

Assignment 2

Date	20 October 2022
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Maximum Marks	2 Marks

Question 1 :

Create User table with email,username,roll number, password.

Solution :

```
create table userdetails(  
uid integer unique not null GENERATED ALWAYS AS IDENTITY (START  
WITH1 INCREMENT BY 1), rollno integer unique not null,  
username varchar(30) unique not null,email  
varchar(40) unique not null, password  
varchar(8) unique not null  
)
```

Question 2 :

Perform UPDATE,DELETE Queries with user table

Solution :

```
import ibm_db  
  
def printTableData(conn):  
    sql = "SELECT * FROM userdetails"  
    out = ibm_db.exec_immediate(conn, sql)  
    document = ibm_db.fetch_assoc(out) while  
    document != False:  
  
dictionary.update({document['USERNAME']:document['PA
```

```

SSWORD']})          document =
ibm_db.fetch_assoc(out)
    def insertTableData(conn,rollno,username,email,password):sql="INSERT
        INTO
userdetails(rollno,username,email,password) VALUES
({},{},'{'','{'','{'})".format(rollno,username,email,password)

        out = ibm_db.exec_immediate(conn,sql)
        print('Number of affected rows : ',ibm_db.num_rows(out),"n")def
updateTableData(conn,rollno,username,email,password):
    sql = "UPDATE userdetails SET
(username,email,password)=('{'','{'','{'}) WHERE
rollno={}".format(username,email,password,rollno)
    out = ibm_db.exec_immediate(conn, sql)
    print('Number of affected rows : ', ibm_db.num_rows(out), "n")def
deleteTableData(conn,rollno):
    sql = "DELETE FROM userdetails WHERE rollno={}".format(rollno)
    out = ibm_db.exec_immediate(conn, sql)
    print('Number of affected rows : ', ibm_db.num_rows(out), "n")
try:
    conn=ibm_db.connect("DATABASE=bludb;HOSTNAME=0c77d6f2-5da9-48a9-81f8-
86b520b87518.bs2io90l08kqb1od8lcg.databases.appdomain.cloud;PORT=31198;SECU
RITY=SSL;SSLServerCertifi
cate=DigiCertGlobalRootCA.crt;PROTOCOL=TCPIP;UID=bjn03696;PWD=ef96tLJX2VjzaC
PX;","", "")    print("Db connected")
except:
    print("Error")

from flask import Flask,render_template,request,url_for,sessionapp=Flask( _name_
)
@app.route("/")

```

```

@app.route("/login",methods=['POST','GET']) def
login():
    if request.method=="POST":
        printTableData(conn)
        username=request.form['username']
        password=request.form['password'] try:
            if dictionary[username] == password and username in dictionary:return
                "Logged in successfully"
        except:
            return "Invalid username or password" return
            render_template('loginpage.html')

@app.route("/register",methods=['POST','GET']) def
register():
    if request.method=="POST":
        rollno = request.form['rollno'] username =
        request.form['username']email =
        request.form['email'] password =
        request.form['password']
        insertTableData(conn, rollno, username, email, password)
        #printTableData(conn)
        return render_template('loginpage.html')
    return render_template('registerpage.html')

#deleteTableData(conn,6)
#updateTableData(conn,5,'pradhee','pradhee@google.com','assignment') #printTableData(conn)
#print(dictionary)
if __name__=="_main_":app.run(debug=True)

```

Question 3 :

Connect python code to db2.

Solution :

```
import ibm_db
conn = ibm_db.connect("database","username","password")
```

Question 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 with username and password. If the user is valid show the welcome page.

Solution :

Forms.py

```
from flask_wtf import FlaskForm
from wtforms import StringField, PasswordField, SubmitField, BooleanField
from wtforms.validators import DataRequired, Length, Email, EqualTo

class RegistrationForm(FlaskForm):
    username = StringField('Username', validators=[DataRequired(),
Length(min=2, max=20)])
    email = StringField('Email', validators=[DataRequired(), Email()])
    password = PasswordField('Password', validators=[DataRequired()])
    confirm_password = PasswordField('Confirm Password', validators=[DataRequired(),
EqualTo('password')])
    submit = SubmitField('Sign Up')

class LoginForm(FlaskForm):
    email = StringField('Email', validators=[DataRequired(), Email()])
    password = PasswordField('Password', validators=[DataRequired()])
    remember = BooleanField('Remember Me')
    submit = SubmitField('Login')
```

Layout.html

```
<!DOCTYPE html>
<html lang="en">
<head>

<meta charset="utf-8">
<meta name="viewport" content="width=device-width, initial-scale=1">
<title>Home Page</title>

<!-- Bootstrap CSS -->
<link rel="stylesheet"
href="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0/css/bootstrap.min.css"
integrity="sha384-
Gn5384xqQ1aoWXA+058RXPxPg6fy4IWvTNh0E263XmFcJlSAwiGgFAW/dAiS6JXm"
crossorigin="anonymous">

<link rel="stylesheet" type="text/css" href="{{ url_for('static', filename='main.css') }}">

{% if title %}
<title>{{ title }}</title>
{% else %}
<title>Home page</title>
{% endif %}

</head>
<body>
<header class="site-header">
<nav class="navbar navbar-expand-md navbar-dark bg-steel fixed-top">
<div class="container">
<a class="navbar-brand mr-4" href="/">Nutrition Assistant Application</a>
<button class="navbar-toggler" type="button" data-toggle="collapse" data-target="#navbarToggle" aria-
controls="navbarToggle" aria-expanded="false" aria-
```

```

label="Toggle navigation">
    <span class="navbar-toggler-icon"></span>
</button>
<div class="collapse navbar-collapse" id="navbarToggle">
    <div class="navbar-nav mr-auto">
        <a class="nav-item nav-link" href="/">Home</a>
        <a class="nav-item nav-link" href="/about">About</a>
    </div>
    <!-- Navbar Right Side -->
    <div class="navbar-nav">
        <a class="nav-item nav-link" href="/login">Login</a>
        <a class="nav-item nav-link" href="/register">Register</a>
    </div>
</div>
</div>
</nav>
</header>
<main role="main" class="container">
    <div class="row">
        <div class="col-md-8">
            {% block content %} {% endblock %}
        </div>
        <div class="col-md-4">
            <div class="content-section">
                <p class="text-muted">Here you Welcome! To our Nutrition Assistant We are
                    here to help you to maintain your physic.</p>
            </div>
        </div>
    </div>
</main>
<!-- Optional JavaScript -->
<!-- jQuery first, then Popper.js, then Bootstrap JS -->
<script src="https://code.jquery.com/jquery-3.2.1.slim.min.js"
integrity="sha384-

```

```

KJ3o2DKtlkvYIK3UENzmM7KCKRr/rE9/Qpg6aAZGJwFDMVNA/
GpGFF93hXpG5KkN" crossorigin="anonymous"></script>
    <script src="https://cdnjs.cloudflare.com/ajax/libs/popper.js/1.12.9/umd/popper.min.js"
integrity="sha384-
ApNbgh9B+Y1QKtv3Rn7W3mgPxhU9K/ScQsAP7hUibX39j7fakFPskvXusvfa0b4Q"
crossorigin="anonymous"></script>
    <script
src="https://maxcdn.bootstrapcdn.com/bootstrap/4.0.0/js/bootstrap.min.js"
integrity="sha384-
JZR6Spejh4U02d8jOt6vLEHfe/JQGiRRSQQxSfFWpi1MquVdAyjUar5+76PVCmYl"
crossorigin="anonymous"></script>
</body>
</html>

```

Login.html

```

{% extends "layout.html" %}
{% block content %}
<div class="content-section">
    <form method="POST" action="">
        {{ form.hidden_tag() }}
        <fieldset class="form-group">
            <legend class="border-bottom mb-4">Log In</legend>
            <div class="form-group">
                {{ form.email.label(class="form-control-label") }}
                {% if form.email.errors %}
                    {{ form.email(class="form-control form-control-lg is-invalid") }}
                    <div class="invalid-feedback">
                        {% for error in form.email.errors %}
                            <span>{{ error }}</span>
                        {% endfor %}
                    </div>
                {% else %}
                    {{ form.email(class="form-control form-control-lg") }}

```

```

        {% endif %}
    </div>
    <div class="form-group">
        {{ form.password.label(class="form-control-label") }}
        {% if form.password.errors %}
            {{ form.password(class="form-control form-
control-lg is-invalid") }}          <div class="invalid-
feedback">

                {% for error in form.password.errors %}
                    <span>{{ error }}</span>
                {% endfor %}
            </div>
        {% else %}
            {{ form.password(class="form-
control form-control-lg") }}          {% endif
%}

    </div>
    <div class="form-check">
        {{ form.remember(class="form-check-input") }}
        {{ form.remember.label(class="form-check-label") }}
    </div>
</fieldset>
    <div class="form-group">
        {{ form.submit(class="btn btn-outline-info") }}
    </div>
    <small class="text-muted ml-2">
        <a href="#">Forgot Password?</a>
    </small>
</form>
</div>
<div class="border-top pt-3">
    <small class="text-muted">
        Need An Account? <a class="ml-2" href="{{ url_for('register')

```



```
}}">Sign Up Now</a>    </small>
```

```
</div>
```

```
{% endblock content %}
```

Main.py

```
from flask import Flask,
render_template, url_for, flash, redirect
from Forms import RegistrationForm,
LoginForm

app = Flask(_name_)
app.config['SECRET_KEY'] =
'5791628bb0b13ce0c676dfde280ba245' posts =
[
    {
        'title': 'Blog post I',
        'Author': 'Agenis',
        'date_posted': 'sep 25,2022','content':
        '1st post'
    },

    {
        'title': 'Blog post II',
        'Author': 'Aved ',
        'date_posted': 'sep 26,2022','content':
        '2st post'
    }
]
```

```
@app.route("/")
```

```
def home():
```

```
    return render_template('home.html', title='Home')
```

```
@app.route("/about")
```

```
def about():
```

```

return render_template('about.html', title='about')

@app.route("/register", methods=['GET', 'POST'])def
register():
    form = RegistrationForm()
    if form.validate_on_submit():
        flash(f'Account created for
{form.username.data}!', 'success') return
redirect(url_for('home'))

    return render_template('register.html', title='Register', form=form)@app.route("/login",
methods=['GET', 'POST'])
def login():
    form = LoginForm()
    if form.validate_on_submit():
        if form.email.data == 'admin@blog.com' and
form.password.data == 'password':            flash('You have been
logged in!', 'success')

        return redirect(url_for('home'))
    else:
        flash('Login Unsuccessful. Please check username and
password', 'danger')            return
render_template('login.html', title='Login', form=form)

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

```

Register.html

```

{% extends "layout.html" %}
{% block content %}
<div class="content-section">
    <form method="POST" action="">
        {{ form.hidden_tag() }}

```

```

    <fieldset class="form-group">
      <legend class="border-bottom mb-
4">Join Today</legend>      <div
class="form-group">
        {{ form.username.label(class="form-control-label") }}

        {% if form.username.errors %}
          {{ form.username(class="form-control form-
control-lg is-invalid") }}      <div class="invalid-
feedback">

            {% for error in form.username.errors %}
              <span>{{ error }}</span>
            {% endfor %}
          </div>
        {% else %}
          {{ form.username(class="form-
control form-control-lg") }}      {% endif
%}
      </div>
    <div class="form-group">
      {{ form.email.label(class="form-control-label") }}
      {% if form.email.errors %}
        {{ form.email(class="form-control form-
control-lg is-invalid") }}      <div
class="invalid-feedback">

          {% for error in form.email.errors %}
            <span>{{ error }}</span>
          {% endfor %}
        </div>
      {% else %}
        {{ form.email(class="form-control form-control-lg") }}
      {% endif %}
    </div>

```

```

<div class="form-group">
  {{ form.password.label(class="form-control-label") }}
  {% if form.password.errors %}
    {{ form.password(class="form-control form-
control-lg is-invalid") }}      <div class="invalid-
feedback">

      {% for error in form.password.errors %}
        <span>{{ error }}</span>
      {% endfor %}
    </div>
  {% else %}
    {{ form.password(class="form-
control form-control-lg") }}      {% endif
%}

</div>
<div class="form-group">
  {{
form.confirm_password.label(class="form-
control-label") }}      {% if
form.confirm_password.errors %}
    {{ form.confirm_password(class="form-control form-
control-lg is-invalid") }}      <div class="invalid-feedback">
      {% for error in form.confirm_password.errors %}
        <span>{{ error }}</span>
      {% endfor %}
    </div>
  {% else %}
    {{ form.confirm_password(class="form-
control form-control-lg") }}      {% endif %}
  </div>
</fieldset>
<div class="form-group">
  {{ form.submit(class="btn btn-outline-info") }}
</div>

```

</form>

</div>

<div class="border-top pt-3">

<small class="text-muted">

Already Have An Account? <a class="ml-2" href="{ {
url_for('login') }}">Sign In </small>

</div>

{% endblock content %}

