CS478 Assignment6

1. **Please create a webserver and a client for ML inference system.**

**Please use multiclass\_image\_classification.ipynb for training your CNN. Please use training and test dataset images for model training and validation and testing purposes.**

1. After training your model, you shall save the trained model as a file (model.h5); Download it and place it in the directory where your server code is placed.
2. Your system shall have a web server which starts with ./server.sh command. It shall respond to the client.sh client command.

server (display server name and port number)

1. You system shall have a client.sh script.

client - gets information from your server and prints. The information include the project name, your name, and current date/time.

e.g.,

The client command:

**client**

A sample output:

**Rock, Paper and Scissors image classification server.**

**Gheni Abla**

**May 1st, 2021**

client with an image file name as a parameter – sends the image file to the server and displays the classified image name.

e.g.,

The client command:

**client myhand.jpg**

A sample output:

Gheni Abla

**Rock, Paper and Scissors image classification server.**

**Gheni Abla**

**May 1st, 2021**

**The image you’ve submitted is classified as a: paper**

1. **Grade:**

Total: 14

1. **Submission**
2. Create folder and name it <LastName>\_Assignment6
3. Pleace server and client files in this <LastName>\_Assignment6 folder
4. Create <LastName>\_README.docx file. It shall have 3 sections:
   1. ML Web Server Description

-Just two-three sentences about what this server does, used data sets, model, web server routes etc.

* 1. Testing the Web Server and Clients
     + How to test the server and its clients
  2. Screen Captures of Test Run
     + Place at least **two screen capture images (running client and client <imagefile>)** while you are running the web server and its client.
     + Screen capture images shall clearly show the client and server outputs.

1. All codes and image files shall be placed the <LastName>\_Assignment6
2. Compress and create .gzip file named <LastName>\_Assignment6.zip and upload it to Assignment6 of course’s Assignment section.