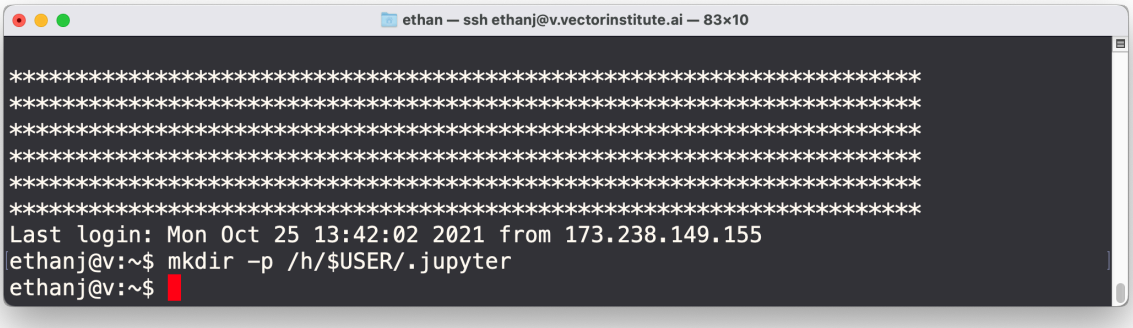
Cluster Access Instructions (With VPN)

Set up JupyterHub Environment

1. Open a **new** Terminal or PowerShell window, log in to your cluster account, and create a new directory for JupyterHub config and logs. JupyterHub will not load if this folder doesn't exist! **Note:** Replace **<username>** with your own Vector username.

```
ssh <username>@v.vectorinstitute.ai
mkdir -p $HOME/.jupyter
```

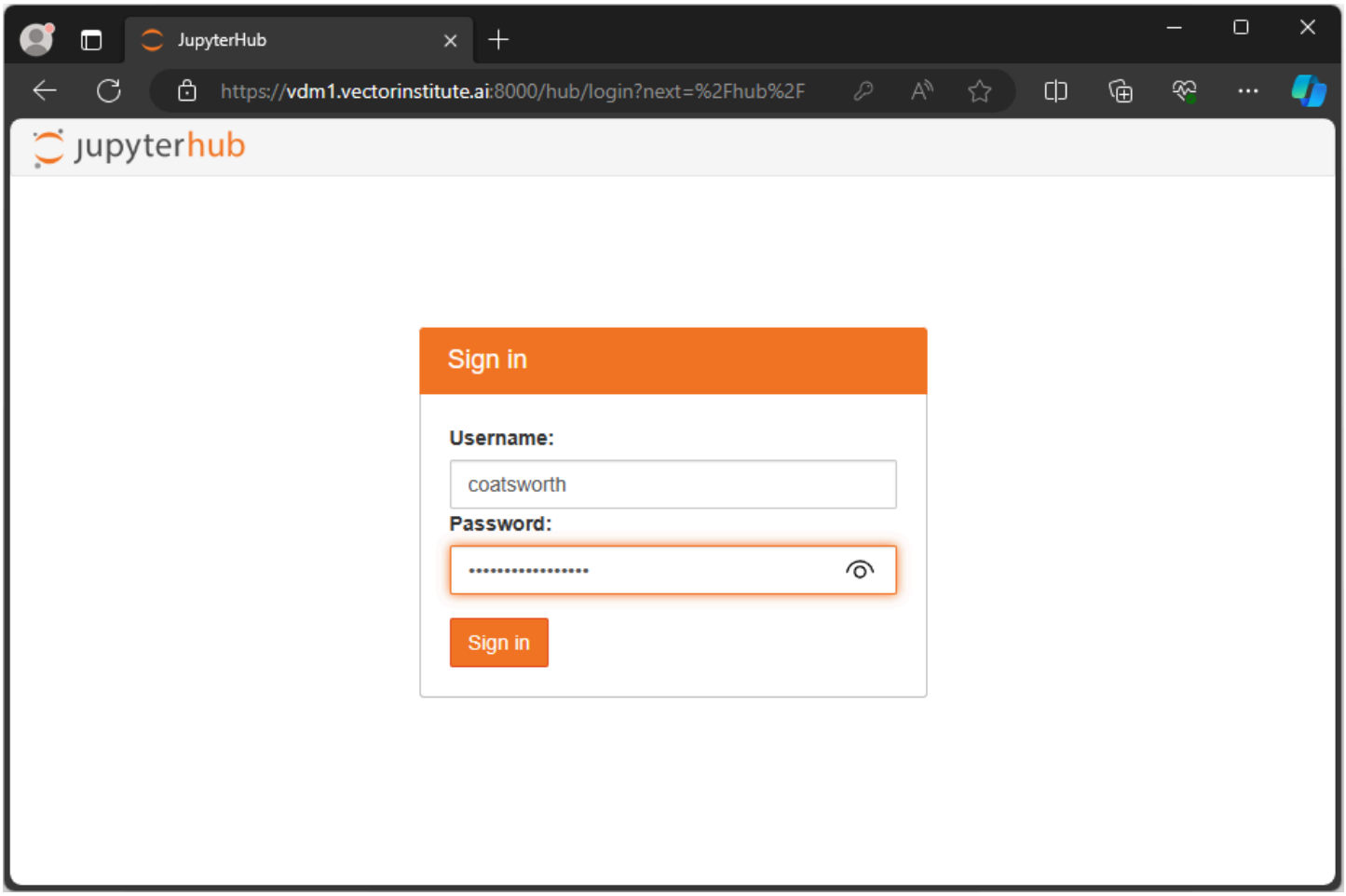


2. Install the Python kernels required to run the various notebooks in the GitHub repository.

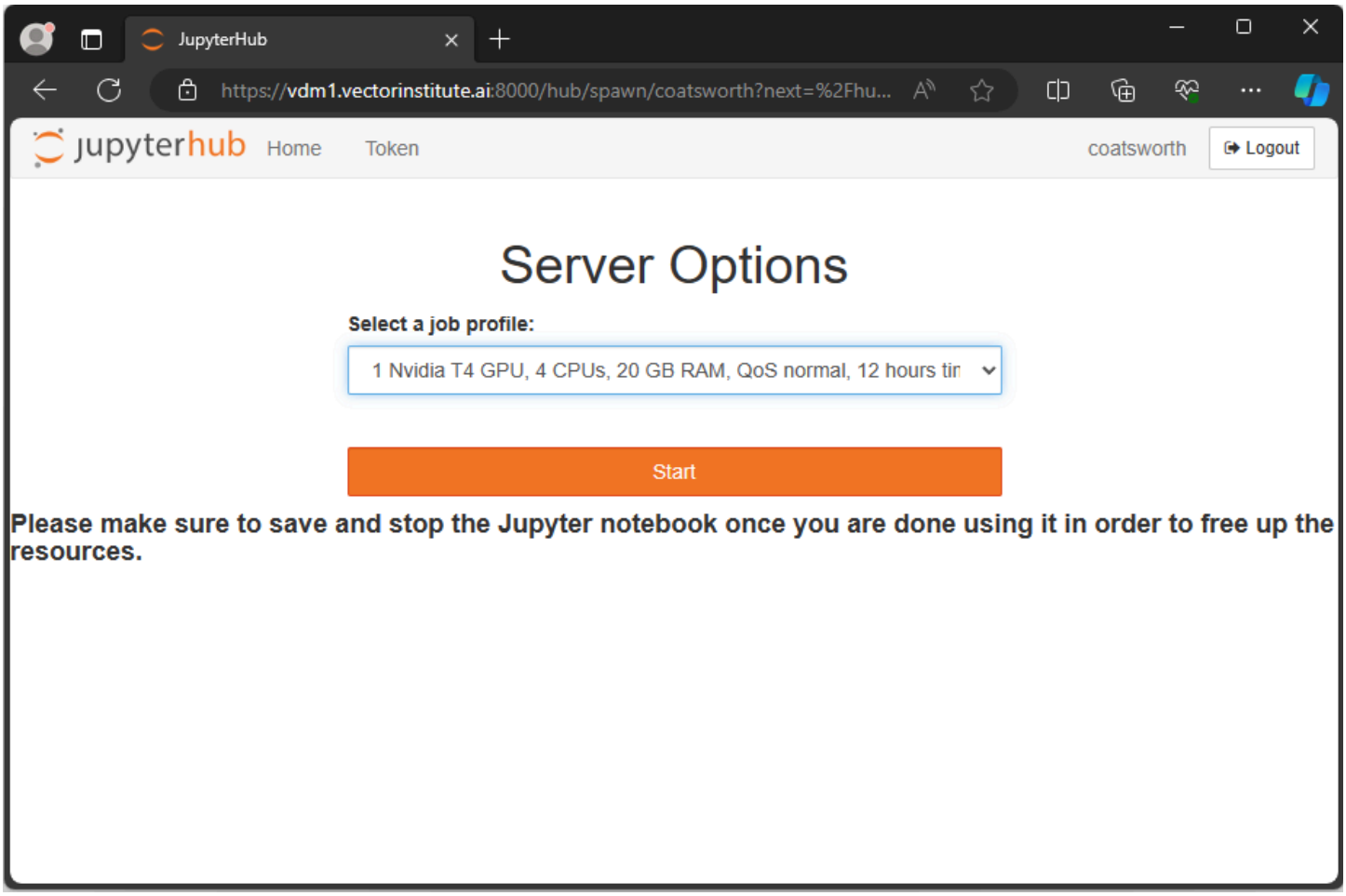
```
cd
/projects/diffusion_bootcamp/env/diffusion-models-bootcamp-OnOgsElf-py3.9


source bin/activate
ipython kernel install --user --name=diffusion_models
deactivate
```

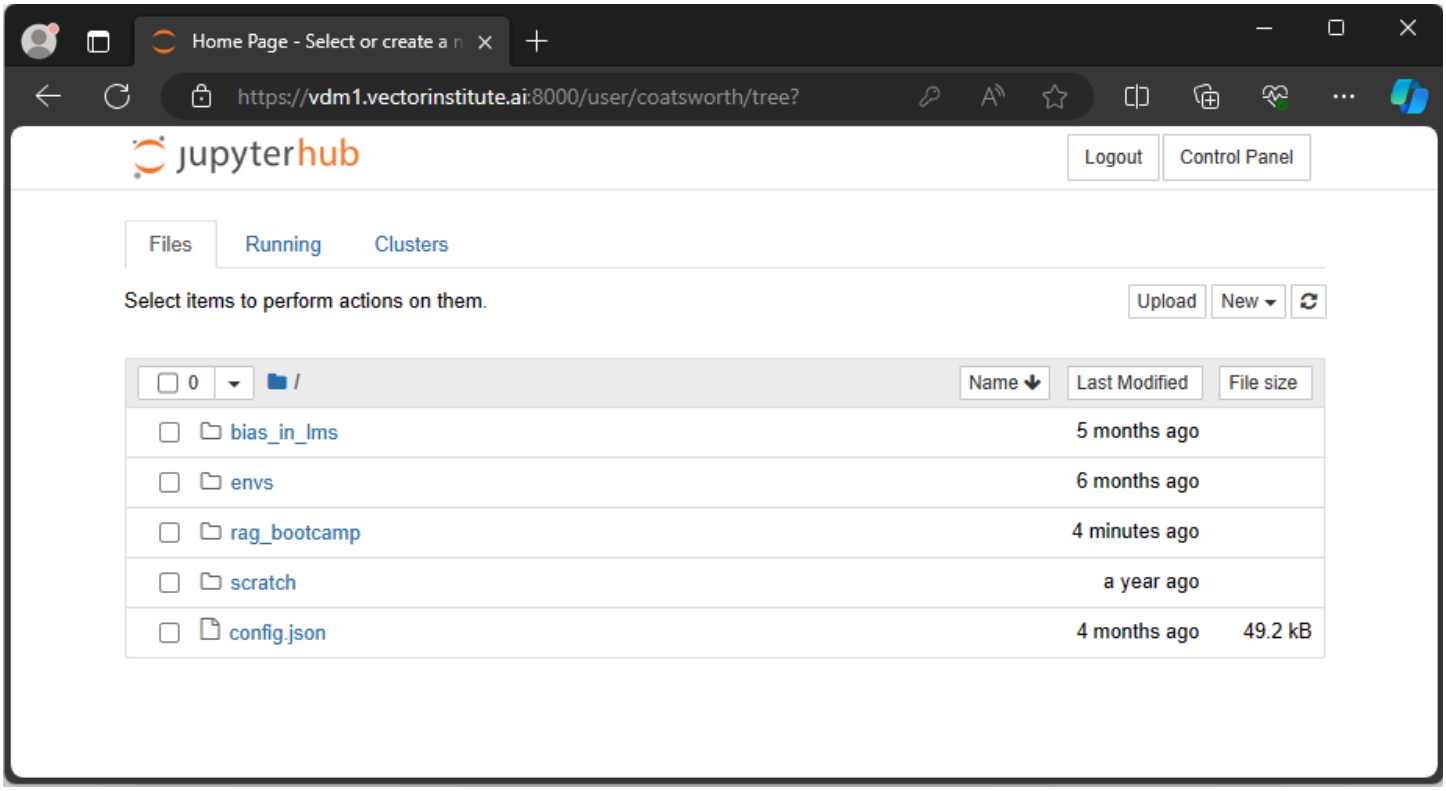
3. Visit https://vdm1.vectorinstitute.ai:8000 and login using your Vector cluster credentials. *Tip: add this URL as a bookmark in your browser!*



4. Start a Jupyter lab server that will have access to 1 Nvidia T4 GPU, 4 CPU cores, 20 GB RAM and a time limit of 12 hours. **The notebooks are configured to auto-save every 120 seconds, but please manually save your work before stopping the Jupyter lab or the job timeout.**



5. JupyterHub will launch in your home directory.



6. All prepared demos and reference implementations are located in the `diffusion_model_bootcamp` directory, assuming you have cloned it successfully from GitHub.

Note: Not all demos are in the form of notebooks. However, those that are will be runnable through JupyterHub.

7. You are all set to get started with the bootcamp!

8. When you're done with the Jupyter notebook, do not forget to save your work and shut down your JupyterHub server in order to free up resources for other users of the Vector cluster. From the main JupyterHub window, click the **Control Panel** button, then click the **Stop My Server** button.