MLOPS : Assignment 6

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Training and Testing Model:

Taking small Dataset sample for fast run

```
Train size: 1000
Val size: 200
```

Model Accuracies:

```
Finishing previous runs because reinit is set to 'default'.
View run ethereal-vortex-10 at: https://wandb.ai/ir2023/tiny-imagenet-resnet/runs/xzrcut6p
View project at: https://wandb.ai/ir2023/tiny-imagenet-resnet
Synced 5 W&B file(s), 0 media file(s), 0 artifact file(s) and 0 other file(s)
Find logs at: ./wandb/run-20251102_164659-xzrcut6p/logs
Tracking run with wandb version 0.22.2
Run data is saved locally in /content/wandb/run-20251102_173155-5q9wqmcz
Syncing run rose-sponge-14 to Weights & Biases (docs)
View project at https://wandb.ai/ir2023/tiny-imagenet-resnet
View run at https://wandb.ai/ir2023/tiny-imagenet-resnet/runs/5q9wqmcz
Epoch 1: Train Acc=0.867, Val Acc=0.610
Epoch 2: Train Acc=0.970, Val Acc=0.200
Epoch 3: Train Acc=0.984, Val Acc=0.595
```

Run history:

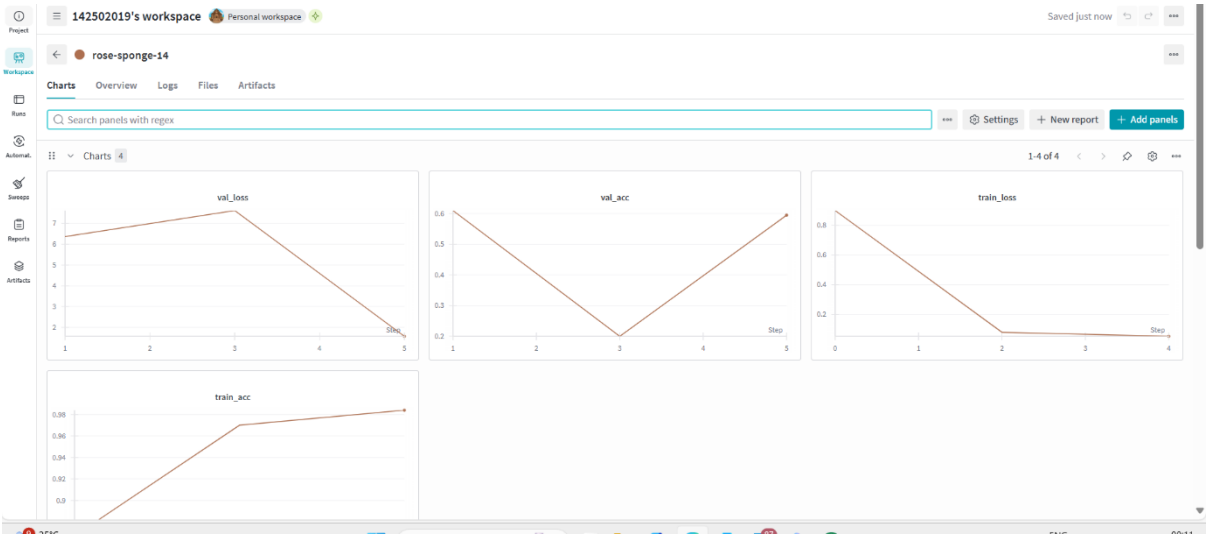
```
train_acc ▁▇█
train_loss █▂▁
val_acc   ▇▁█
val_loss  ▆█▁
```

Run summary:

```
train_acc  0.984
train_loss 0.053
val_acc    0.595
val_loss   1.57557
```

```
View run rose-sponge-14 at: https://wandb.ai/ir2023/tiny-imagenet-resnet/runs/5q9wqmcz
View project at: https://wandb.ai/ir2023/tiny-imagenet-resnet
Synced 5 W&B file(s), 0 media file(s), 0 artifact file(s) and 0 other file(s)
```

Weight and Biases : Chart



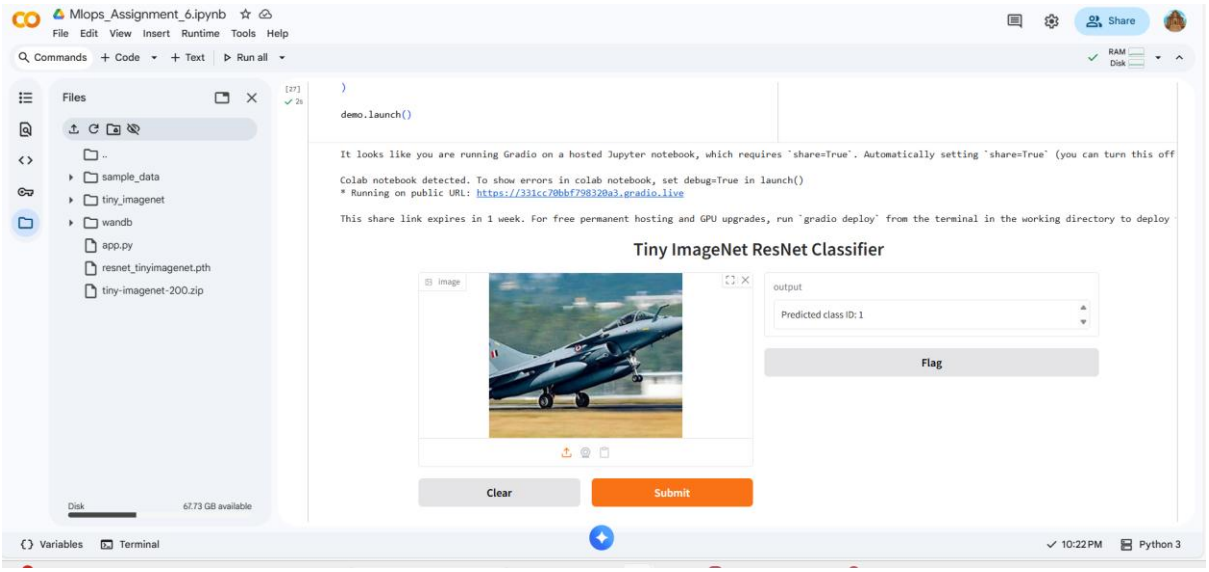
Uploading to Hugging face:

```
from huggingface_hub import HfApi

api = HfApi()
api.upload_file(
    path_or_fileobj="resnet_tinyimagenet.pth",
    path_in_repo="resnet_tinyimagenet.pth",
    repo_id="NiranjanIITPKD/tinyimagenet-resnet",
    repo_type="model"
)
```

```
Processing Files (1 / 1)      : 100% 45.2MB / 45.2MB, 16.1MB/s
New Data Upload               : 100% 45.2MB / 45.2MB, 16.1MB/s
resnet_tinyimagenet.pth       : 100% 45.2MB / 45.2MB
CommitInfo(commit_url='https://huggingface.co/NiranjanIITPKD/tinyimagenet-resnet/commit/9ca313c3781f96f66a35347beca86ba2253daa95', commit_message='Upload
resnet_tinyimagenet.pth with huggingface_hub', commit_description='', oid='9ca313c3781f96f66a35347beca86ba2253daa95', pr_url=None,
repo_url=RepoUrl('https://huggingface.co/NiranjanIITPKD/tinyimagenet-resnet', endpoint='https://huggingface.co', repo_type='model',
repo_id='NiranjanIITPKD/tinyimagenet-resnet'), pr_revision=None, pr_num=None)
```

Demo Launch in Colab:



Drifted Accuracy:

```
Tracking run with wandb version 0.22.2
Run data is saved locally in /content/wandb/run-20251102_174316-wvy48f3p
Syncing run drifted_run to Weights & Biases (docs)
View project at https://wandb.ai/ir2023/tiny-imagenet-resnet
View run at https://wandb.ai/ir2023/tiny-imagenet-resnet/runs/wvy48f3p
wandb: Detected [huggingface_hub.inference, mcp] in use.
wandb: Use W&B Weave for improved LLM call tracing. Install Weave with `pip install weave` then add `import weave` to the top of your script.
wandb: For more information, check out the docs at: https://weave-docs.wandb.ai/
```

Run history:

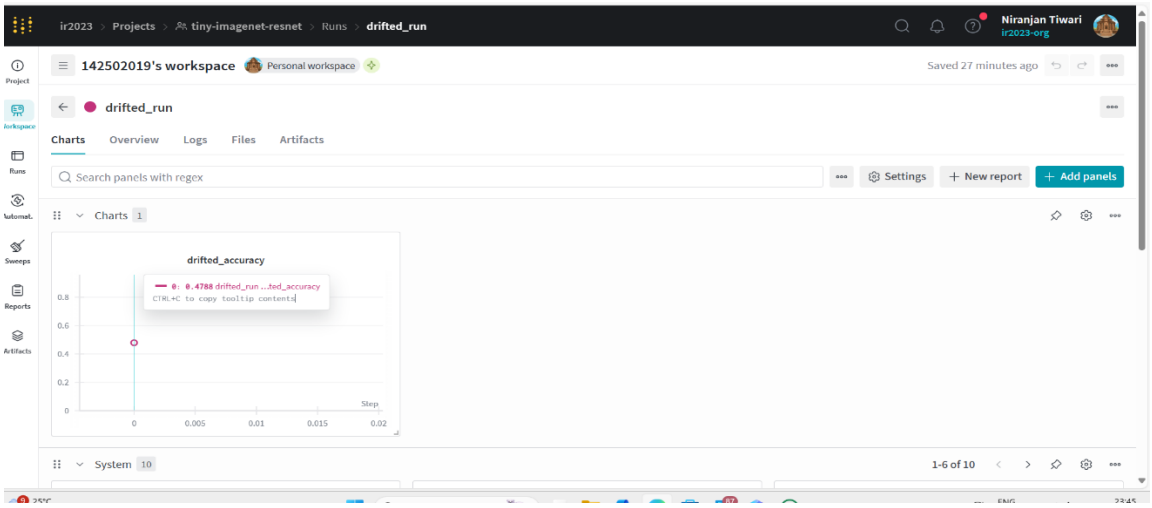
drifted_accuracy _

Run summary:

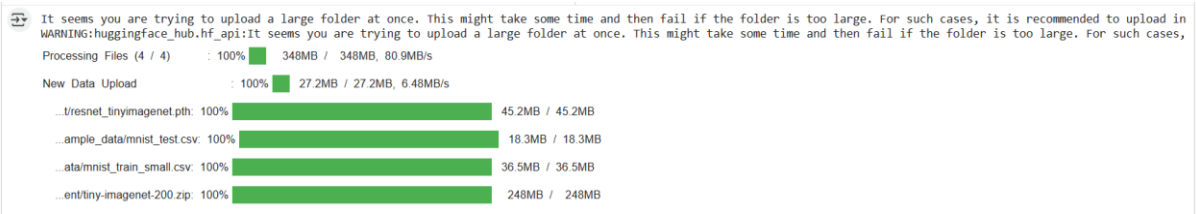
drifted_accuracy 0.4788

```
View run drifted_run at: https://wandb.ai/ir2023/tiny-imagenet-resnet/runs/wvy48f3p
View project at: https://wandb.ai/ir2023/tiny-imagenet-resnet
Synced 5 W&B file(s), 0 media file(s), 0 artifact file(s) and 0 other file(s)
Find logs at: ./wandb/run-20251102_174316-wvy48f3p/logs
```

Drifted Run Accuracy Plot:

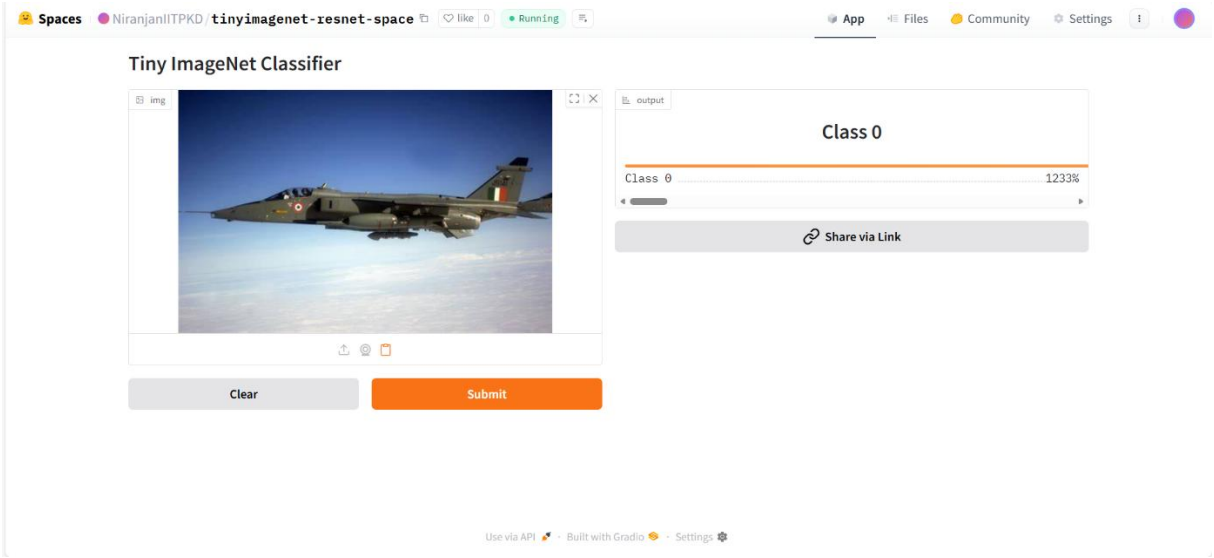


Upload to Hugging face:




```
Processing Files (1 / 1)      : 100% 45.2MB / 45.2MB, 14.6MB/s
New Data Upload               :      0.00B /  0.00B,  0.00B/s
  resnet_tinyimagenet.pth     : 100% 45.2MB / 45.2MB
CommitInfo(commit_url='https://huggingface.co/spaces/NiranjanIITPKD/tinyimagenet-resnet-space/commit/a968b5ec5c07eaa56827b6dc021b27bd04d83af7', commit_message='Upload
resnet_tinyimagenet.pth with huggingface_hub', commit_description='', oid='a968b5ec5c07eaa56827b6dc021b27bd04d83af7', pr_url=None,
repo_url=RepoUrl('https://huggingface.co/spaces/NiranjanIITPKD/tinyimagenet-resnet-space', endpoint='https://huggingface.co', repo_type='space',
repo_id='NiranjanIITPKD/tinyimagenet-resnet-space'), pr_revision=None, pr_num=None)
```

Deployed Hugging Face Space Run:


Spaces
NiranjanIITPKD / tinyimagenet-resnet-space
like 0
Running
App
Files
Community
Settings
Tiny ImageNet Classifier
img
output
Class 0
Class 0
1233%
Share via Link
Clear
Submit
Use via API
Built with Gradio
Settings