

EX01 Developing a Simple Webserver

Date:

13/03/2024

AIM:

To develop a simple webserver to serve html pages.

DESIGN STEPS:

Step 1:

HTML content creation.

Step 2:

Design of webserver workflow.

Step 3:

Implementation using Python code.

Step 4:

Serving the HTML pages.

Step 5:

Testing the webserver.

PROGRAM:



```
from http.server import HTTPServer, BaseHTTPRequestHandler
content="""
<!DOCTYPE html>
<html>
<head>
<title>top software Industries</title>
</head>
<body>
<table border="2" cellspacing="10" cellpadding="6">
<caption>Top 5 Revenue Generating Software companies</caption>
<tr>
<th>s.no</th>
<th>companie</th>
<th>Revenue</th>
</tr>
<tr>
<th>1</th>
<th>Microsoft</th>
<th>65 billion</th>
</tr>
<tr>
<th>2</th>
<th>Oracle</th>
<th>29.6 billion</th>
</tr>
<tr>
<th>3</th>
<th>IBMC</th>
<th>29.1 billion</th>
</tr>
<tr>
<th>4</th>
<th>SAP</th>
<th>6.4 billion</th>
</tr>
<tr>
<th>5</th>
<th>Symentec</th>
<th>5.6 billion</th>
</tr>
</body>
</html>
"""
class myhandler(BaseHTTPRequestHandler):
    def do_GET(self):
        print("request received")
        self.send_response(200)
        self.send_header('content-type', 'text/html; charset=utf-8')
        self.end_headers()
        self.wfile.write(content.encode())
server_address=('',8000)
httpd=HTTPServer(server_address,myhandler)
print("My webserver is running...")
httpd.serve_forever()
```

OUTPUT:

The screenshot shows a Visual Studio Code window with a terminal open. The terminal output shows the following commands and their results:

```
PS C:\Users\admin> env\scripts\activate
(env) PS C:\Users\admin> git clone https://github.com/JothikrishnaaVengatesan/simplewebserver.git
Cloning into 'simplewebserver'...
remote: Enumerating objects: 39, done.
remote: Counting objects: 100% (18/18), done.
remote: Compressing objects: 100% (12/12), done.
remote: Total 39 (delta 6), reused 6 (delta 6), pack-reused 21
Receiving objects: 100% (39/39), 8.45 KiB | 8.45 MiB/s, done.
Resolving deltas: 100% (6/6), done.
(env) PS C:\Users\admin> code .
(env) PS C:\Users\admin\simplewebserver> code .
(env) PS C:\Users\admin\simplewebserver> python web.py
c:\Users\admin\AppData\Local\Microsoft\WindowsApps\PythonSoftwareFoundation.Python.3.12_qbz5n2kfra8p0\python.exe: can't open file 'C:\\Users\\admin\\simplewebserver\\web.py': [Errno 2] No such file or directory
(env) PS C:\Users\admin\simplewebserver> python web.py
My webserver is running...
request received
127.0.0.1 - - [13/Mar/2024 06:17:01] "GET / HTTP/1.1" 200 -
request received
127.0.0.1 - - [13/Mar/2024 06:17:01] "GET /favicon.ico HTTP/1.1" 200 -
```

The screenshot shows a web browser window displaying a table titled "Top 5 Revenue Generating Software companies". The table has three columns: "s.no", "company", and "Revenue". The data is as follows:

s.no	company	Revenue
1	Microsoft	65 billion
2	Oracle	29.6 billion
3	IBMC	29.1 billion
4	SAP	6.4 billion
5	Symantec	5.6 billion

RESULT:

The program for implementing simple webserver is executed successfully.