERT INTO user VALUES (?, ?, ?)"
62             stmt = ibm_db.prepare(conn, insert_sql)
63             ibm_db.bind_param(stmt, 1, username)
64             ibm_db.bind_param(stmt, 2, password)
65             ibm_db.bind_param(stmt, 3, email)
66             ibm_db.execute(stmt)
67             msg = 'You have successfully registered !'
68         elif request.method == 'POST':
69             msg = 'Please fill out the form !'
70     return render_template('register.html', msg = msg)
71 if __name__ == '__main__':
72     app.run(debug = True)
```

Index.html:

```
1 <html>
2   <head>
3     <meta charset="UTF-8">
4     <title> Index </title>
5
6     <link rel="stylesheet" href="{{ url_for('static', filename='style.css') }}">
7   </head>
8   <body><br><br><br><br><br>
9
10    <div align="center">
11      <div class="header">
12        <h1 class="word">Index</h1>
13      </div><br><br><br>
14      <div class="bottom">
15        | Hi {{session.username}}!!<br><br> Welcome to the index page...
16      </div><br><br><br>
17      <a href="{{ url_for('logout') }}" class="btn">Logout</a>
18    </div>
19
20  </body>
21 </html>
```

Login.html:

```
1 <html>
2   <head>
3     <meta charset="UTF-8">
4     <title> Login </title>
5
6     <style>
7     height: 100%;
8
9     body {
10      background-image: linear-gradient(45deg, #FFFFFF, #rgb(255, 122, 89));
11    }
12  </style>
13
14  <link rel="stylesheet" href="{{ url_for('static', filename='style.css') }}">
15  </head>
16  <body><br><br><br><br><br>
17
18    <div align="center">
19      <div align="center" class="border">
20        <div class="header">
21          <h1 class="word">Login</h1>
22        </div><br><br><br>
23        <div class="word">
24          <form action="{{ url_for('login') }}" method="post">
25            <div class="msg">{{ msg }}</div>
26            <input id="username" name="username" type="text" placeholder="Enter Your Username" class="textbox"/><br><br>
27            <input id="password" name="password" type="password" placeholder="Enter Your Password" class="textbox"/><br><br>
28            <input type="submit" class="btn" value="Sign In"/><br><br>
29          </form>
30        </div>
31        <p class="bottom">Don't have an account? <a class="bottom" href="{{ url_for('register') }}"> Sign Up here</a></p>
32      </div>
33    </div>
34
35  </body>
36 </html>
```

Register.html:

The screenshot shows the Visual Studio Code interface with the 'register.html' file open. The Explorer sidebar on the left displays the project structure, including the 'templates' folder and its contents: 'index.html', 'login.html', and 'register.html'. The main editor area shows the HTML code for 'register.html', which includes a form for user registration. The code uses inline styles for a gradient background and a border. The status bar at the bottom indicates 'Ln 1, Col 1' and 'Spaces: 2'.

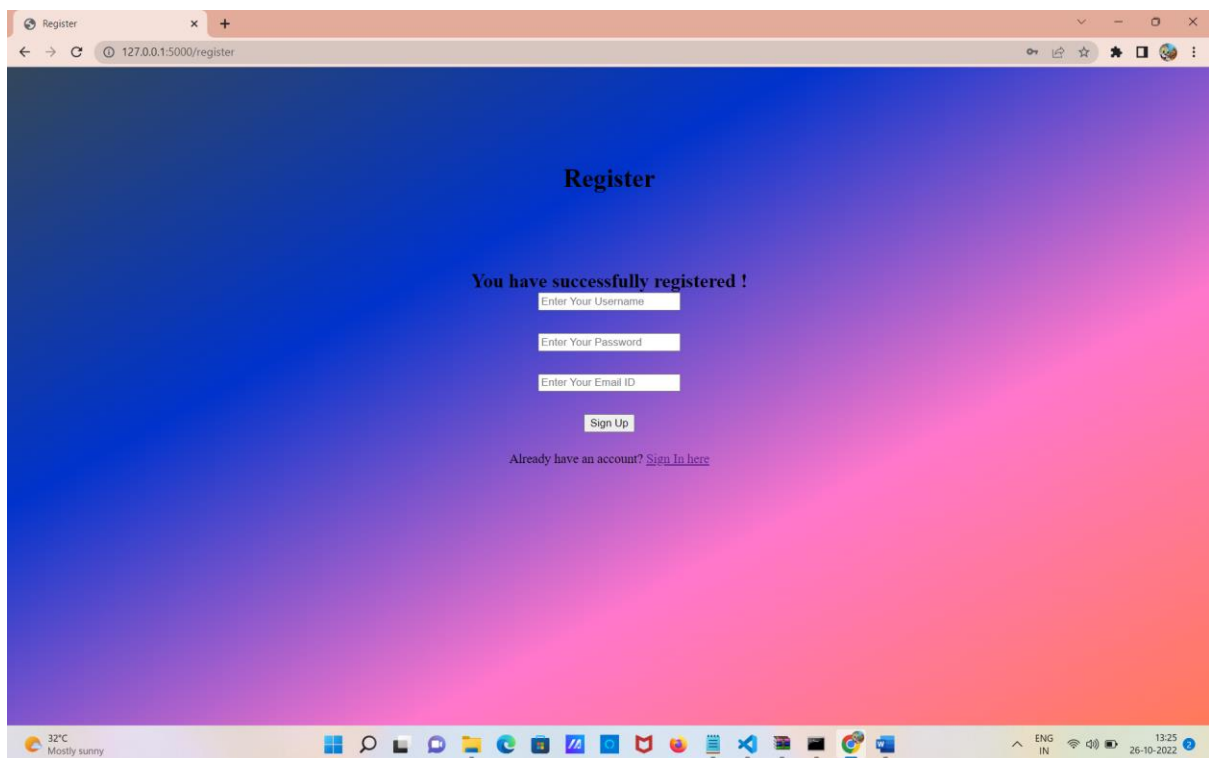
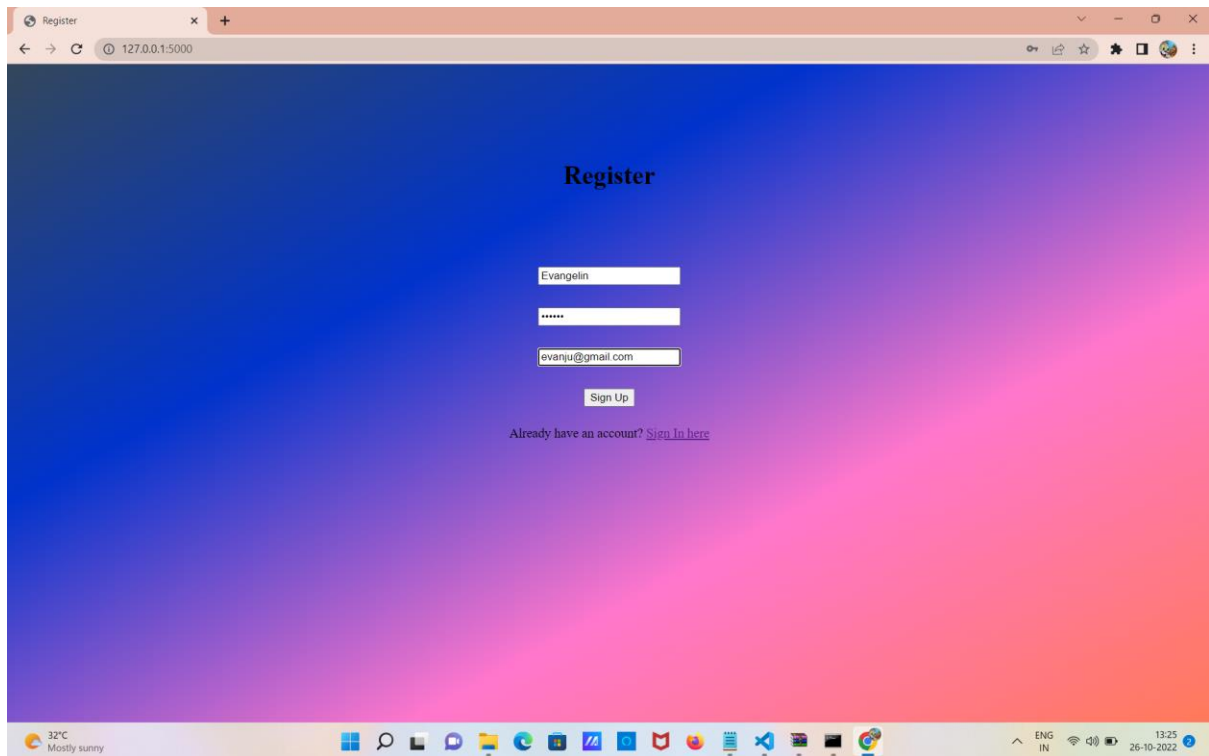
```

1
2 <html>
3   <head>
4     <meta charset="UTF-8">
5     <title> Register </title>
6   </head>
7   <body>
8     <div class="container">
9       <div class="header">
10        <h1 class="word">Register</h1>
11      </div>
12      <div class="form">
13        <form action="{{ url_for('register') }}" method="post">
14          <div class="msg">{{ msg }}</div>
15          <input id="username" name="username" type="text" placeholder="Enter Your Username" class="text-box">
16          <input id="password" name="password" type="password" placeholder="Enter Your Password" class="text-box">
17          <input id="email" name="email" type="text" placeholder="Enter Your Email ID" class="text-box">
18          <input type="submit" class="btn" value="Sign Up">
19        </form>
20      </div>
21      <p class="bottom">Already have an account? <a class="bottom" href="{{ url_for('login') }}"> Sign In here</a></p>
22    </div>
23  </body>
24 </html>

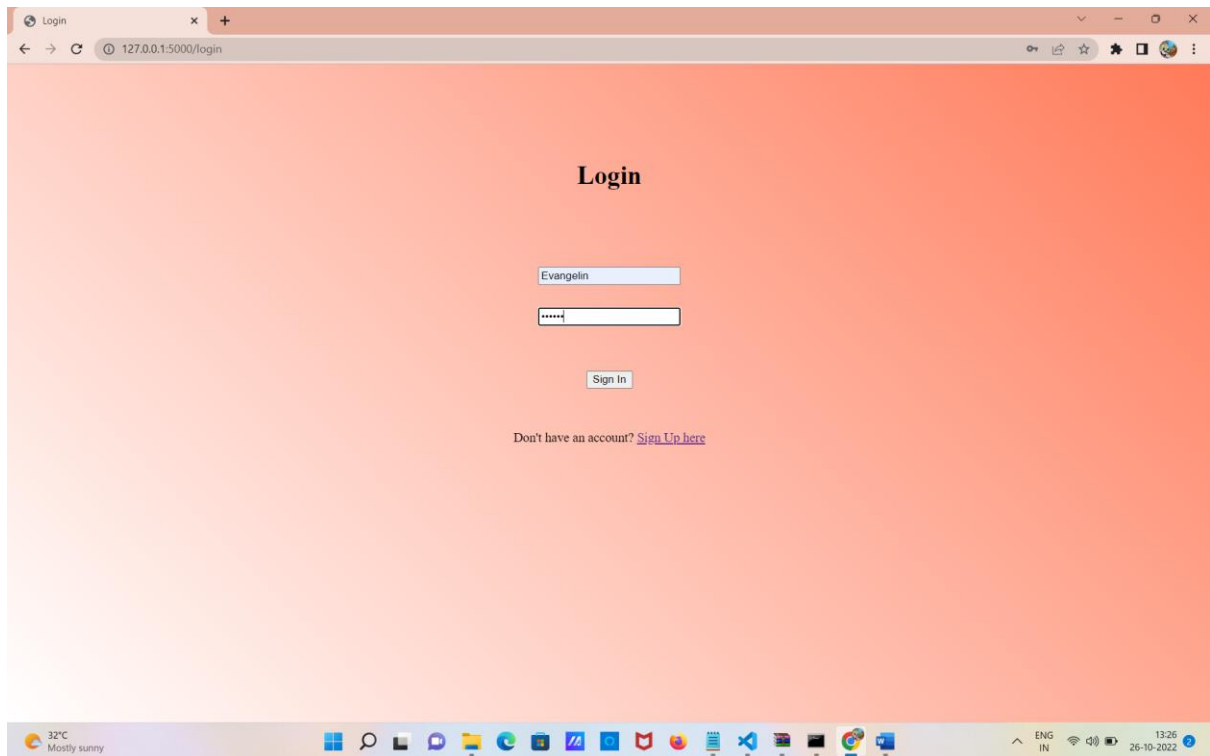
```

OUTPUT:

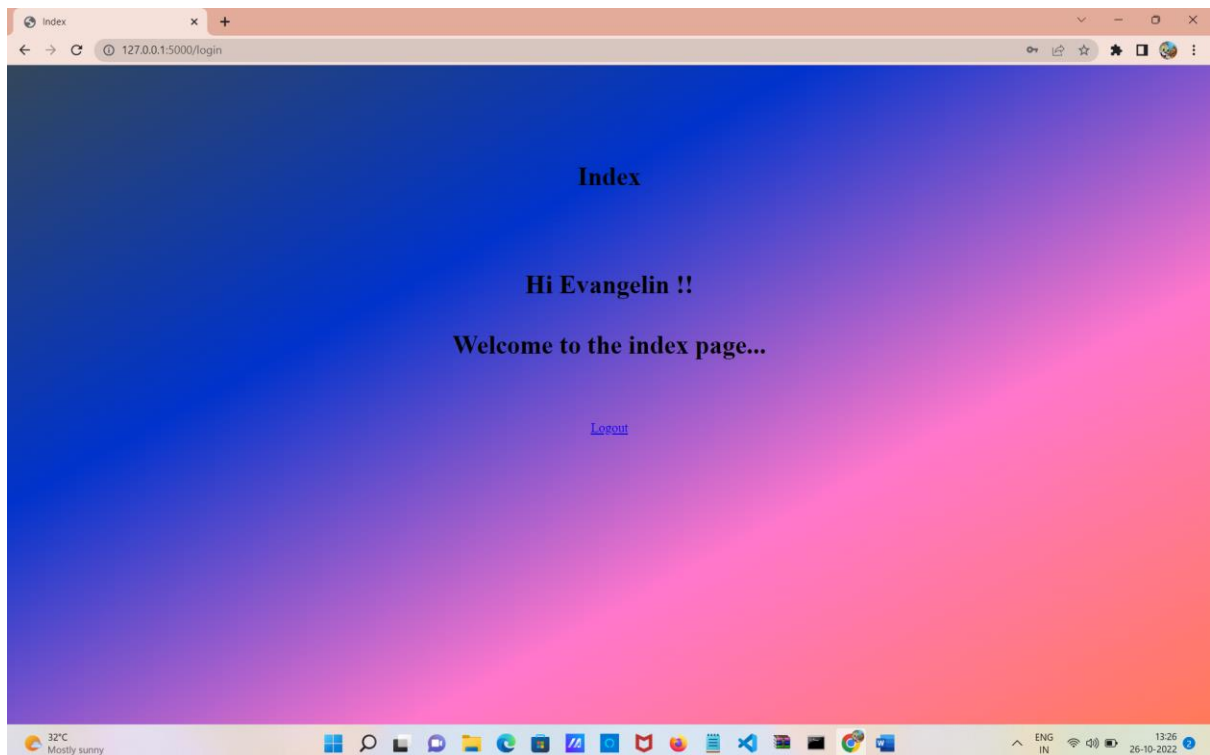
Registering page:



Login page:



Index page:



Database:

The screenshot displays the IBM Db2 on Cloud web interface. The main content area shows a table named 'CTL39277.USER'. The table has three columns: 'USERNAME', 'PASSWORD', and 'EMAIL'. There are six rows of data representing different users. The interface includes a top navigation bar with links to 'Load Data', 'Load History', 'Tables', 'Views', 'Indexes', 'Aliases', 'MQTs', 'Sequences', and 'Application objects'. A left sidebar contains icons for 'SQL', 'Tables', and 'Views'. A right sidebar has a 'Back' button and an 'Export to CSV' button. The bottom of the image shows a Windows taskbar with various application icons and a system tray with weather, language, and time information.

USERNAME	PASSWORD	EMAIL
Evangelin	evanju	evanju@gmail.com
Evangelin	evanju	evanju@gmail.com
Evangelin	evanju	evanju@gmail.com
evanju	evan	e@gmail.com
shirley	shir	s@gmail.com