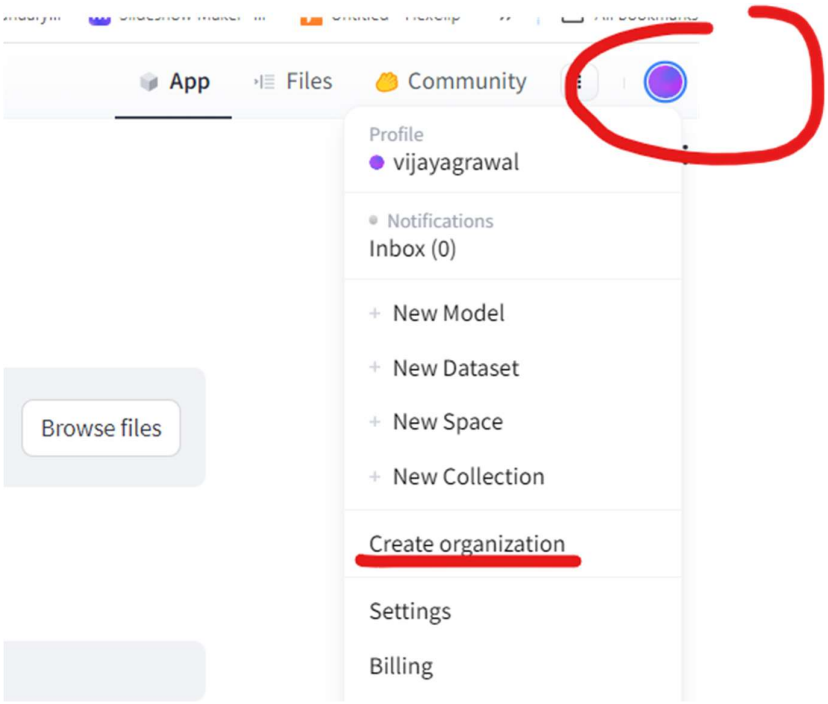
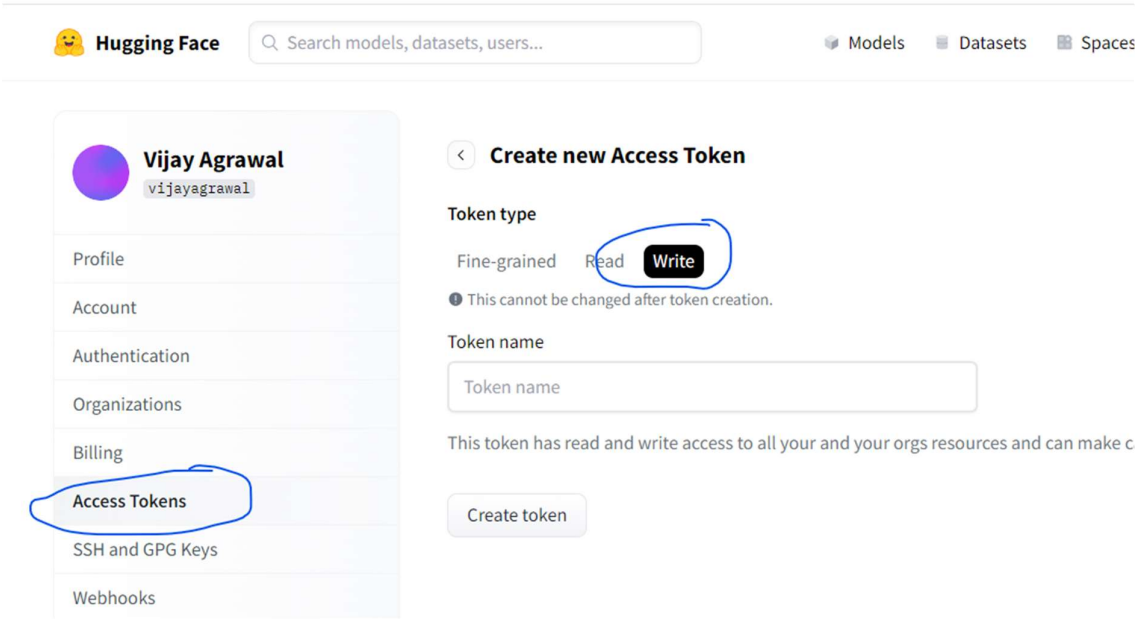
Steps to setup Huggingface project

1) Goto: https://huggingface.co
2) Create an account if you don't have one
3) Verify the account
4) Create an organization:

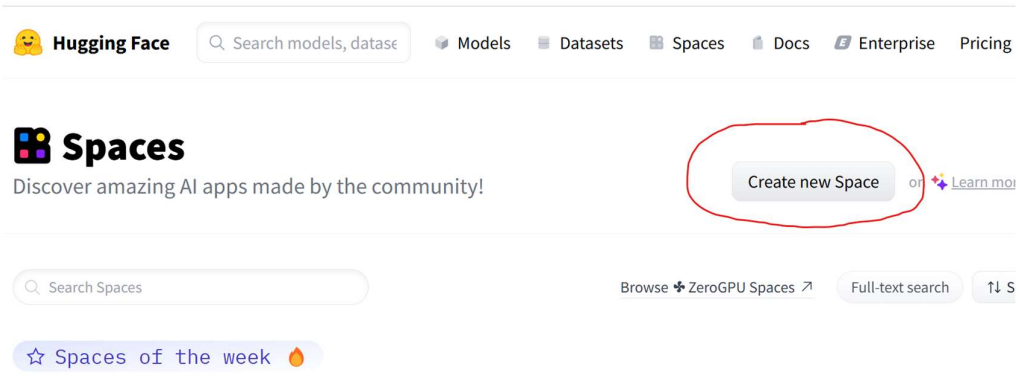


5) Create token in HF

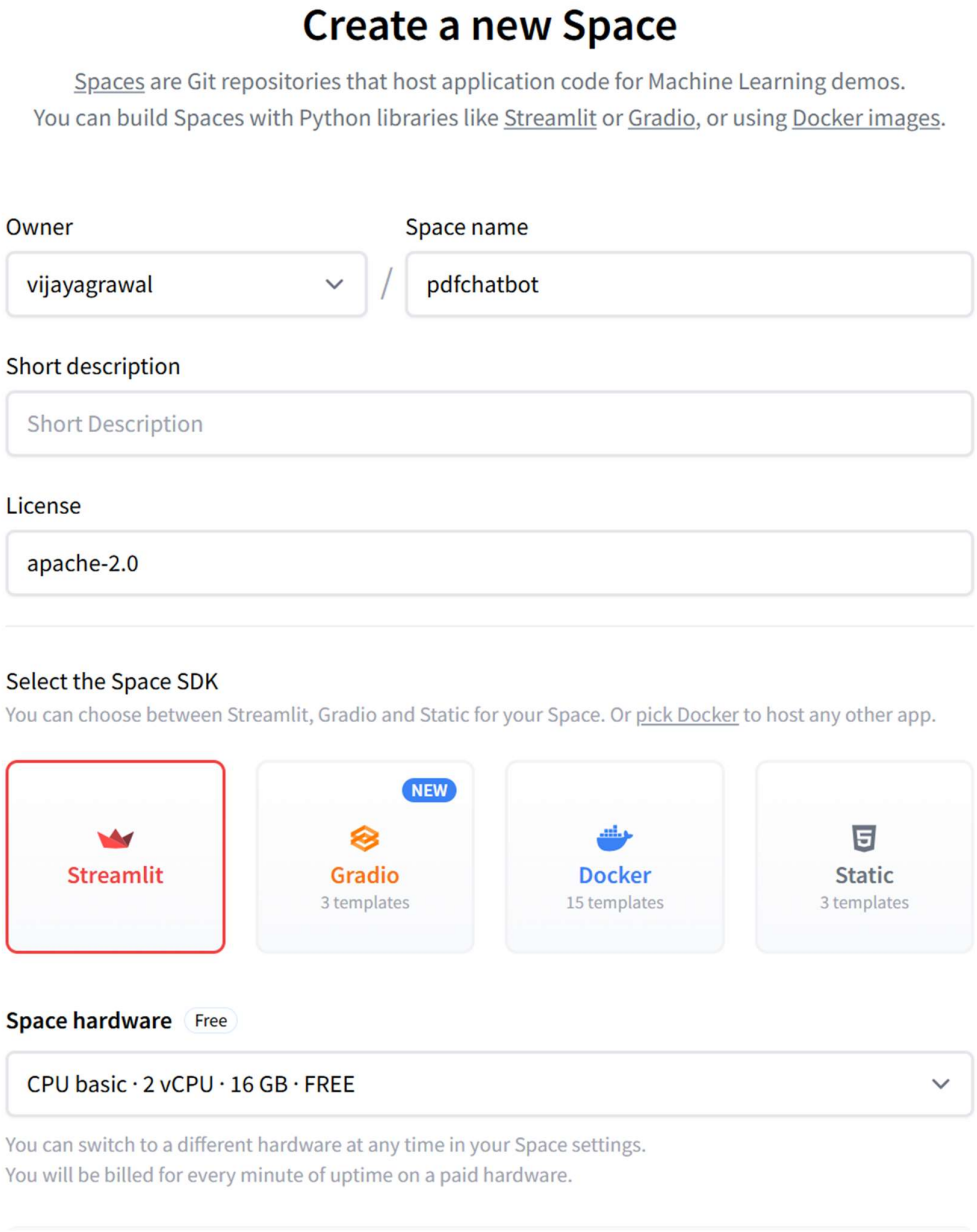
From Settings:



6) Create a new space:



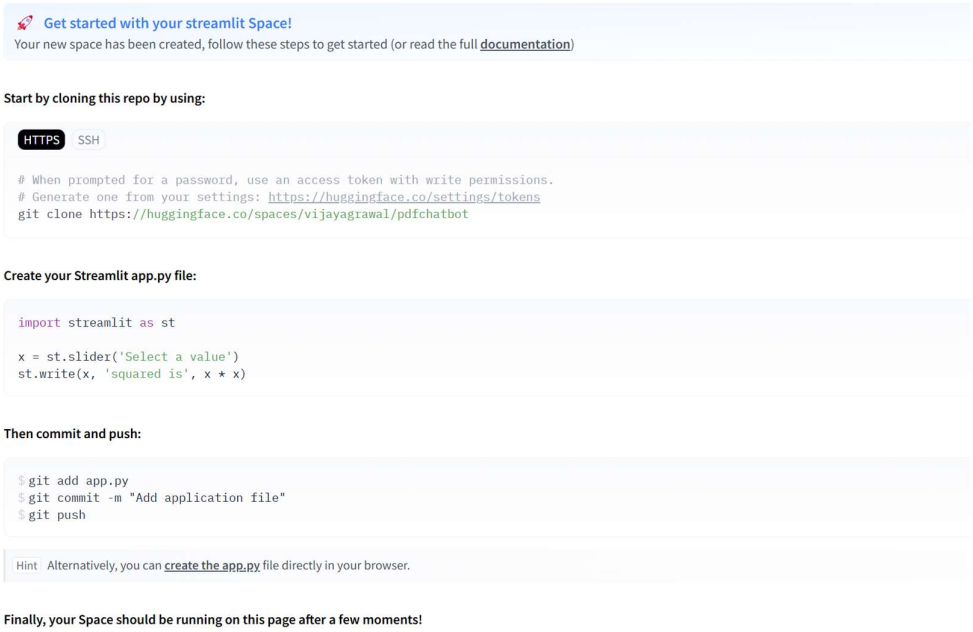
7) Give it any name such as pdfchatbot or aichatbot



8) Note the git clone command it gives when you create the new space

9) Follow the instructions to clone the repository on your PC. For example:
mkdir hf

git clone ….(if git is not installed on your PC, see the git setup document)



10) Once cloned, you can open VS code from the command prompt by issuing following prompt:
    code .
    Or you can start VS code and open the code folder
    Add following files:
    a) app.py
    b) requirements.txt

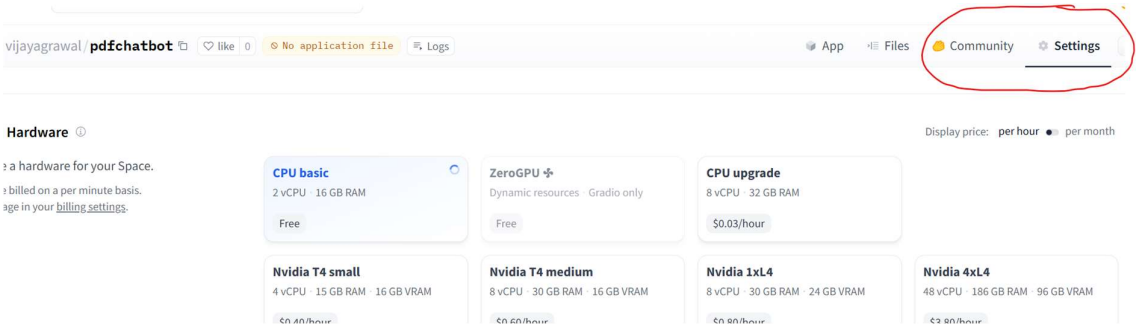
    in requirements.txt:
    langchain-openai
    langchain-community
    langchain-text-splitters
    chromadb
    langchain
    python-dotenv
    openai
    streamlit

11) Use the code present in **streamlit_chatbot_app.py** and the requirements.txt you have used previously in VS code. These files are available in the course content folder as well.
12) Commit and push the code to the HF repository
    cd to the code folder
    git status
    # should show the 2 files you just created

git add .
git status
git commit -am "updated space"
git push
(Make sure you are inside your app directory when issuing above commands)

Use your HF account username to login.
Password is the secret write key you created in step 5 above

13) Refresh the HF application UI for your space. It will automatically build and restart the application.
14) In HF, add the secrets that need to be populated as environment variables:
Click on **Settings** in your space:



Scroll down to where secrets and variables are present:

Add the following secrets:

AZURE_OPENAI_ENDPOINT
AZURE_OPENAI_MODEL_DEPLOYMENT_NAME
AZURE_OPENAI_MODEL_NAME
AZURE_OPENAI_API_KEY
AZURE_OPENAI_API_VERSION

15) Your changes should be reflected in the application. Application will automatically build and restart – you should see the chatbot UI

Viewing your space

When you login again, you can view your spaces by going to your profile and clicking your profile name/icon

Making changes to your project

To edit the files in the project, do it in VS Code or any other IDE.

Make sure you edit app.py even if cosmetic (the project will rebuild in HF only if you touch it)

Checkin the code using git commands and push it to the repository.

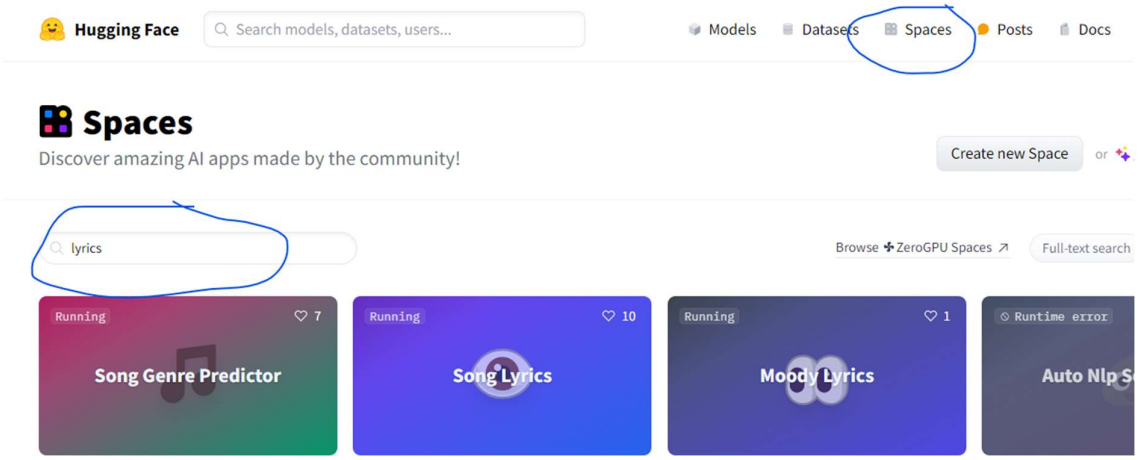
The application will automatically start building in HF

Duplicating an existing HF Space

HF has many spaces/codes/apps checked in by the community.

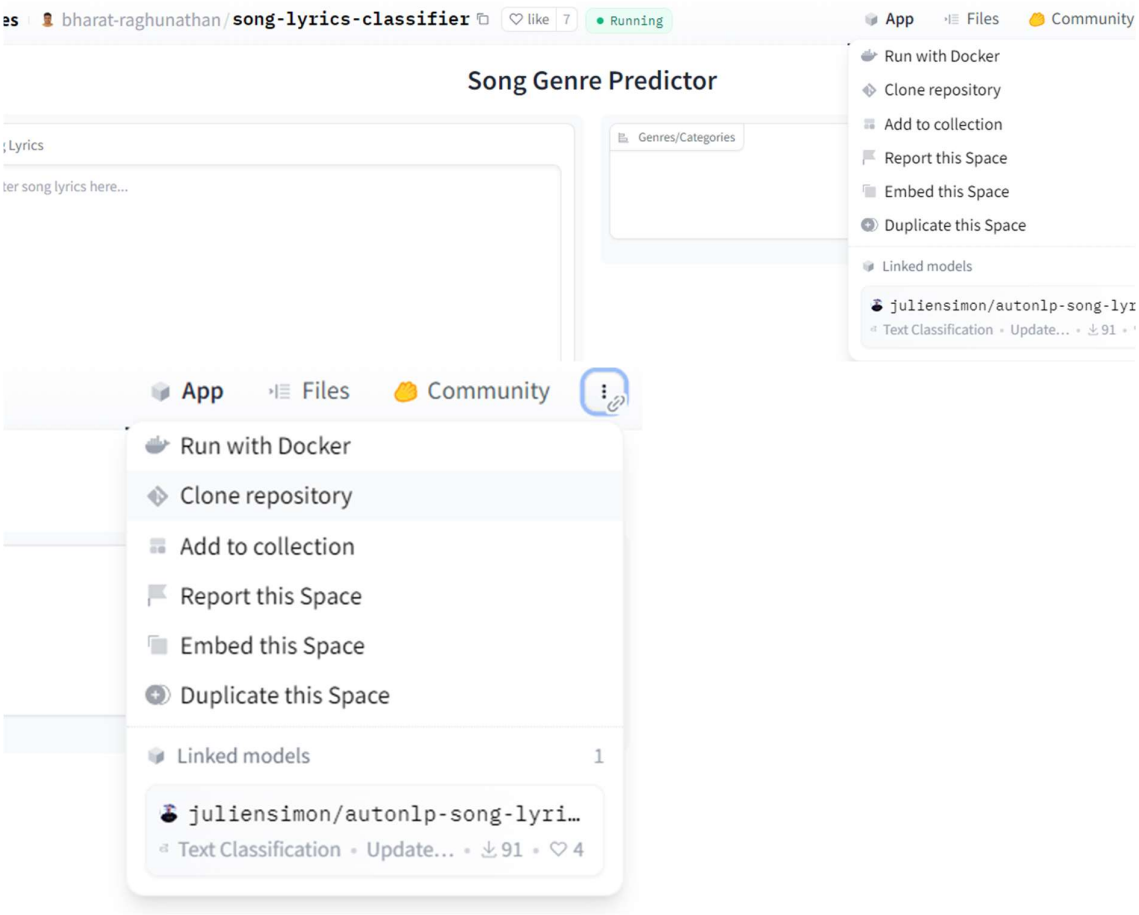
You can leverage existing work by cloning an existing space. Here are steps for the same:

1) Got spaces and search for any space based on functionality you wish to implement (such as pdf chat, audio, image object detection, music etc.)

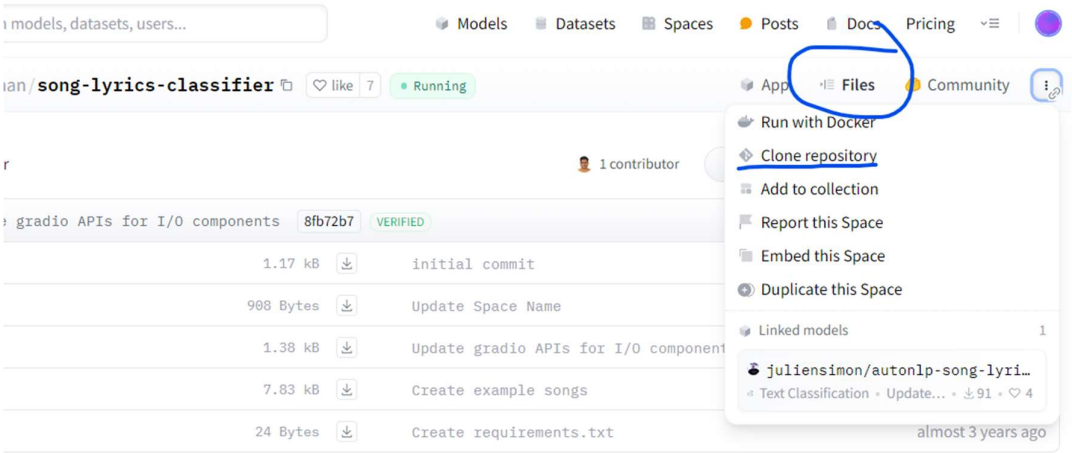


2) Click on the space to test it
   Only choose spaces that have high like count to ensure good code

3) Duplicate the space:



4) Clone the HF git repos to your local machine. Goto “Files” and use the 3 dots and choose “Clone repository”



5) Edit the code and do a git commit and push as per the steps in the previous section