Sagemaker ML

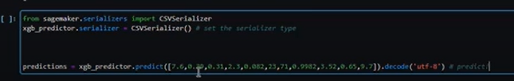
Sagemaker ML = ML in SQL

1. Navigate to Amazon S3, create 1 bucket w/ 3 folders (output, train, test).
   1. Note: the key of accessing the S3 is getting the right roles/permissions.
2. Upload training 7 test .csv data to respective folders
   1. Note: first column NEEDS to be the label
3. Navigate to Sagemaker, click Get Started button
4. Click Studio on left-hand menu
   1. Select domain & user profile (these are pre-configured)
5. Click in Open Launcher
6. Paste in the Jupyter notebook the code

import sagemaker  
import boto3  
from sagemaker.amazon.amazon\_estimator  import get\_image\_uri  
from sagemaker.session import s3\_input, Session  
my\_region = boto3.session. Session().region\_name  
my\_region

s3\_input\_train = sagemaker.inputs.TrainingInput(s3\_data='s3://alfrednine/train'.format("wine\_train\_four.csv"), content\_type='csv')  
s3\_input\_test = sagemaker.inputs.TrainingInput(s3\_data='s3://alfrednine/test'.format("wine\_test\_four.csv"), content\_type='csv')

hyperparameters = {'max\_depth':'5',  
    'eta': '0.2',  
    'gamma': '4',  
    'min\_child\_weight':'6',  
    'subsample':'0.7',  
    'objective':'binary:logistic',  
    'num\_round':50  
}

1. Change code to your specific parameters (region, etc.)
2. Establish the model as an endpoint
   1. Xgb\_predictor = estimator.deploy(initial\_instance\_count=1, instance\_type=”ml.m4.xlarge”)
3. Initialize a serializer (allowing you to pass the data in to make a prediction)
   1. from sagemaker import get\_execution\_role  
      role = get\_execution\_role()  
      role
   2. 
      1. The predictions is just dummy data for demo purposes