Pune Institute of Computer Technology
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Department of Information Technology

Class: TE(IT)   Subject: LP-II (WADL)

Assignment No.: 3a   A.Y.: 2023-24   Date:

Title: Static Web Server

Problem Statement:
Create a Node JS application which serves a static web site.

Objective:
Use necessary modules like http, url, fs, path etc. for creation of server and file operations on server side.

Theory:
Here we will build a static file web server which will list out all the files in the directory and on clicking the file name, it displays the file content.

Steps for creating a static file server is as follows -

Step 1 - Importing necessary modules, and defining Multipurpose Internet Mail Extensions which helps browser to understand the type of file that is being sent.

Step 2 - Creating a server at the port specified.

Step 3 - We will respond the URL "/" to list all the files in the directory. We will limit this article to the current working directory only. Add the below code to the server's function call.

Step 4 - Preprocessing the requested file pathname to avoid directory traversal (like http://localhost:5001/../fileOutOfContext.txt by replacing '../' with ''.

Step 5 - Finally, check whether the file exists. If exists then send the with the proper header 'Content-type' having value as per the file extensions mapped with the MIME type above. Else if not exist then send File not Found! with 404 status code.

Conclusion!

Thus, we have used http, fs, url, path node js modules to create static file web server.