



**Computer Engineering Department
Computer Networks 2 (10636455)**

**HTTP Project
Fall 2021/2022**

Description:

You are asked to develop a Java Web Client and one/or multiple Server-side applications (PHP server or Servlet) to upload and download Images with Names and Descriptions

The assignment has two parts:

Part 1. You will develop a Java Client application that connects to servers by using HTTP protocol.

Part 2. You will develop one/or two server-side applications by using different programming languages

(PHP Server and/or Servlet). Both applications will have the same functionalities, which is receiving HTTP requests from the Java client and responding with corresponding HTTP responses.

You are asked to implement one of them Either Java or PHP. Extra credit if you implement Both

Part 1 (Java Client):

In this part, you are required to develop a Java application to Upload and down load images to the Server and display All the Images along with Names and Descriptions.

The following functionalities should be available:

1. The Application should Allow the user to upload an Images with the Description Text for the Image and its Name. You can do that in One HTTP request or two.
The Server side should store the names and description of the Images. Limit the Description to maximum of 500 characters. And limit the Number of Images to a maximum of 12. At the Server-side Images must NOT be stored in the database, just store the name of the Image and Description. The actual Image should be stored in a folder at the server.
2. The Application should allow the user to upload a new image. The new image should be added by the server and also show at the Client. Make sure it is Shown at the client if and only if the upload succeeds.
3. Allow the Application to upload a new Image, Delete an Exiting Image. Delete the Image if the deletion succeeds at the server side.

4. Allow the Application to update(change) the description of an Image. Make sure you get a confirmation for the update from the server.
5. Develop a GUI for the java client that has drop-boxes, text fields, buttons to interact with the server.
6. Your application must display all images on your application that are currently available at the server with the description below the image and a Button/or check box to delete or update the Image.
7. When your Application Starts, it should display the Images by loading them from the server.
8. You can/should scale the Images to fit nicely on the Client. You can also provide a button to should the Image on a Separate window with larger dimensions.

Part 2 (Server Side):

In this part, you are required to develop 1 or 2 servers (PHP Or/and Servlet) with identical functionalities. The server receives HTTP requests from the java client application and responds with corresponding responses.

- The servers need a database to store information required by the Application. You need one database (use MySQL) for both.
- The Server side should store the names and description of the Images. Limit the Description to maximum of 500 characters. And limit the Number of Images to a maximum. At the Server-side Images must NOT be stored in the database, just store the name of the Image and Description. The actual Image should be stored in a folder at the server.
- You can use more than one php page or servlet if you need. You do not have to use sessions

Submission Notes:

- You can work either individually or with a partner. Groups of three members or more are not allowed unless I agree on that.
- You have to submit all your source files on Moodle (this includes, database file imported from MySQL, Java projects and PHP server files)
- A video demo should be submitted to show the implemented functionalities. The video should be uploaded into Google drive (or any similar cloud storage service of your choice) and a sharable link should be submitted to Moodle. You are advised to screen-record your demo by using ZOOM because it produced high-quality videos with acceptable file size.