Movies Recommender by Personalize

Hands on Lab

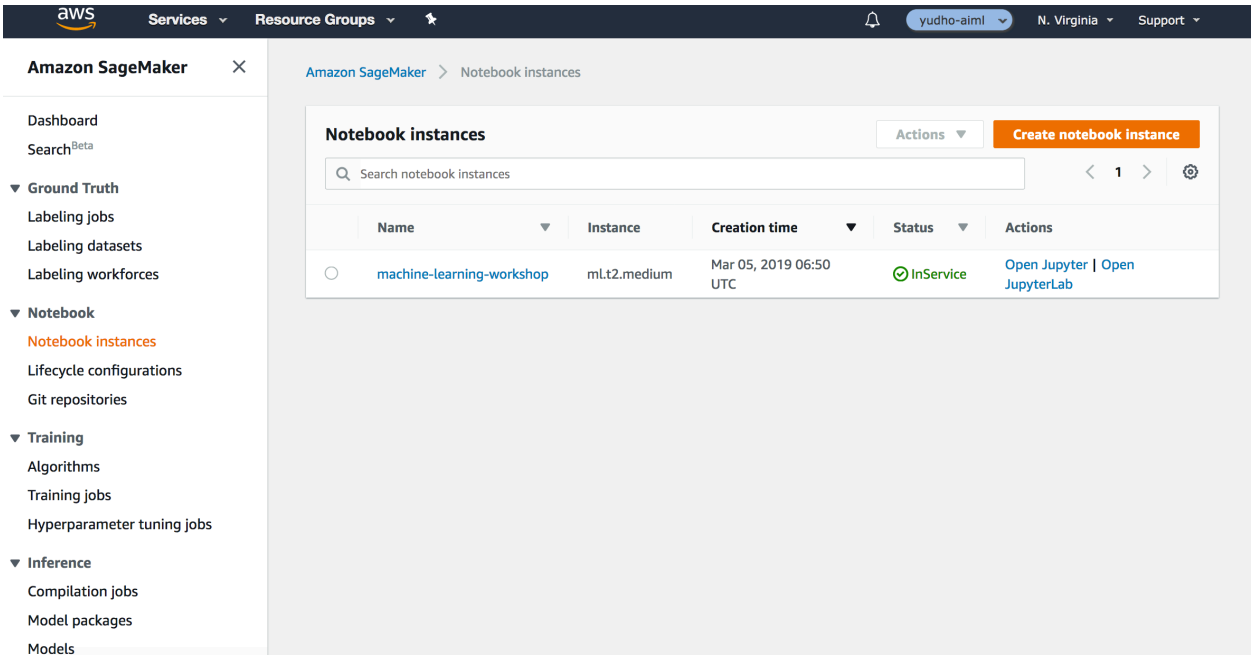
March 2019

Lab Preparation

This lab guide provides preparation steps for the machine learning workshop labs on AWS. This includes launching SageMaker notebook instances and creating necessary IAM role.

Launching Sagemaker notebook instance

1. Go to Amazon SageMaker UI console at https://console.aws.amazon.com/sagemaker/home?region=us-east-1#/
2. Locate "Notebook Instances" on the left menu, and click it
3. Click "Create notebook instance" orange button
4. Fill in details:
    a. Notebook instance name: **machine-learning-workshop**
    b. Notebook instance type: **ml.t2.medium**
    c. IAM role: **Create a new role**
        i. When prompted, under "S3 buckets you specify – optional" section, select **Any S3 bucket**, then click "Create role"
    d. Volume size in GB – optional: **50**
5. Leave other fields with default value
6. Click "Create notebook instance"
7. Go back to SageMaker Notebook instances dashboard and wait until the status of notebook is InService. You should see this after the notebook is InService



Add permissions to IAM role

1. From AWS console, go to IAM service
2. Select Policies from the left menu
3. Click “Create policy”
4. Choose “JSON” tab
5. Paste this policy below:

```
{
    "Version": "2012-10-17",
    "Statement": [
        {
            "Sid": "VisualEditor0",
            "Effect": "Allow",
            "Action": [
                "s3:*",
                "rekognition:*",
                "sagemaker:*",
                "personalize:*",
                "transcribe:*",
                "translate:*",
                "polly:*",
                "comprehend:*",
                "iam:GetRole"
            ],
            "Resource": "*"
        }
    ]
}
```

6. Click “Review policy”
7. Fill in this detail:
    a. Name: **aiml-workshop**
    b. Description: **Policy that allows to S3 and several AIML services including recognition, sagemaker, personalize, transcribe, translate, polly, and comprehend.**
8. Click “Create policy”
9. Go back to IAM console main page
10. Select Roles from the left menu
11. Find the Amazon SageMaker role that was created in the section above when we launched SageMaker notebook instance. It should start with “AmazonSageMaker-ExecutionRole-“. Click that role.
12. Under “Permissions” click “Attach policies”
13. On the “Filter policies” box type **aiml-workshop** that we created just now
14. Click “Attach policy”

Access Jupyter notebook and clone code

1. From AWS console go to Amazon SageMaker service
2. Click Notebook instances on the left menu
3. On the currently InService notebook instance we created before, click “Open Jupyter”
4. On the newly opened tab, click “New” then select “Terminal”
5. On the newly opened tab for Jupyter notebook terminal, do:
    a. `cd SageMaker`
    b. `git clone https://github.com/yudho/machine-learning-workshop.git`
6. Navigate back to the previous tab, which shows Jupyter notebook UI. Our lab materials today are there.