FLASK

LAB-11

Setup a virtual environment for flask(in *VS CODE*):

Step1: Open VS code,then Open folder Menu.
Step2: In VS code, Open Desktop create new folder name like ……..
Step3: Open Terminal in VS Code.
Click Manage--> Click Command palette-->
Then type terminal.
once terminal opened change into Command prompt.
Step4: Create Virtual environment.
Step5: Install virtual environment.
>pip install virtualenv
Step6:
> python -m virtualenv env……
Step7: activate Virtual environment.
> env\Scripts\activate.bat
Step8: checking already installed packages.
(env) > pip list
step9: install flask in our Virtual environment.
(env) > pip install flask
step10:checking already installed packages.
(env) > pip list
step11: freeze the requirements or dependences
(env) >pip freeze>requirements.txt

(env) >flask run
(or)
(env) **>flask --app app.py --debug run**

Example:

app.py

```
from flask import Flask
app=Flask(__name__)
@app.route('/')
def helloworld():
    return "CSE-AIML-C"
if __name__=='_main_':
 app.run()
```

LAB-12

Using HTML templates create Web App with different menu items

ORDER.HTML

```
<html>
<head>
<title> APP development lab </title>
</head>
<body bgcolor=”red”>
<hr> CMRIT Departments <br>
<ol>
<li> CSE </li>
<li> AIML</li>
<li> DS </li>
<li>CIVIL</li>
<li>MECH</li>
<li>ECE</li>
<hr> COURSES <br>
<ul>
DBMS
APP
JAVA
Python
Mathematics
</ul>
</body>
</html>
```

app.py

```
from flask import Flask, request, render_template
import pickle
app=Flask(__name__)
@app.route('/')
def hello_world():
 return render_template("order.html")
if __name__=='_main_':
 app.run()
```

LAB-13

LOGIN.HTML

```
<html>
<body>
<form action = "http://localhost:5000/login" method = "post">
<p>Enter Name:</p>
<p><input type = "text" name = "nm" /></p>
<p><input type = "submit" value = "submit" /></p>
</form>
</body>
</html>
```

app.py

```
from flask import Flask, redirect, url_for, request
app = Flask(__name__)
@app.route('/success/<name>')
def success(name):
   return 'welcome %s' % name
@app.route('/login',methods = ['POST', 'GET'])
def login():
   if request.method == 'POST':
      user = request.form['nm']
      return redirect(url_for('success',name = user))
   else:
      user = request.args.get('nm')
      return redirect(url_for('success',name = user))
if __name__ == '__main__':
app.run(debug = True)
```

LAB-14

LOGIN.HTML

```
<html>
<body bgcolor="orange">
<form action="/form_login" method="post">
        <h2> Username: <br>
        <input type="text" name='Username'>
        <h2> Password: <br>
        <input type=”text” name='Password'>
        <br>
        <input type="Submit "value="Login">
    </form>
    <h1> {{info}}</h1>
</body>
</html>
```

home.HTML

```
<html>
<body bgcolor="red">
<br>
<h1 align="center"> Welcome {{name} </h1>
</body>
</html>
```

app.py

```
from flask import Flask, request,render_template
import pickle
app=Flask(__name__)
@app.route('/')
def hello_world():
    return render_template("login.html")
database={'cmrit':'123','mallareddy':'abc','hyd':'abc'}
@app.route('/form_login',methods=['POST','GET'])
def login():
    name1=request.form['Username']
    ,mpwd=request.form['Password']
    if name1 not in database:
     return render_template('login.html',info='Invaild User')
    else:
       if database[name1]!=pwd:
        return render_template('login.html',info='Invaild Password')
       else:
        return render_template('home.html',name=name1)
    if __name__=='_main_':
        app.run()
```

LAB-15

app.py

```
from flask import Flask, request, render_template
app = Flask(__name__)
def load_questions():
    questions = {}
    with open('python_questions.txt', 'r') as file:
        lines = file.readlines()
        for line in lines:
            question, answer = line.strip().split('|||')
            questions[question.strip()] = answer.strip()
    return questions
python_questions = load_questions()
@app.route('/')
def chatbot_page():
    return render_template('chatbot.html')
@app.route('/ask', methods=['POST'])
def answer_question():
    user_question = request.form.get('user_question')
    if user_question in python_questions:
        answer = python_questions[user_question]
    else:
        answer = "Sorry, I don't know the answer to that question."
    return render_template('chatbot.html', user_question=user_question, answer=answer)
if __name__ == '__main__':
    app.run(debug=True)
```

chatbot.html

```
<html>
<body>
        <h1> Python Chatbot </h1>
        <form action="/ask" method="post">
            <input type="text" name="user_question">
            <input type="submit" name="submit">
        </form>
  {% if user_question %}
        <h3>Your Question:</h3>
        <p>{{ user_question }}</p>
        <h3>Answer:</h3>
        <p>{{ answer }}</p>
        {% endif %}
</body>
</html>
```

python_questions.txt

What is Python? ||| Python is a high-level programming language.