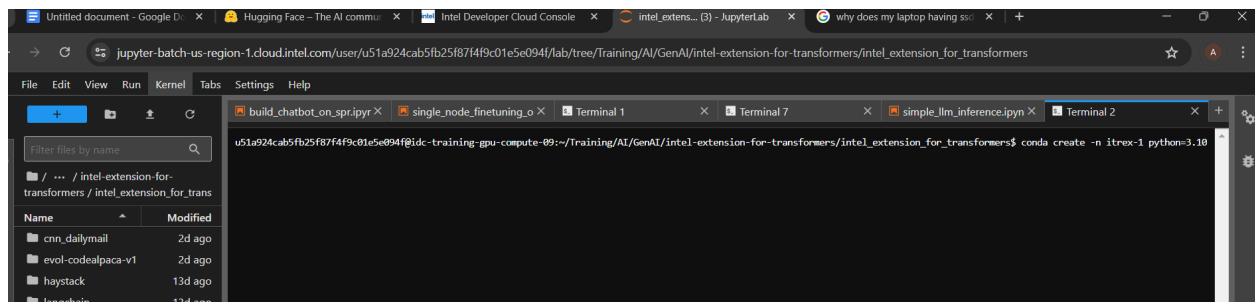


Creating a Local Environment using anaconda package

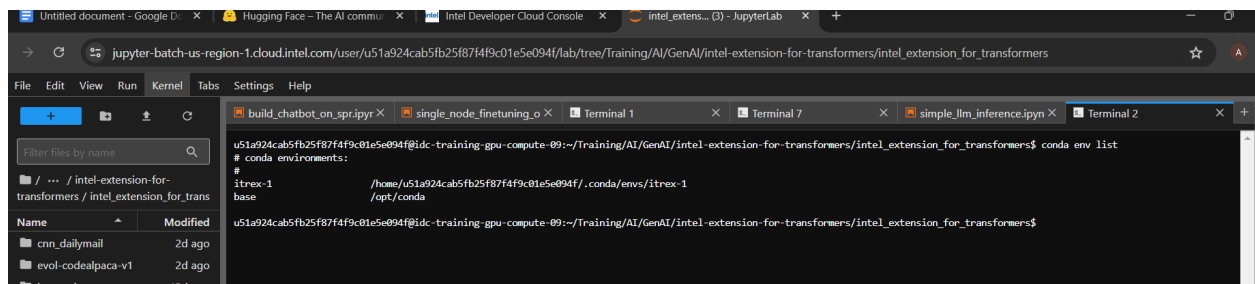
Step :1

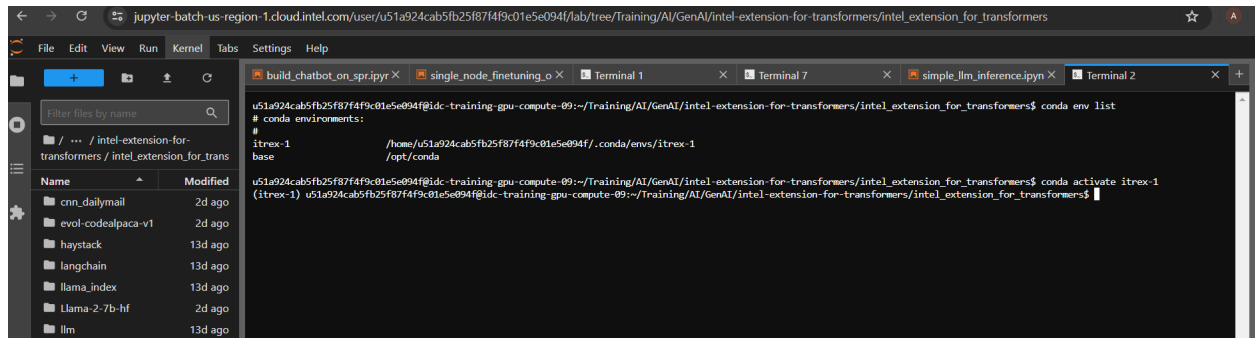
conda create -n itrex-1 python=3.10



Step:2

Activating the conda environment created
conda activate itrex-1



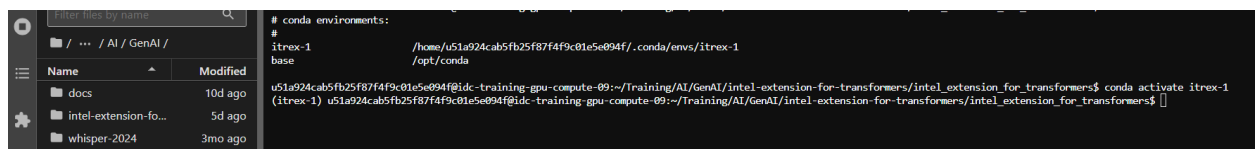
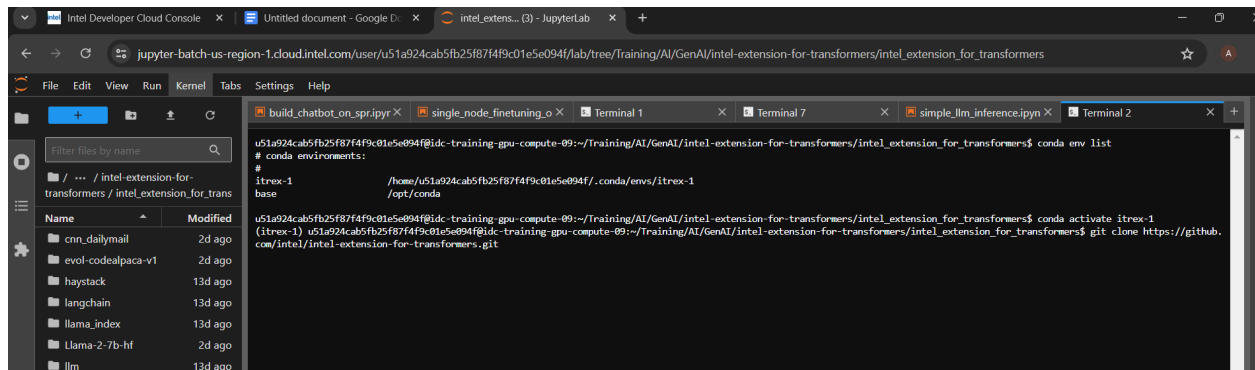


Step :3

Cloning the intel extension for transformers from github

git clone

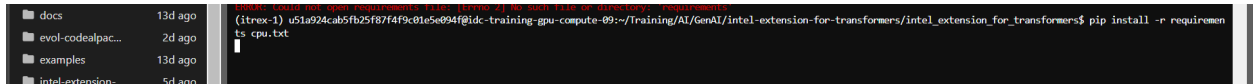
<https://github.com/intel/intel-extension-for-transformers.git>



Step 3 :

Installing all required dependencies:

pip install -r requirements_cpu.txt



```
(itrex-1) u51a924cab5fb25f87f4f9c01e5e094f@idc-training-gpu-compute-09:~/Training/AI/GenAI/intel-extension-for-transformers/intel_extension_for_transformers$ pip install -r requirements_cpu.txt
```

Install intel extension for transformers:

```
[ ]: !pip install intel-extension-for-transformers
```

Install Requirements:

```
[ ]: !git clone https://github.com/intel/intel-extension-for-transformers.git
[ ]: %cd ./intel-extension-for-transformers/intel_extension_for_transformers/neural_chat/
    !pip install -r requirements_cpu.txt
    %cd ../../../../
```

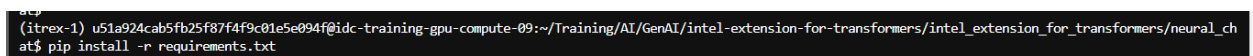
Build your chatbot



```
%cd ../../../../
```

Build your chatbot

pip install -r requirements.txt



```
(itrex-1) u51a924cab5fb25f87f4f9c01e5e094f@idc-training-gpu-compute-09:~/Training/AI/GenAI/intel-extension-for-transformers/intel_extension_for_transformers/neural_chat$ pip install -r requirements.txt
```

Finetune Your Chatbot on a Single Xeon SPR

NeuralChat is a customizable chat framework designed to create user own chatbot within few minutes on multiple architectures. This notebook will introduce how to finetune your chatbot on the customized data on a single node Xeon SPR.

Prepare Environment

Install intel extension for transformers:

```
[ ]: !pip install intel-extension-for-transformers
```

Install Requirements:

```
[ ]: !git clone https://github.com/intel/intel-extension-for-transformers.git
[ ]: %cd ./intel-extension-for-transformers/intel_extension_for_transformers/neural_chat/
    !pip install -r requirements.txt
    %cd ../../../../
```

Step 4:

huggingface-cli login

```
activate itrex-1
(itrex-1) u51a924cab5fb25f87f4f9c01e5e094f@idc-training-gpu-compute-09:~/Training/AI/GenAI/intel-extension-for-transformers/intel_extension_for_transformers/neural_c
at$ huggingface-cli login


HUGGINGFACE

A token is already saved on your machine. Run 'huggingface-cli whoami' to get more information or 'huggingface-cli logout' if you want to log out.
Setting a new token will erase the existing one.
To login, 'huggingface_hub' requires a token generated from https://huggingface.co/settings/tokens .
Enter your token (input will not be visible):
```

Inorder to use the meta lama dataset we need the huggingface tokens which can be acquired once we have an acc in hugging face

Step 5:

Once we create an acc in huggingface we can create a token so that we can access the different datatypes in this case meta lama

 **Hugging Face**

Models

Datasets

Spaces

Posts


Docs

Solutions

Pricing

Log In

Sign Up



Log In

Don't have an account? [Sign Up](#)


Username or Email address

Password

Login

[Forgot your password?](#)

SSO is available for [Enterprise accounts](#).

 **Hugging Face**

Models

Datasets


Spaces

Posts

Docs

Solutions

Pricing



Abhinav Nair
AbhinavNairS

Profile

Account


Authentication

Access Tokens

User Access Tokens

+ Create new token

Access tokens authenticate your identity to the Hugging Face Hub and allow applications to perform actions based on token permissions. **Do not share your Access Tokens with anyone**; we regularly check for leaked Access Tokens and remove them immediately.

 **Hugging Face**

Models

Datasets


Spaces

Posts

Docs

Solutions

Pricing



Abhinav Nair
AbhinavNairS

Profile

Account

Authentication

Organizations

Billing

Access Tokens

SSH and GPG Keys

Webhooks

Papers

Notifications

Local Apps and Hardware

Gated Repositories

Content Preferences

Create new Access Token

Token type

Fine-grained

Read

Write

This cannot be changed after token creation.

Token name

User permissions (AbhinavNairS)

Repositories

☐ Read access to contents of all repos under your personal namespace

☐ Read access to contents of all public gated repos you can access

☐ Write access to contents/settings of all repos under your personal namespace

Webhooks

☐ Access webhooks data

☐ Create and manage webhooks

Discussions & Posts

☐ Interact with discussions / Open PRs on repos under your personal namespace

Inference

☐ Make calls to the serverless Inference API

☐ Make calls to Inference Endpoints

☐ Manage Inference Endpoints

Collections

☐ Read access to all collections under your personal namespace

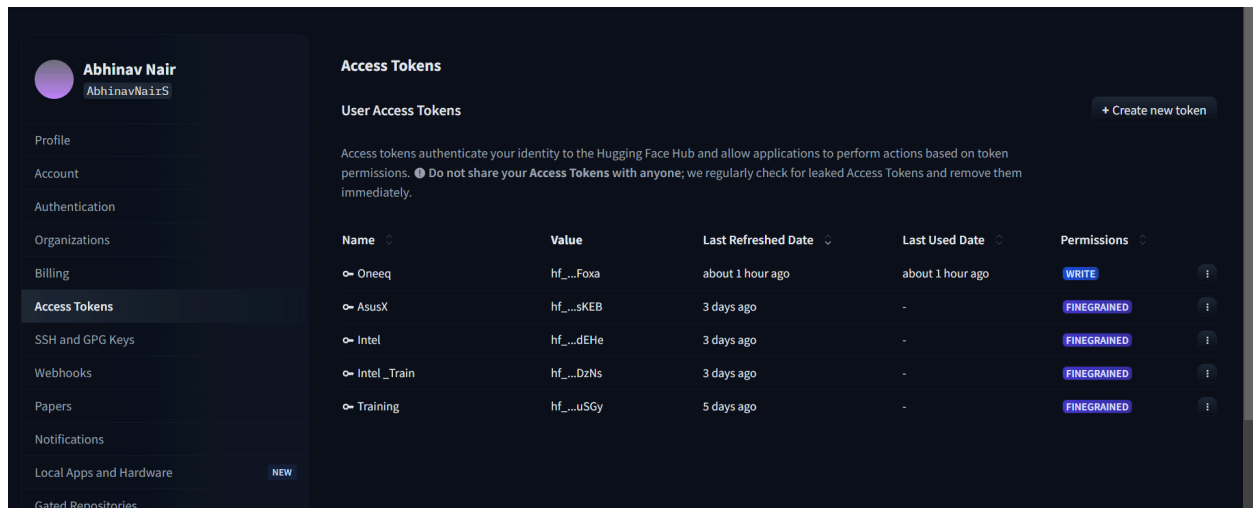
☐ Write access to all collections under your personal namespace

Billing

☐ Read access to your billing usage and know if a payment method is set

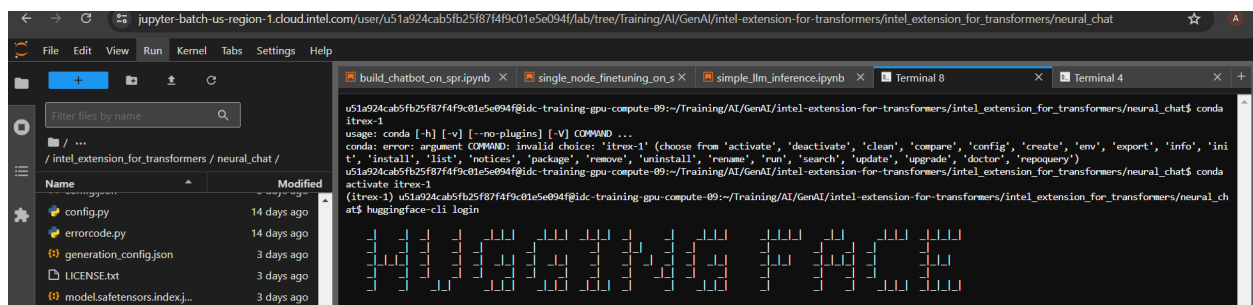
Step 6:

Once the token is created we can access it from the following page



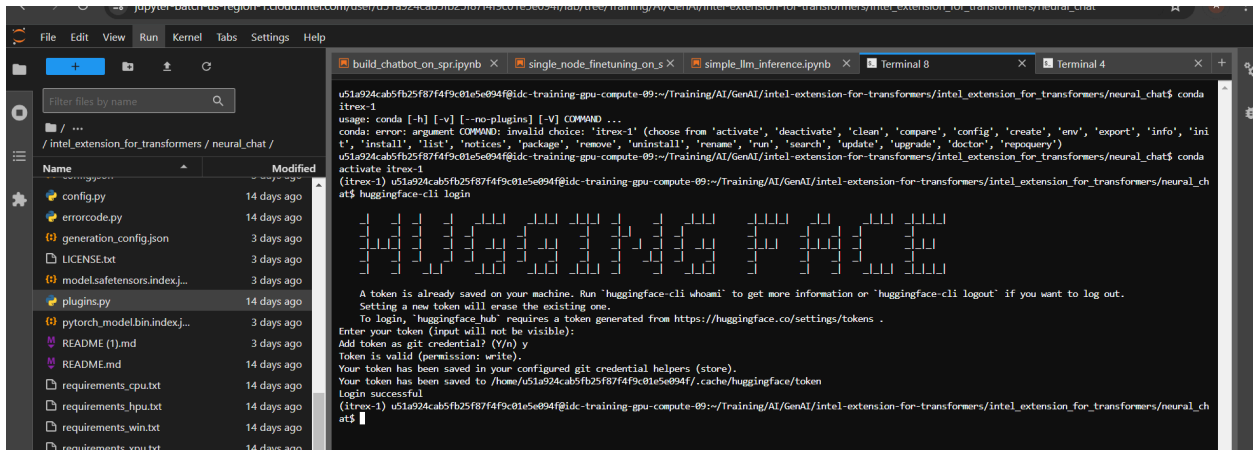
Step 7:

Return to the terminal and run the the huggingface-cli login command



Step 8:

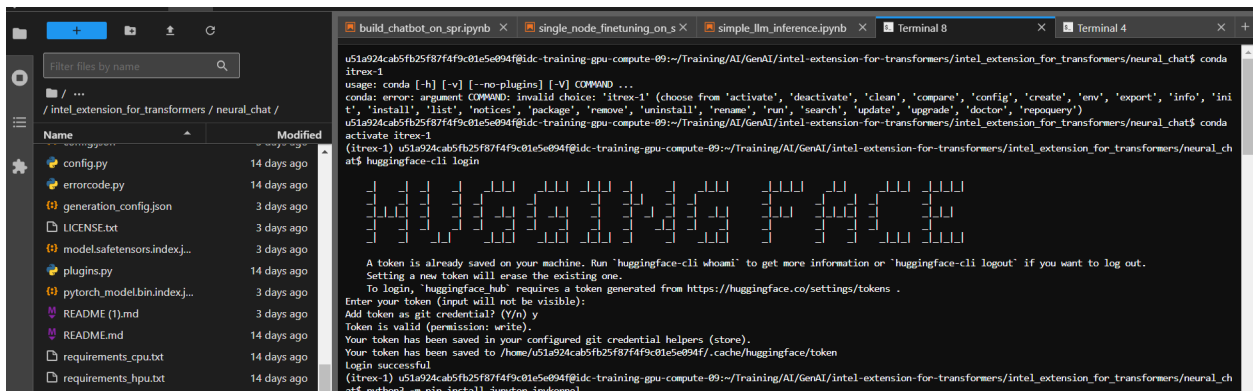
Once the command is accepted it will ask the user to input their respective token



Step 9:

Run the following cmd in the terminal
 python3 -m pip install jupyter ipykernel

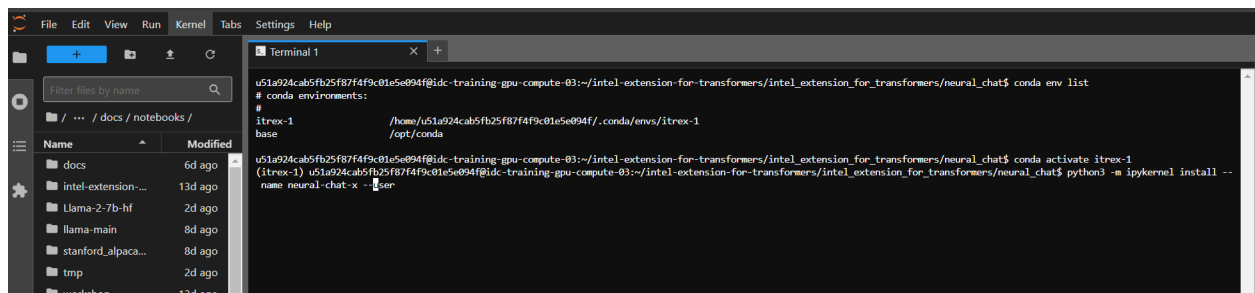
The ipykernel package is necessary for running
 Python kernels within Jupyter



Once the cmd is executed properly we can create a new in kernel in the local environment

Step 10:

```
python3 -m ipykernel install -- name neural-chat-x --
user
```



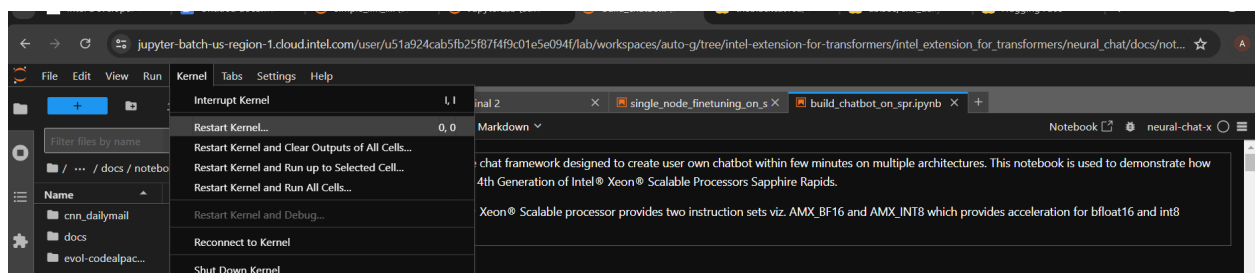
The screenshot shows a Jupyter Notebook interface with a terminal window open. The terminal displays the following commands and output:

```
u51a924cab5fb25f87f4f9c01e5e094f@idc-training-gpu-compute-03:~/intel-extension-for-transformers/intel_extension_for_transformers/neural_chat$ conda env list
# conda environments:
#
itrex-1                /home/u51a924cab5fb25f87f4f9c01e5e094f/.conda/envs/itrex-1
base                   /opt/conda

u51a924cab5fb25f87f4f9c01e5e094f@idc-training-gpu-compute-03:~/intel-extension-for-transformers/intel_extension_for_transformers/neural_chat$ conda activate itrex-1
(itrex-1) u51a924cab5fb25f87f4f9c01e5e094f@idc-training-gpu-compute-03:~/intel-extension-for-transformers/intel_extension_for_transformers/neural_chat$ python3 -m ipykernel install --
name neural-chat-x --user
```

Step 11:

Inorder to activate the created kernel just restart the entire kernel



By doing the following steps one can run the Build_chatbot_on_spr using the local environment created using anaconda package