#### Atelier Sagemaker

Produced by: AIT HAMZA Moussa Supervised by: Mr. Fahd Kalloubi

#### MOHAMED VI POLYTECHNIC UNIVERSITY

January 7, 2024





University Mohammed VI Polytechnic

```
INFO: sagemaker: Creating processing-job with name sagemaker-scikit-learn-2024-01-07-18-33-49-399
/miniconda3/lib/python3.7/site-packages/sklearn/externals/joblib/externals/cloudpickle.py:47: DeprecationWarning: the imp module is
deprecated in favour of importlib; see the module's documentation for alternative uses
  import imp
/miniconda3/lib/python3.7/site-packages/sklearn/utils/validation.py:37: DeprecationWarning: distutils Version classes are deprecated. Use packag
ing.version instead.
 LARGE SPARSE SUPPORTED = LooseVersion(scipy version) >= '0.14.0'
Reading input data from /opt/ml/processing/input/bank-additional-full.csv
Positive samples: 4639
Negative samples: 36537
Ratio: 7.88
Running preprocessing and feature engineering transformations
Train data shape after preprocessing: (32940, 58)
Test data shape after preprocessing: (8236, 58)
Saving training features to /opt/ml/processing/train/train features.csv
Saving test features to /opt/ml/processing/test/test_features.csv
Saving training labels to /opt/ml/processing/train/train labels.csv
```

Figure: déploiement

Saving test labels to /opt/ml/processing/test/test labels.csv

```
[41]: import pandas as pd
      data = pd.read csv('bank-additional/bank-additional-full.csv')
      print(data.shape)
      data[:5]
      (41188, 21)
                    job marital education default housing loan
                                                                     contact month day of week ... campaign pdays previous poutcome emp.yar.rate
              housemaid married
                                                                                                                   999
                                    basic.4v
                                                  no
                                                           no
                                                                no telephone
                                                                                 may
                                                                                              mon ...
                                                                                                                              0 nonexistent
          57
                 services married high.school unknown
                                                                no telephone
                                                                                 may
                                                                                             mon ...
                                                                                                                   999
                                                                                                                              0 nonexistent
      2
          37
                 services married high school
                                                                no telephone
                                                                                                                   999
                                                                                                                              0 nonexistent
                                                  no
                                                                                 may
                                                                                             mon ...
          40
                  admin. married
                                    basic.6y
                                                                no telephone
                                                                                                                   999
                                                                                                                              0 nonexistent
                                                  no
                                                                                 may
                                                                                             mon ...
                 services married high.school
                                                                                                                   999
                                                  no
                                                                yes telephone
                                                                                 may
                                                                                             mon ...
                                                                                                                              0 nonexistent
     5 rows x 21 columns
```

```
[48]: preprocessing_job_description_=_skleacn_processor_jobs[-1].describe()
output_config = preprocessing_job_description['ProcessingOutputConfig']
for output an output_config['Outputs']:
print(output['S3Output']['S3Uni'])
s3://sagemaker-us-east-1-0436[2393875/sagemaker-scikit-learn-2024-01-07-18-33-49-399/output/train_data
s3://sagemaker-us-east-1-0436[2393875/sagemaker-scikit-learn-2024-01-07-18-33-49-399/output/test_data
```

sh-4.2\$ aws s3 cp s3://sagemaker-us-east-1-043612393875/sagemaker-scikit-learn-2024-01-07-18-33-49-399/output/train\_data/train\_labels.csv .t Completed 100.1 KiB/100.1 KiB (789.9 KiB/s) with 1 fildownload: s3://sagemaker-us-east-1-043612393875/sagemaker-scikit-learn-2024-01-07-18-33-49-399/output/train\_data/train\_labels.csv to .//sagemaker-us-east-1-043612393875/sagemaker-scikit-learn-2024-01-07-18-33-49-399/output/train\_data/train\_labels.csv to .//sagemaker-us-east-1-043612393875/sagemaker-scikit-learn-2024-01-07-18-33-49-399/output/train\_data/train\_labels.csv to .//sagemaker-us-east-1-043612393875/sagemaker-us-east-1-0

sh-4.2\$ aus s3 cp s3://sagemaker-us-east-1-043612393875/sagemaker-scikit-learn-2024-01-07-18-33-49-399/output/train\_data/train\_features.csv .t download: s3://sagemaker-us-east-1-043612393875/sagemaker-scikit-learn-2024-01-07-18-33-49-399/output/train\_data/train\_features.csv to ./.t sh-4.25 []

# Thank you!