

Report Briefing Advanced Requirements

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The program implements the following three advanced requirements:

1. Returning of binary images (GIF, JPEG and PNG): If the requested file is an image (checked using its extension), the file content is converted into an array of bytes and then returned to the client. The return action is simulated by printing the array on to the standard output. Additionally, when requested from the web browser, the image is displayed.
2. Logging: A separate log file is created for each day within the *logs/* directory with the filename in the format *dd_MM_YYYY*. The logs contain the timestamp, the requested information (i.e., the method, filename and the protocol), the response code and the file size. For example, a log made for the "GET" request of the file "beer.jpg" looks like: `[07/11/2019:13:22:55:0185 GMT] "GET /beer.jpg HTTP/1.1" 200 24552`
3. Supporting the additional DELETE method: The program also supports the "DELETE" request type in addition to "HEAD" and "GET". On executing a DELETE, the file is first checked for writable permissions. If writable, the file provided by the user is removed and both the logs as well as the response headers reflect empty bodies (i.e. length of body = 0). Otherwise, the server returns a header with code 403 saying that access to the file is forbidden. The method can be tested from terminal by running (for file *index.html*): `"curl -s -I -X DELETE localhost:12345/index.html"`