

Simple File Upload (Server)

Description

In this problem, you are required to implement and test a simple file upload server in Python. The server listens for incoming connections, accepts file upload requests from clients, receives files, and saves them to a specified directory. The server code has been provided, but it needs to be completed and thoroughly tested.

Method

The server receives data from clients over a TCP connection. Each file upload request consists of a command to upload, followed by a header containing the file name and file size, and then the file content itself. The header and content are separated by a double CRLF ("\r\n\r\n"). The server should save the uploaded file to the specified directory and send a confirmation message back to the client. Please check the format of the header in the given unit test.

Expected server output

Testing parse header ...

test attribute passed: testfile.txt is equal to testfile.txt

test attribute passed: 1024 is equal to 1024

test attribute passed: Content is equal to Content

Testing receive file ...

[+] File /fakepath/testfile.txt received successfully!

sendall called with: call(b'File received successfully')

Testing start ...

[+] Listening from 127.0.0.1:65432

upload testfile.txt