Lesson 18 – Server Files & Templates

**Goals of the lesson:**

* Understand how server responds with HTML files.
* Understand how server process requests to send files.
* Understand how can a server modify an HTML template.

**Task 1:**

* Serve HTML files via the Flask web server.

Instructions:

1. If Flask is not installed, run pip install flask from the command line.
   * If the system fails to run the installation, follow the instructions provided [here](https://appuals.com/fix-pip-is-not-recognized-as-an-internal-or-external-command/).
2. **Download** an archive **server.zip** from the **NAS**.
3. Extract the archive to get the script **files\_example.py** and additional auxiliary files.
4. Open the script in any text editor (such as Notepad++) and **examine the code**.
5. Examine the **.html webpages** located in the **pages** folder.
6. **Start the webserver** using the command python files\_example.py
   * If the system fails to run the script, follow the instructions provided [here](https://www.pythoncentral.io/add-python-to-path-python-is-not-recognized-as-an-internal-or-external-command/).
7. Open an **index** webpage in your **browser** at <http://localhost:80>
8. Open **page1.html** and **page2.html** via the server.
   * Compare the file **path** on the **server** and the **URL** as seen from the **client**.

**Task 2:**

* Serve files via the Flask server.

Instructions:

1. Examine **audio** and **video** files located in the **files** folder.
2. **Start the webserver** using the command python files\_example.py
3. Open your **browser** at <http://localhost:80>/page2
4. Open both **audio** and **image** files.
5. Try to **add** some [video file](https://www.onlinevideoconverter.com/youtube-converter) to the folder containing the files.
6. Restart the server, open and **view the video** in your browser.

**Task 3:**

* Modify webpage template during server runtime.

Instructions:

1. Examine the template **pages/pacman.html**.
2. Examine the function **game()** inside the script **files\_example.py** at lines 21 to 24.
   * What is the purpose of this code? What is being replaced?
3. **Start the webserver** using the command python files\_example.py
4. Open your **browser** at <http://localhost:80>/pacman
5. Fill in the **login** form, submit it and display the resulting page. Have fun! :)