Assignment -2

Python Programming

Assignment Date	19 September 2022
Student Name	Nirmala G
Student Roll Number	211419205118
Maximum Marks	2 Marks

Question-1:

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 userusername and password. If the user is valid show the welcome page

Solution:

```
from flask import Flask, render_template, request,
redirect, url_for, session,flash
from flask_mysqldb import MySQL

import mysql.connector as mysql

import re



app = Flask(_name_)

# Change this to your secret key (can be anything,
it's for extra protection)
app.secret_key = '1a2b3c4d5e'

# Enter your database connection details below
app.config['MYSQL_HOST'] = 'localhost'
app.config['MYSQL_PORT'] = 3306
app.config['MYSQL_USER'] = 'root'
app.config['MYSQL_PASSWORD'] = 'root'
#app.config['MYSQL_CURSORCLASS'] = 'DictCursor'
app.config['MYSQL_DB'] = 'flaskproject'

#app.config['MYSQL_PORT'] = '3306'

# Intialize MySQL
mysql = MySQL(app)
```

```
# http://localhost:5000/pythonlogin/ - this will be
the login page, we need to use both GET and POST
requests
@app.route('/index/', methods=['GET', 'POST'])
def login():
# Output message if something goes wrong...
    # Check if "username" and "password" POST requests
exist (user submitted form)
    if request.method == 'POST' and 'username' in
request.form and 'password' in request.form:
        # Create variables for easy access
        username = request.form['username']
        password = request.form['password']
        # Check if account exists using MySQL
        cursor = mysql.connection.cursor()
        #cursor =
mysql.connection.cursor(MySQLdb.cursors.DictCursor)
        #cursor =
mysql.connection.cursor(MySQLdb.cursors.DictCursor)
        cursor.execute('SELECT * FROM accounts WHERE
username = %s AND password = %s', (username,
password))

        # Fetch one record and return result
        account = cursor.fetchone()
                # If account exists in accounts table
in out database
       # if account:
        if request.method == 'POST':
            # Create session data, we can access this
data in other routes
            session['loggedin'] = True
            #session['id'] = account['id']
            session['username'] =
request.form['username']
            #session['password'] = account['password']
            # Redirect to home page
            return redirect(url_for('home'))
        else:
            # Account doesnt exist or
username/password incorrect
            flash("Incorrect username/password!",
"danger")
    return
render_template('auth/login.html',title="Login")



# http://localhost:5000/pythinlogin/register
```

```
# This will be the registration page, we need to use
both GET and POST requests
@app.route('/pythonlogin/register', methods=['GET',
'POST'])
def register():
    # Check if "username", "password" and "email" POST
requests exist (user submitted form)
    if request.method == 'POST' and 'username' in
request.form and 'password' in request.form and
'email' in request.form:
        # Create variables for easy access
        username = request.form['username']
        password = request.form['password']
        email = request.form['email']
                # Check if account exists using MySQL
        cursor = mysql.connection.cursor()
        # cursor.execute('SELECT * FROM accounts WHERE
username = %s', (username))
        cursor.execute( "SELECT * FROM accounts WHERE
username LIKE %s", [username] )
        account = cursor.fetchone()
        # If account exists show error and validation
checks
        if account:
            flash("Account already exists!", "danger")
        elif not re.match(r'[^@]+@[^@]+\.[^@]+',
email):
            flash("Invalid email address!", "danger")
        elif not re.match(r'[A-Za-z0-9]+', username):
            flash("Username must contain only
characters and numbers!", "danger")
        elif not username or not password or not
email:
            flash("Incorrect username/password!",
"danger")
        else:
        # Account doesnt exists and the form data is
valid, now insert new account into accounts table
            cursor.execute('INSERT INTO accounts
VALUES (%s, %s, %s)', (username,password, email))
            mysql.connection.commit()
            flash("You have successfully registered!",
"success")
            return redirect(url_for('login'))
    elif request.method == 'POST':
        # Form is empty... (no POST data)
        flash("Please fill out the form!", "danger")
    # Show registration form with message (if any)
```

```
    return
render_template('auth/register.html',title="Register")

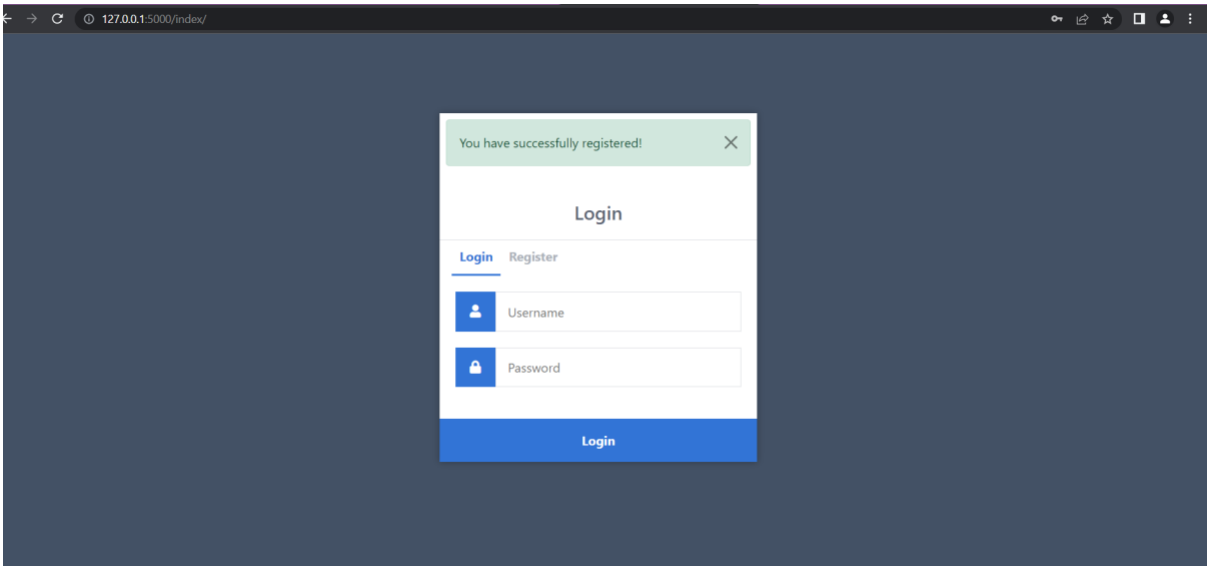
# http://localhost:5000/pythinlogin/home
# This will be the home page, only accessible for
loggedin users

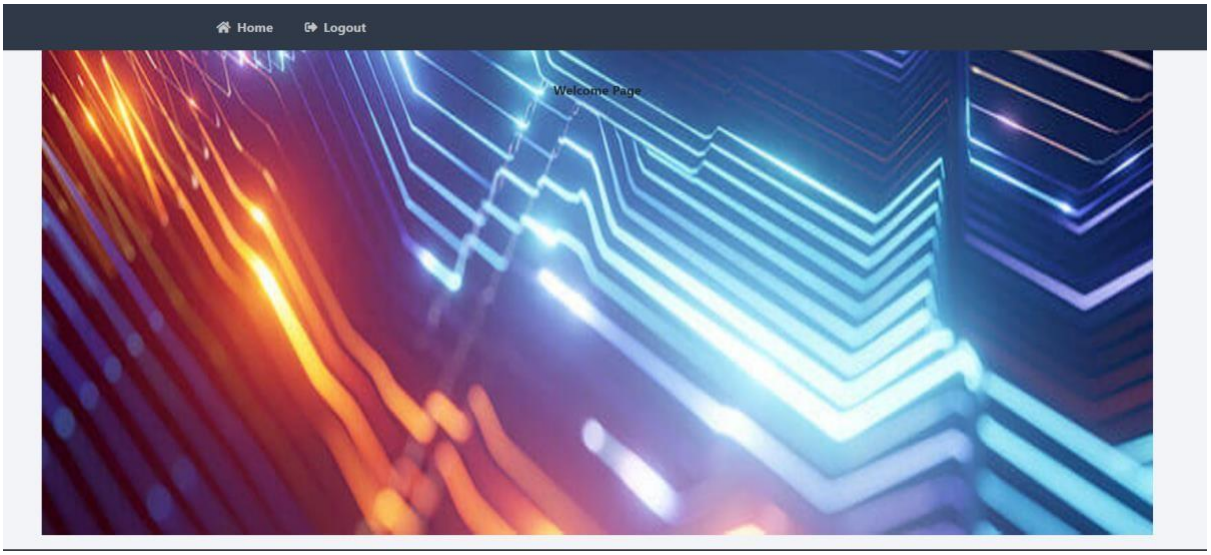
@app.route('/pythonlogin/home')
def home():
    # Check if user is loggedin
    if 'loggedin' in session:
        # User is loggedin show them the home page
        return render_template('home/home.html',
username=session['username'],title="Home")
    # User is not loggedin redirect to login page
    return redirect(url_for('login'))

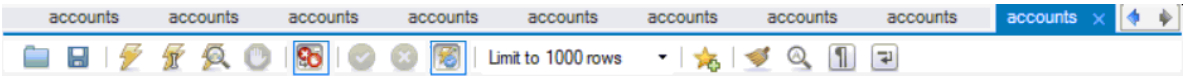

@app.route('/pythonlogin/profile')
def profile():
    # Check if user is loggedin
    if 'loggedin' in session:
        # User is loggedin show them the home page
        return render_template('auth/profile.html',
username=session['username'],title="Profile")
    # User is not loggedin redirect to login page
    return redirect(url_for('login'))

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

OUTPUT:


127.0.0.1:5000/index/
You have successfully registered!
Login
Login
Register
Username
Password
Login


Home
Logout
Welcome Page

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```

Result Grid | Filter Rows: _____ Export: : @ map Cell Portent: { \

	username	password	email
k	a	a	a@gmail.com
	ramya	ramya	ramyag›gmail.com
	renn	renu	renu@gmail.erm
	nirmala	vijay	nirmala jail.axn

Result Grid

Form

Field

accounts 1 ×

0 Read Only