**STEPS for flask App deployment:**

The flask project is available on <https://github.com/CBIIT/nci-doe-data-sharing/tree/v1.9/flaskProject>

1. **FORCE CLUSTER SET UP**

* Currently, all the python inferencing scripts, and mapper classes are available on the Force Cluster in the home directory.
* Login with the service account on Force Cluster(batch.ncifcrf.gov):
* ncidoesvct2 for DEV/UAT
* ncidoesvcp2 for PROD
* Create a virtual environment for each of the models using the following command:
* python3 -m venv <env-name>
* Activate the virtual environment using the following command:
* *source <env-name>/bin/activate*
* Currently the following virtual environments are created:
* **mt-cnn**: for [Multitask-Convolutional-Neural-Network](https://github.com/CBIIT/NCI-DOE-Collab-Pilot3-Multitask-Convolutional-Neural-Network)
* **tc\_1**: for Tumor Classifier
* Once the required virtual environment is set up and activated, install the required dependencies using:
* *pip install -r <requirements text file name>*

**NOTE**: The requirements file is likely to change in future. For **mt-cnn**: use mt-cnn\_requirements.txt file. For **TC1 classifier**: use tc1\_requirements.txt file

* All the slurm output files can be viewed here.

1. **SET UP ON MODAC SERVER:**

* Login into MoDaC server and do:
* sudo su
* su ncidoesvct2
* The **gunicorn\_config** file is located on **/opt/flask** directory
* The scripts are located on **/opt/flask/inference** directory
* The **application.py** if the file which has flask API code.
* In this file, a batch job is submitted to the force cluster. The shell scripts are in **infer.sh** and **tc1\_infer.sh**
* gunicorn can be manually restarted using the command:
* sudo systemctl restart gunicorn
* The gunicorn logs are in the **messages** file on **var/log** directory.