**Flask APP Set UP on FRCE Cluster**

The flask project is available on https://github.com/CBIIT/nci-doe-data-sharing/tree/v1.10/flaskProject

1. **FRCE CLUSTER SET UP**

* Login with the service account on FRCE Cluster(batch.ncifcrf.gov):
* ncidoesvct2 for DEV/UAT
* ncidoesvcp2 for PROD
* Once logged in, all the common scripts can be found on home directory under folder ‘common’. The infer scripts and mapper classes can be found in each of the directories mt-cnn and tc\_1.
* Any helper classes are found under ‘helper’ directory in each of the virtual environment directory.
* 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

* The slurm scripts can be found under the virtual environment directory for each of the models.

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 FRCE cluster. The shell scripts are in mt\_cnn\_**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.