Assignment # 2

Following are the tasks for your second week of the internship:

- 1. Administrative tasks
- 2. Prepare your machine
- 3. Environment Management
- 4. Familiarization with Jupyter-Notebook
- 5. Glimpse of CI/CD
- 6. Setup Llama 2
- 7. Train your model on MNIST dataset

Administrative tasks

- Your sitting arrangement:
 - All of you are requested to sit in "Information Processing and Transmission Lab", located in SEECS-NUST. Note: Office Timings are from 10am till 4pm.
 - o Ensure that you have internet connectivity and a charging port beside your desk.
 - In case of any issues, don't hesitate to contact Ahmed Mohsin. His contact no.
 +923181836426.
- Submit the required documents to NSTP office for the 'Entry Card'.
 - o 2 passport-size pictures and 2 CNIC photocopies.
- Get in touch with your assigned mentor.
 - o This information will be communicated to you on coming Thursday.

Prepare your machine

- Ensure that you have a suitable laptop to carry out Internship assignments.
- Required Installations:
 - o Python
 - o Pip
 - Anaconda (if you are using windows)
 - Git bash (if you are using windows)
 - Jupyter notebook
 - o VS Code
 - o Dual boot/ VMware (optional) --- Only for the windows users

Environment management

Learn to create virtual environments to segregate projects with each other. It's a powerful concept. You are required to go through the followings:

- (Venv) https://docs.python.org/3/library/venv.html
- (Conda) https://conda.io/projects/conda/en/latest/user-guide/getting-started.html

Familiarization with Jupyter-Notebook

Use Jupyter-Notebook on VS Code and switch through multiple environments created by you during the practice of last task.

Glimpse of CI/CD

https://www.freecodecamp.org/news/how-to-setup-a-ci-cd-pipeline-with-github-actions-and-aws/

Write a brief review after reading the article.

Setup Llama 2

Read about it. We will discuss it on coming Thursday.

Train your model on MNIST dataset

Go through the Repo and fork it into your GitHub account.

Mentor Information:

Internee	Mentor
Muhammad Usman Malik	Saad Iqbal
Ali Kamal Mustafa	Muhammad Kazim
Muzaqqa Shoaib	Muhammad Umer
Mohammad Haider Abbas	Huzaifah Wasim
Shizza Fatima Shafqat	Muhammad Ahmed Mohsin
Hasan Nasrullah	Sikandar Bakht