How to setup conda environment in Windows and make a streamlit webapp

Setting up python environments

- Download latest python version from <u>HERE</u> and install in in your system (in my case it is windows), which install pip as well
- I like to use venv for structuring my projects well, So, I am going to install make a venv. using this and pip:
 - python -m venv env
 - This will create a new folder called env inside the directory where you executed the command.
- Here is a screenshot using terminal:
- To activate it Use:
 - ./env/Scripts/activate

PS D:\my research\Projects\12_Streamlit_Datascience_Apps> python -m venv env
PS D:\my research\Projects\12_Streamlit_Datascience_Apps> ./env/Scripts/activate
(env) PS D:\my research\Projects\12_Streamlit_Datascience_Apps>

and we get (env) saying it has been activated like shown in figure.

Miniforge 3 on windows

- Download and install miniforge3 on windows machine from HERE
- Run miniforge as admin and type:

mamba init powershell

To create environment using mamba:

mamba create -n nameofmyenv < list of packages >

• To activate the environement:

mamba activate nameofmyenv

Installing pytorch(requirement-python 3.10,3.11,3.12) to use cuda

- conda create --prefix E:/PYTHON_ENVS/pytorch python=3.11
- conda activate E:/PYTHON_ENVS/pytorch
- cd E:/nltk
- mamba install pytorch==2.5.1 torchvision==0.20.1 torchaudio==2.5.1 pytorch-cuda=12.4
 c pytorch -c nvidia

To check cuda

import torch

```
print("Number of GPU: ", torch.cuda.device_count())
print("GPU Name: ", torch.cuda.get_device_name())
device = torch.device('cuda' if torch.cuda.is_available() else 'cpu')
print('Using device:', device)
```

To see conda env list and remove env

- conda env list
- to remove just delete that folder

Installing Streamlit

- use pip or conda or mamba to install streamlit
 pip install streamlit
- after it has been install check with:
 streamlit hello

Simple Stock Price webapp

Make a file python file with the following code:
 code in file stock_price.py

Make app.pystreamlit run app.py

simple stock price app

shown are the stock closing price an volume of Google!



