**Ex:7 - Computer Network Lab**

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***FTP***

**server.java**

import com.sun.net.httpserver.HttpServer;

import com.sun.net.httpserver.HttpHandler;

import com.sun.net.httpserver.HttpExchange;

import java.io.\*;

import java.net.InetSocketAddress;

public class SimpleHttpFtpServer {

private static final int PORT = 8080; // HTTP port

public static void main(String[] args) throws IOException {

HttpServer server = HttpServer.create(new InetSocketAddress(PORT), 0);

server.createContext("/upload", new UploadHandler());

server.createContext("/download", new DownloadHandler());

server.setExecutor(null); // creates a default executor

System.out.println("HTTP FTP Server is listening on port " + PORT);

server.start();

}

static class UploadHandler implements HttpHandler {

@Override

public void handle(HttpExchange exchange) throws IOException {

if ("POST".equals(exchange.getRequestMethod())) {

InputStream is = exchange.getRequestBody();

String filename = "uploaded\_file"; // Save uploaded files with this name

try (FileOutputStream fos = new FileOutputStream(filename)) {

byte[] buffer = new byte[4096];

int bytesRead;

while ((bytesRead = is.read(buffer)) != -1) {

fos.write(buffer, 0, bytesRead);

}

}

String response = "File uploaded successfully: " + filename;

exchange.sendResponseHeaders(200, response.length());

OutputStream os = exchange.getResponseBody();

os.write(response.getBytes());

os.close();

} else {

String response = "Only POST method is supported for uploads.";

exchange.sendResponseHeaders(405, response.length());

OutputStream os = exchange.getResponseBody();

os.write(response.getBytes());

os.close();

}

}

}

static class DownloadHandler implements HttpHandler {

@Override

public void handle(HttpExchange exchange) throws IOException {

String filename = "uploaded\_file"; // Change this if needed

File file = new File(filename);

if (!file.exists()) {

String response = "File not found: " + filename;

exchange.sendResponseHeaders(404, response.length());

OutputStream os = exchange.getResponseBody();

os.write(response.getBytes());

os.close();

return;

}

exchange.getResponseHeaders().add("Content-Disposition", "attachment; filename=" + filename);

exchange.sendResponseHeaders(200, file.length());

try (FileInputStream fis = new FileInputStream(file);

OutputStream os = exchange.getResponseBody()) {

byte[] buffer = new byte[4096];

int bytesRead;

while ((bytesRead = fis.read(buffer)) != -1) {

os.write(buffer, 0, bytesRead);

}

}

}

}

}

**HTML:**

<!DOCTYPE html>

<html lang="en">

<head>

<meta charset="UTF-8">

<meta name="viewport" content="width=device-width, initial-scale=1.0">

<title>Simple FTP Upload</title>

<style>

body {

font-family: Arial, sans-serif;

background-color: #f4f4f9;

margin: 0;

padding: 0;

display: flex;

flex-direction: column;

align-items: center;

justify-content: center;

height: 100vh;

}

h1 {

color: #333;

}

form {

background: #fff;

padding: 20px;

border-radius: 8px;

box-shadow: 0 0 10px rgba(0, 0, 0, 0.1);

margin: 20px 0;

width: 300px;

text-align: center;

}

input[type="file"] {

margin: 10px 0;

}

input[type="submit"] {

background-color: #4CAF50;

color: white;

border: none;

padding: 10px 20px;

border-radius: 5px;

cursor: pointer;

transition: background-color 0.3s ease;

}

input[type="submit"]:hover {

background-color: #45a049;

}

</style>

</head>

<body>

<h1>Upload File</h1>

<form action="http://localhost:8080/upload" method="post" enctype="multipart/form-data">

<input type="file" name="file" required>

<input type="submit" value="Upload">

</form>

<h1>Download File</h1>

<form action="http://localhost:8080/download" method="get">

<input type="submit" value="Download">

</form>

</body>

</html>

Output:



