CS x476 - Fall 2021
Project 2: Segmentation with CNNs

Setup:

1. Install Miniconda. (If you already have Miniconda installed, you can skip this step)
    - This tool is used to manage all the Python environments that we use for this class. You don't have to install any specific Python release on your machine (we will be installing/using Python 3.6 in the unified environment).
2. Create a conda environment using the appropriate terminal and command.
    - On **Windows**, open the installed "Anaconda Powershell Prompt".
    - On **MacOS** and **Linux**, you can open a terminal window.
    - Modify and run the command in the terminal, replace the "<OS>" in the following command with your OS (Linux, Mac, Windows): conda env create -f proj2_configs/proj2_env_<OS>.yml
3. Check if the proj2 environment has been created properly.
    - Run: conda env list
4. Activate the conda environment.
    - Run: conda activate cv_proj2
    - To deactivate it, run: conda deactivate
5. Install the project packages.
    - Run: pip install -e . inside the repo folder.
    - This should be unnecessary for Project 2 but is good practice when setting up a new conda environment that may have pip requirements.
    - On **Windows**, there are 3 extra packages that you need to install.
        i. Run: pip install segmentation-models-pytorch
        ii. Run: pip install -U albumentations
        iii. Run: pip install torchinfo
6. Open the jupyter notebook to work on the project.
    - Run: jupyter notebook ./proj2_code/proj2.ipynb

Testing & Submission:

1. Ensure that all sanity checks are passing
    - Run: pytest proj2_unit_tests **inside** the proj2_code folder.
2. Compress your code into a zip for submission
    - Run: python zip_submission.py --gt_username <your_gt_username>
3. Submit the zip to Gradescope for the code part
4. Submit report
    - Save the PowerPoint as PDF and submit the PDF to Gradescope for the report part

- **Align your submission page with the rubric on the Gradescope (Worth 2 Points)**