Submission Guide for Assignment 5

DSP Lab (ECE 4163 / ECE 6183)

2021

Files to Submit

- **Demo 11 Exercise 3**

  The coefficients a and b of the Butterworth band-pass filter can be obtained from `wave_filter_python.py` in the Demo 06 folder.

  1. Your Python file named `demo11ex3.py`.
  2. The output wav file `demo11ex3.wav`.
  3. (If needed) myfunctions.py.

- **Demo 12 Exercise 1**

  Amendment: We will be using Google Drive instead of NYU Stream to submit demo videos. Please see the next section for more details.

  Please **do not** upload your video in NYU Classes as an attachment of your submission.

  1. Your Python file named `demo12ex1.py`.
  2. The Google Drive link to your video. Please note that there is a separate assignment called **Demo 12-Ex 1-Video** for you to submit your link.
  3. (If needed) myfunctions.py.

- **Demo 12 Exercise 4**

  1. Your Python file named `demo12ex4.py`.
  2. The output wav file `demo12ex4.wav`.
  3. A comment `txt / pdf` file. In this file, you should explain how you verify that the output signal of the new version (using block processing) is the same.
  4. Any (MATLAB/Python) code you wrote that is used to verify the correctness of the output signal.
  5. (If needed) myfunctions.py.

Submission of Demo Video

Recording

Make a screen recording video demonstrating your solution to [Demo12 - Ex1] by introducing yourself with the AM effect. Your video should not be more than 1 minute in duration.

For Windows Users

One option to make a screen recording is to use the Kaltura Capture Tool.

- `https://stream.nyu.edu/media/Using+the+Kaltura+Capture+Tool/1_eaqc8xuy/20734231`
- `https://nyu.service-now.com/sp?id=kb_article&sysparm_article=KB0017388&sys_kb_id=57bf6eaadb76ab84c59520854b961957&spa=1`

Note: Before you start recording, make sure that you select `settings -> Record System Audio -> Yes`.

For Mac/All Users

The Mac version of Kaltura Capture Tool does not allow users to record the system audio. Therefore, an alternative is to use Zoom for recording.

1. Register a personal Zoom account. (It seems that NYU accounts does not allow us to store the recordings locally.)
2. Start a meeting using the personal account. **mute** yourself.
3. Start recording, ignore the warning that the mic input may not be recorded.
4. Click on `Share Screen` on the meeting toolbar. Select `Share Sound` in the bottom-left corner of the share selection window.
5. Run your Python code.
6. Stop sharing, stop recording, then end the meeting. Now you should be able to get the video file you want :)

Submission

1. Upload your video to the Google Drive (using your NYU account).
2. Click on the video you just uploaded. Click `More Actions` button on the upper-right corner of the screen. Then, click the `Share` item. Then, click `Change link to New York University` at the bottom of the prompted window so that we can have access to your video. Finally, click `Done`.
3. Submit the **link** of your video to a separate assignment called `Demo12 - Ex1 - Video`.