












## Practical-3

### AIM : Generation of Reproducible and Interactive ML Project

Task 1: Create the Github repository for the house rate prediction project created in practical2

[MLOPs](#) / practical\_2 / 

 tirth1804 Add files via upload	
Name	Last commit message
 ..	
 MLOPS_P2_20012531031_Tirth Shah.docx	Add files via upload
 MLOPS_P2_20012531031_Tirth Shah.pdf	Add files via upload
 linear_regression_model.joblib	Add files via upload
 p2.ipynb	Add files via upload
 sample.csv	Add files via upload
 sample.txt	Add files via upload
 scaler_object.joblib	Add files via upload
 test_data.npy	Add files via upload
 train_data.npy	Add files via upload

**Task 2:** Integrate your repository with the binder to make your project interactive. (Hint: refer to the following link for the steps:

Build and launch a repository

GitHub repository name or URL

GitHub

Git ref (branch, tag, or commit)  Path to a notebook file (optional)

Copy the URL below and share your Binder with others:

Expand to see the text below, paste it into your README to show a binder badge:

Copy the URL below and share your Binder with others:

Expand to see the text below, paste it into your README to show a binder badge:

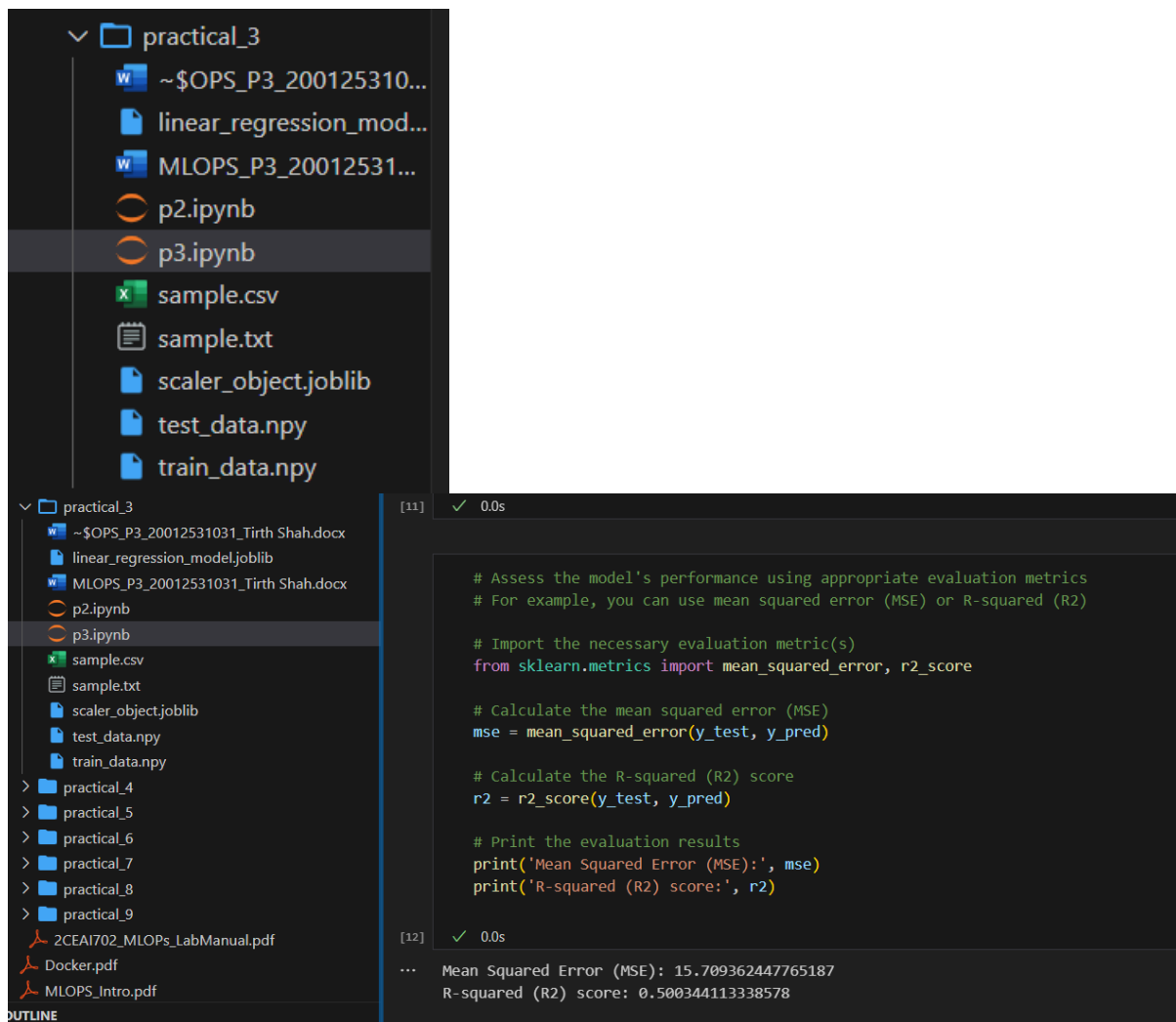
Waiting Already built!

Build logs [view raw](#) [hide](#)

```

tirth1804-2dmlops-09e03a:778daa7463353eff6b4b7e0546c2a1774de756d8Exception ignored in: <fun
ction Application.__del__ at 0x7fa661804ca0>
Traceback (most recent call last):
  File "/usr/lib/python3.10/site-packages/traitlets/config/application.py", line 1043, in
__del__
    File "/usr/lib/python3.10/site-packages/traitlets/config/application.py", line 1032, in
close_handlers
    File "/usr/lib/python3.10/site-packages/traitlets/traitlets.py", line 719, in __get__
TypeError: 'NoneType' object is not callable
Built image, launching...
Launching server...
Server requested
2023-11-29T05:31:08.870869Z [Normal] Successfully assigned ovh2/jupyter-tirth1804-2dmlops-
2dnpawyb39 to user-202211a-node-5eb9bc
2023-11-29T05:31:09Z [Normal] Container image "jupyterhub/mybinder.org-tc-init:2020.12.4-0
.dev.git.5524.ha41b617b" already present on machine
2023-11-29T05:31:09Z [Normal] Created container tc-init
2023-11-29T05:31:10Z [Normal] Started container tc-init
2023-11-29T05:31:11Z [Normal] Pulling image "2lmrrh8f.gra7.container-registry.ovh.net/mybi
nder-builds/r2d-g5b5b759tirth1804-2dmlops-09e03a:778daa7463353eff6b4b7e0546c2a1774de756d8"

```



The screenshot displays a JupyterLab environment. On the left, a file explorer shows a directory structure with folders 'practical\_3' through 'practical\_9' and various files including documents, CSVs, TXTs, and NumPy files. The 'practical\_3' folder is expanded, showing files like 'p3.ipynb', 'sample.csv', 'sample.txt', 'scaler\_object.joblib', 'test\_data.npy', and 'train\_data.npy'. The central code editor shows Python code for evaluating a model's performance using Mean Squared Error (MSE) and R-squared (R2) score. The output area on the right shows the execution results for two cells, with the second cell displaying the calculated MSE and R2 score.

```
[11] ✓ 0.0s

# Assess the model's performance using appropriate evaluation metrics
# For example, you can use mean squared error (MSE) or R-squared (R2)

# Import the necessary evaluation metric(s)
from sklearn.metrics import mean_squared_error, r2_score

# Calculate the mean squared error (MSE)
mse = mean_squared_error(y_test, y_pred)

# Calculate the R-squared (R2) score
r2 = r2_score(y_test, y_pred)

# Print the evaluation results
print('Mean Squared Error (MSE):', mse)
print('R-squared (R2) score:', r2)
```

```
[12] ✓ 0.0s

... Mean Squared Error (MSE): 15.709362447765187
R-squared (R2) score: 0.500344113338578
```