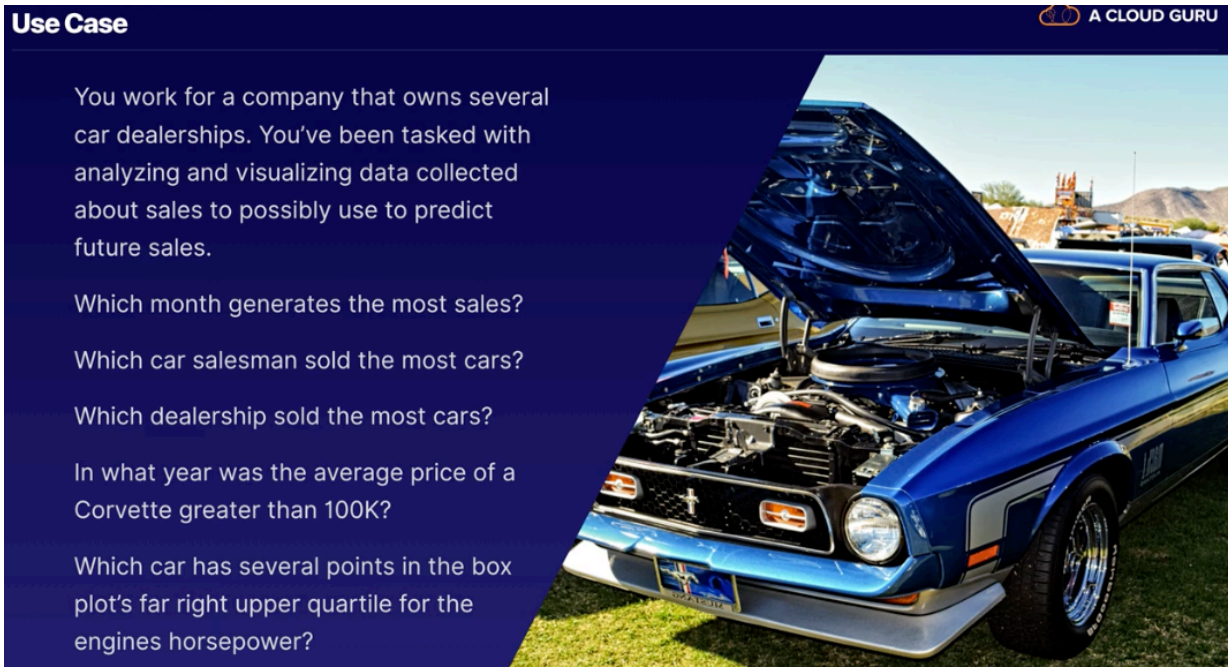
Cloud Guru - 4 - Data Analysis and Visualization Lab

https://acloud.guru/course/aws-certified-machine-learning-specialty/learn/9ec6163d-ffe3-0975-5904-5d2b2d793493/ae167e5d-106e-3c01-7d14-dc59e39b07a4/watch?backUrl=~2Fcourses&backUrl=~2Fcourses

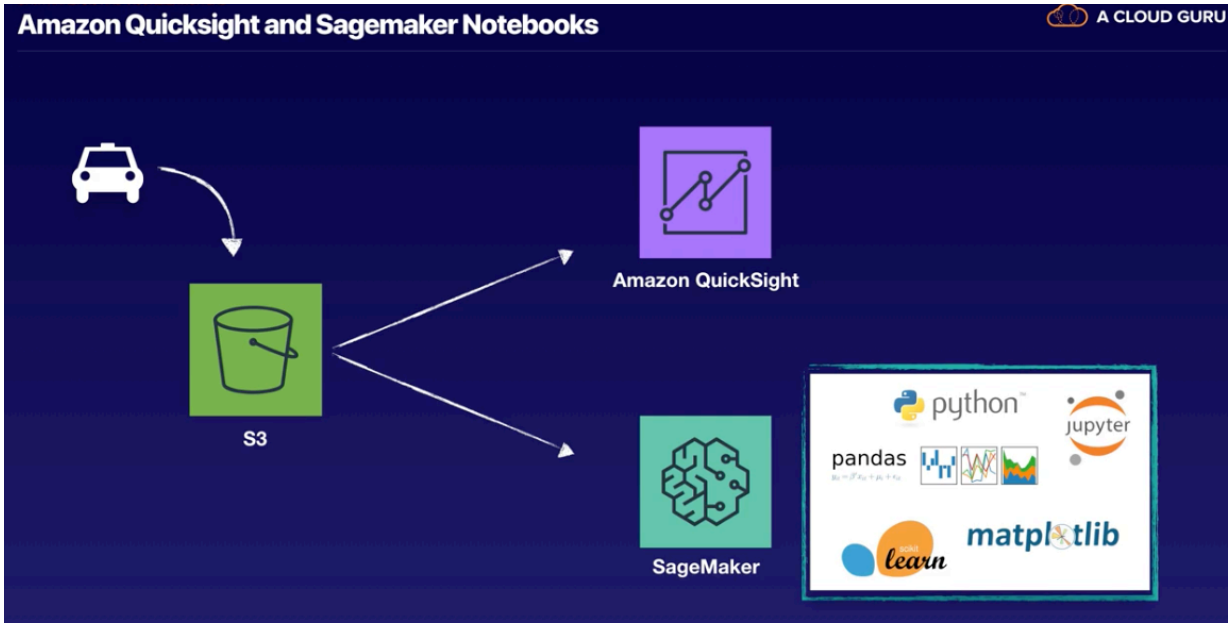
Resources
https://github.com/ACloudGuru-Resources/Course_AWS_Certified_Machine_Learning/tree/master/Chapter5

Use case:

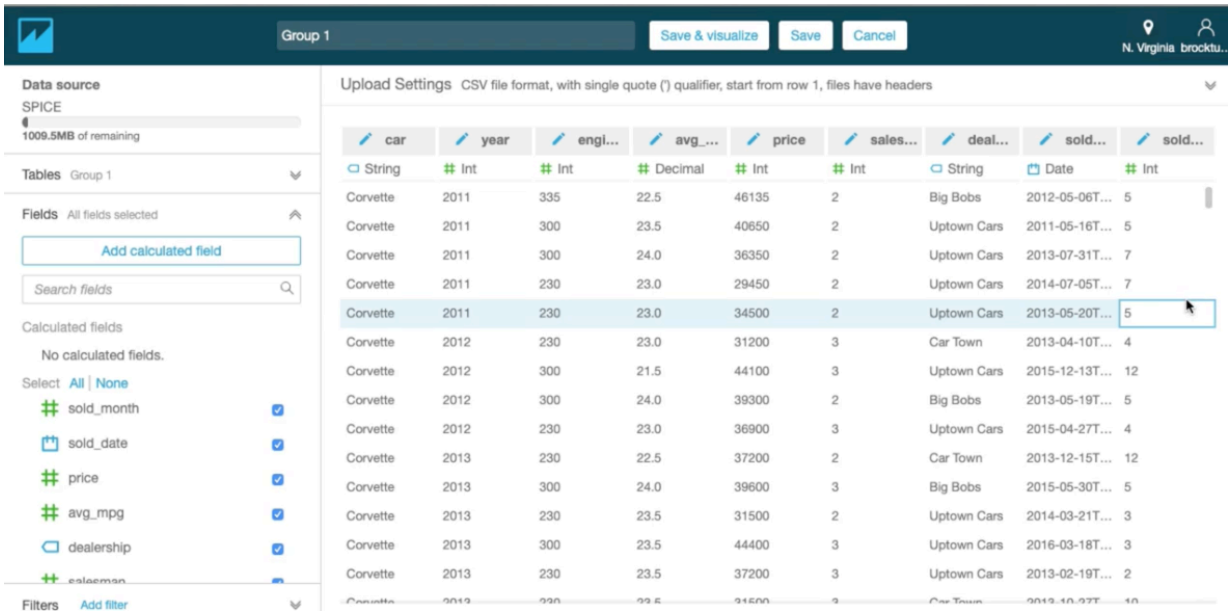


Approach:
- use s3 to load
- use Athena to query
- use Quicksight to present

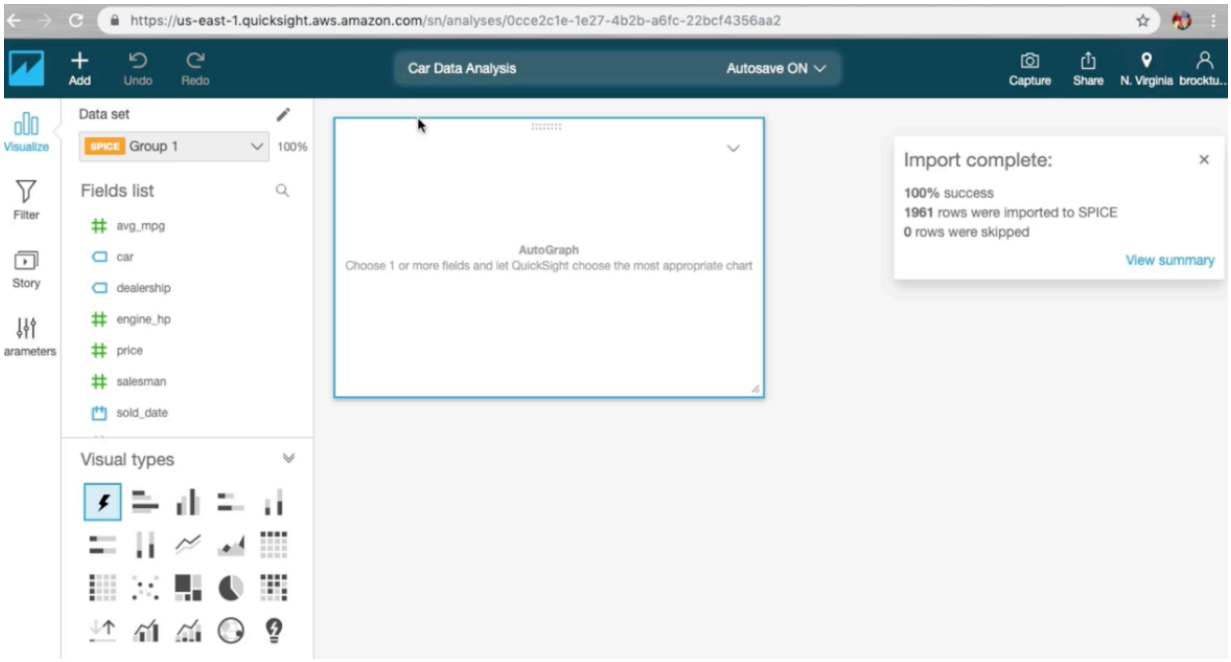
2 appraoches:
- Quicksight as drag and drop
- Jupiter for more hands on



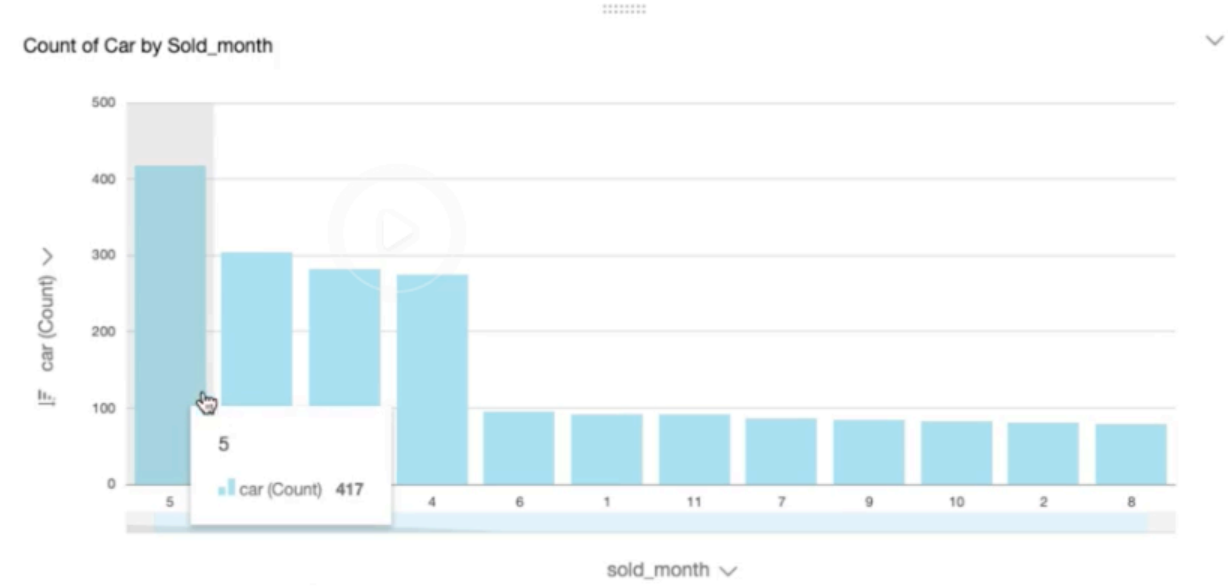
For quicksight, I ended up using my personal account as Cloudguru IAM role would not allow me to use Quicksight
Upon creating a dataset, I can visualize it in Quicksight before I analyze it.



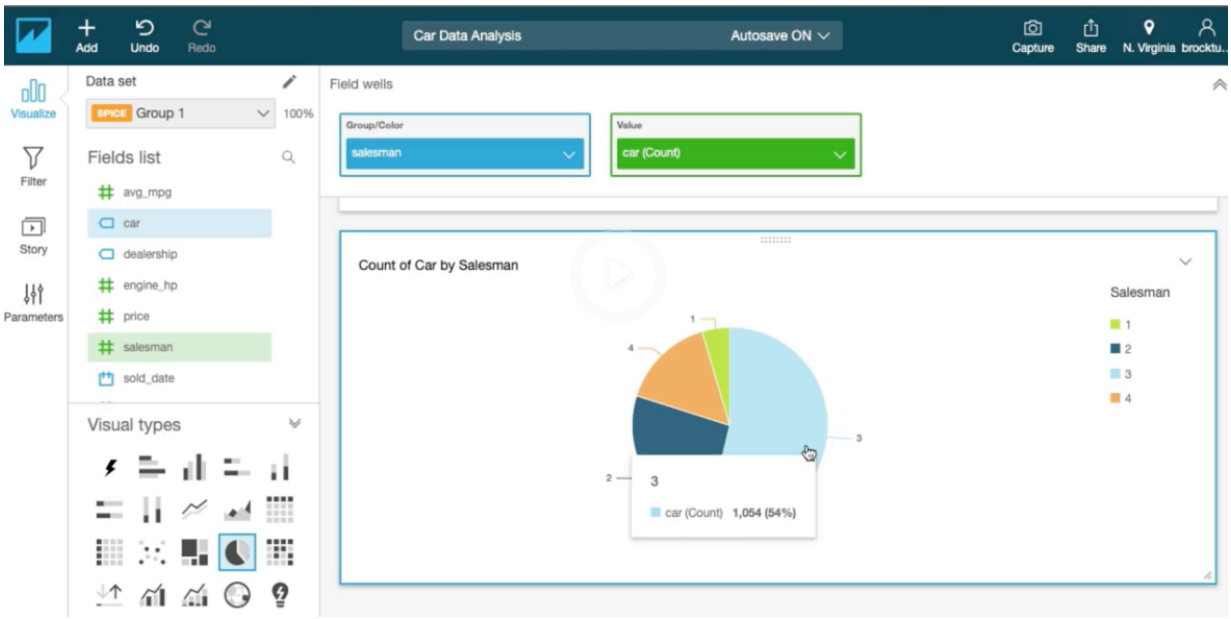
I can them analyze the data



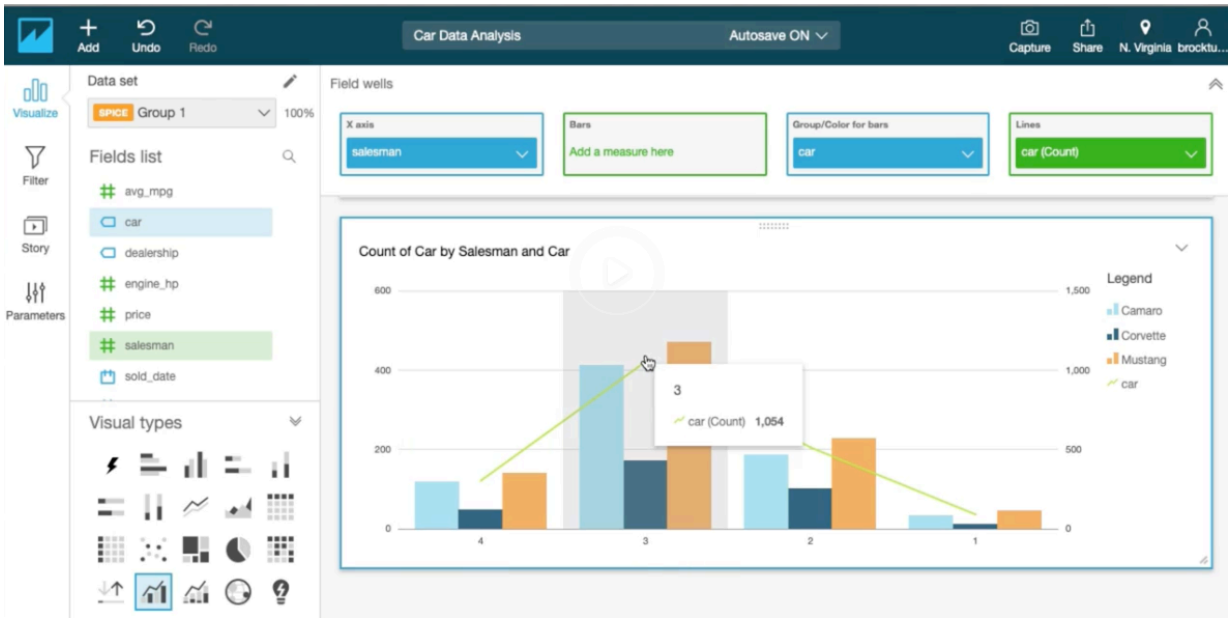
We can now start answering business questions by dragging / dropping measures and dimensions
Which Month generated the most sales: May with 417 cars sold



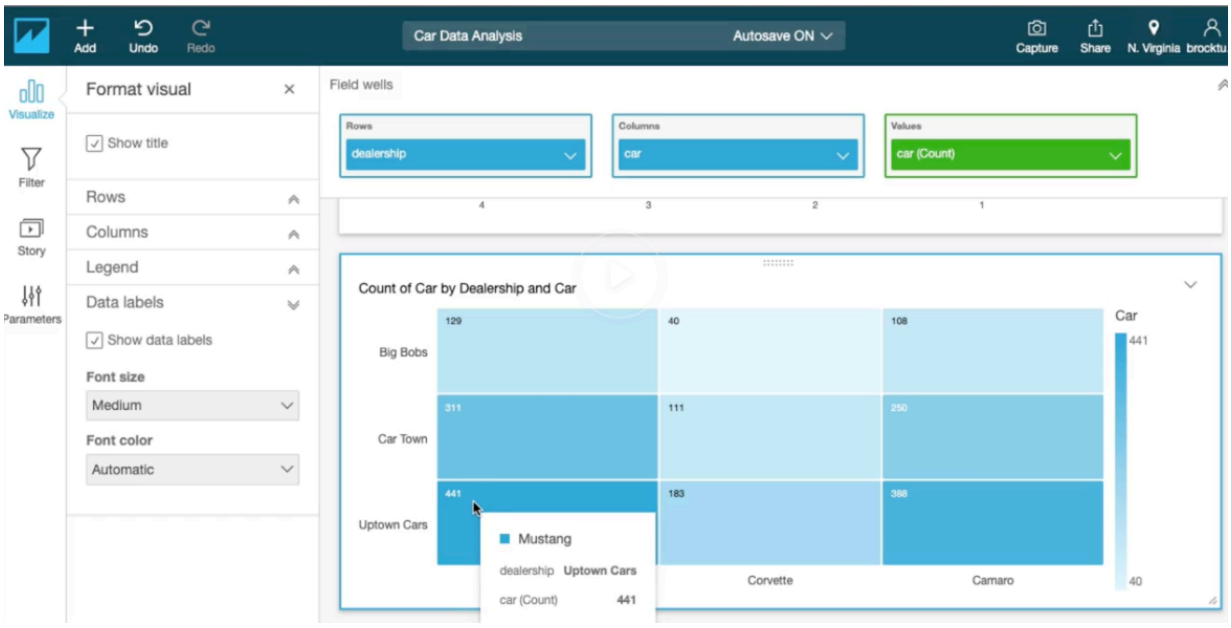
Which salesman sold the most cars?
=> Salesman #3



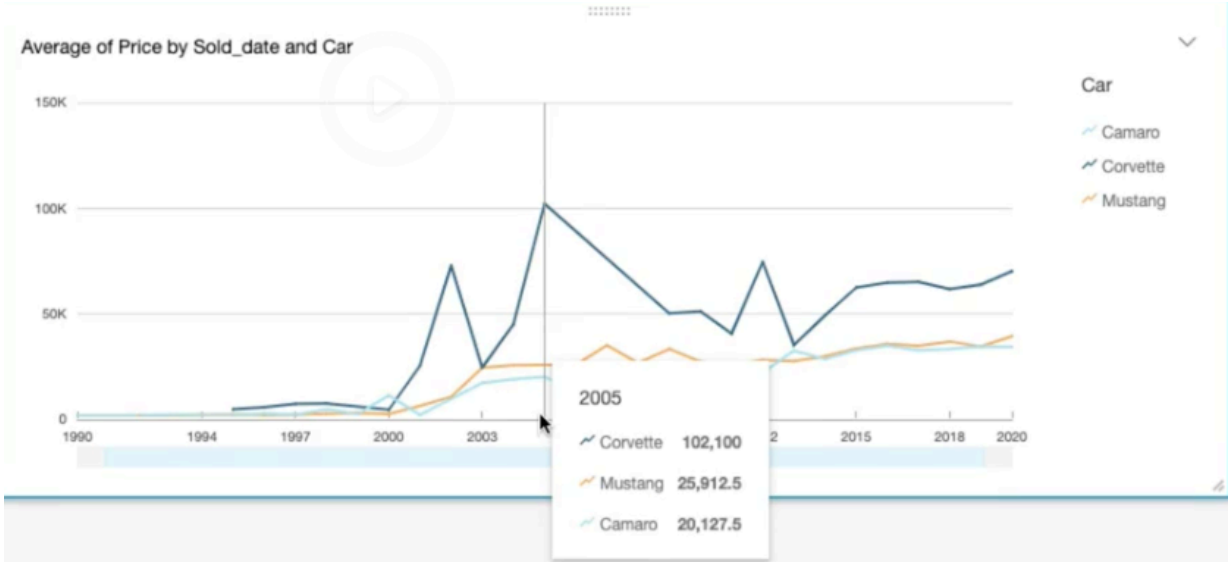
What car types was sold the most, by salesman?



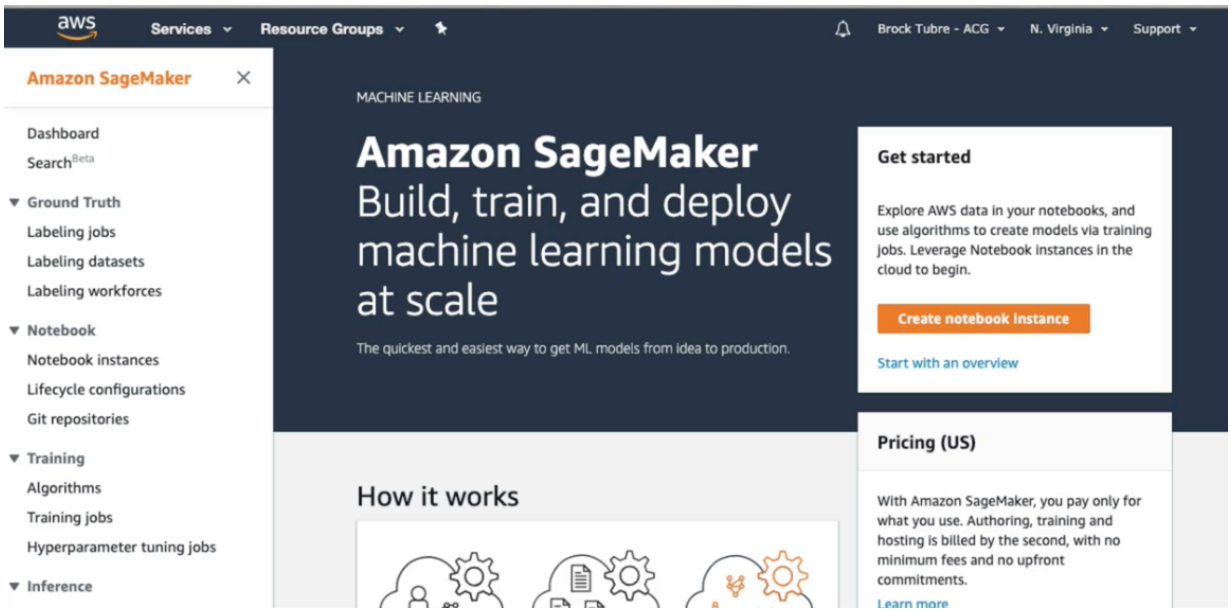
What dealer sold the most cars?



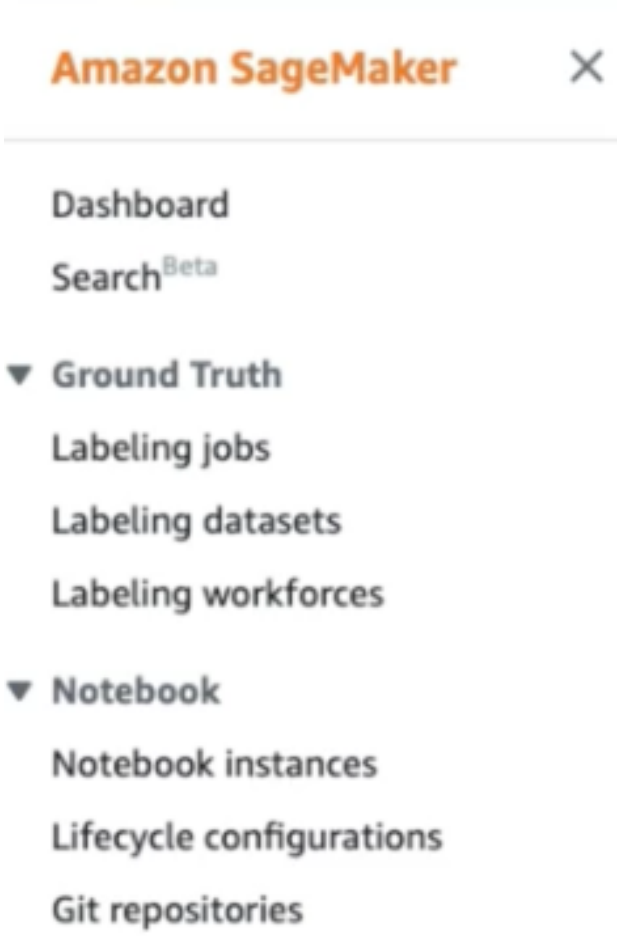
What year was the price of a corvette over $100k?



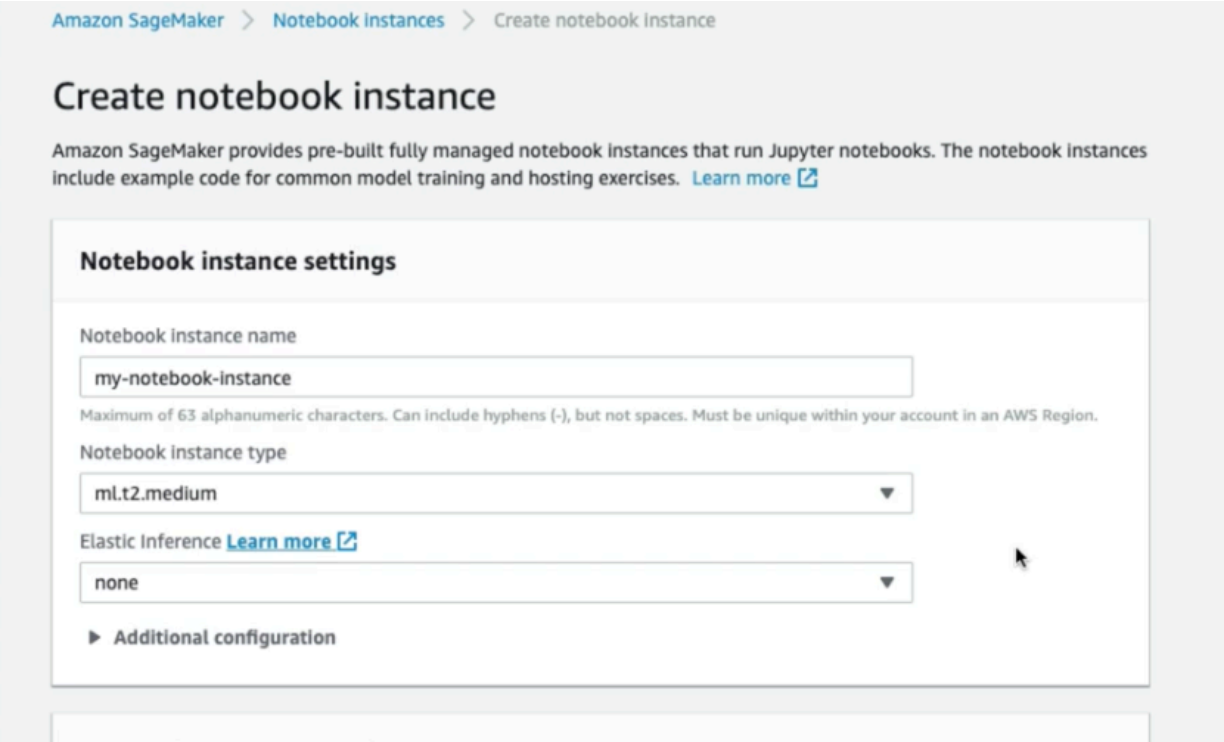
2nd Approach - leveraging AWS SageMaker Jupiter Notebook



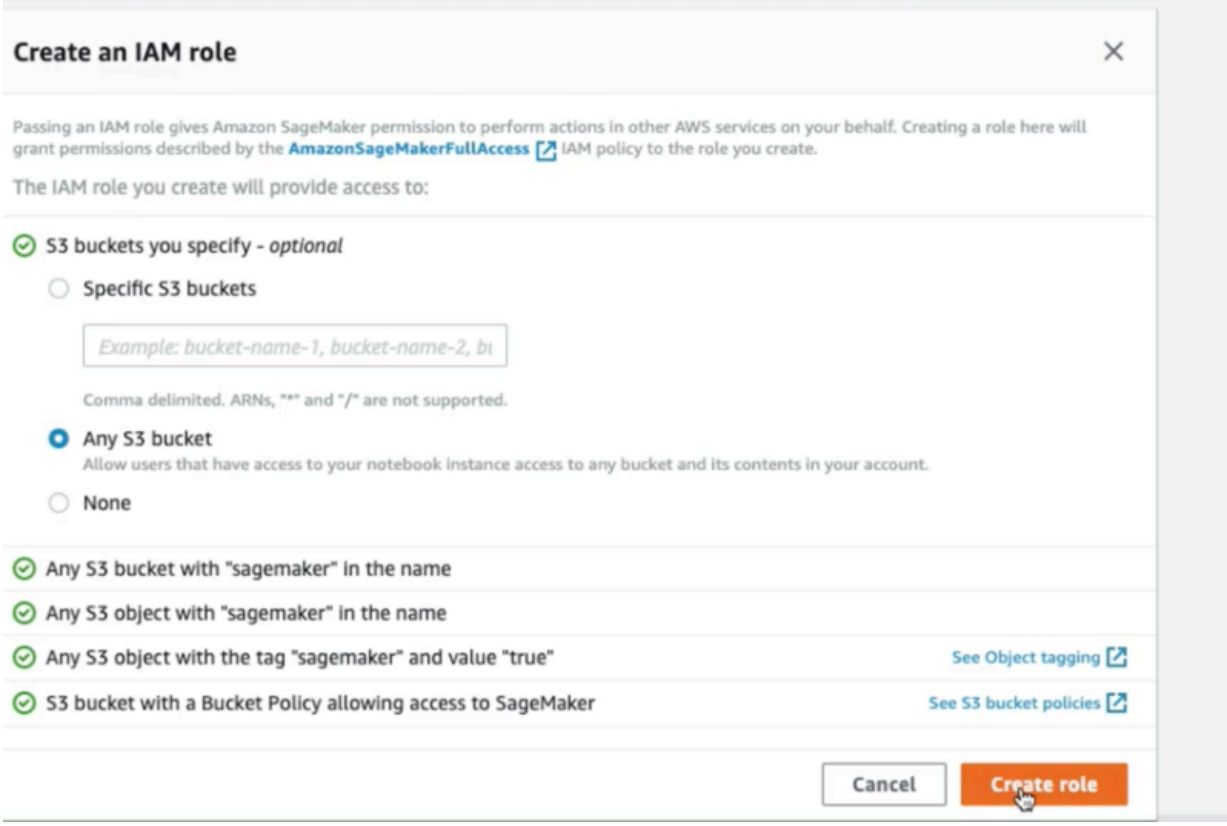
SM allows to built, train and deploy Machine Learning models
We will be using a Notebook instance

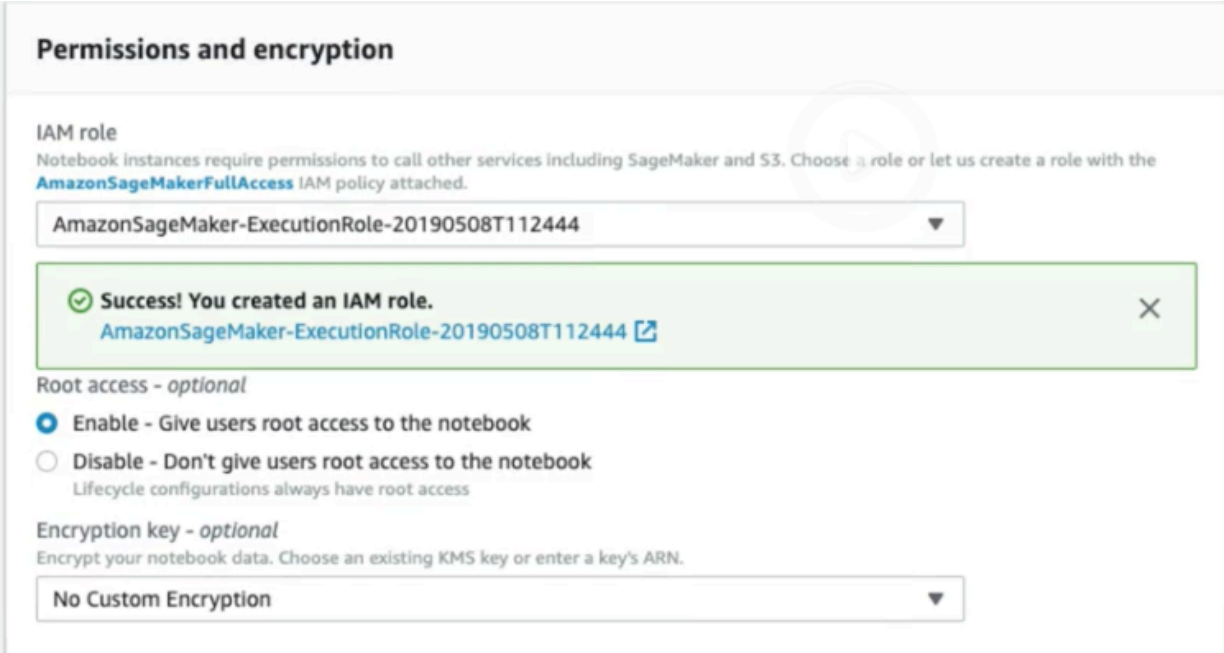


SM can run locally, in an EC2 instance, of EMR,... and can be launched from SM

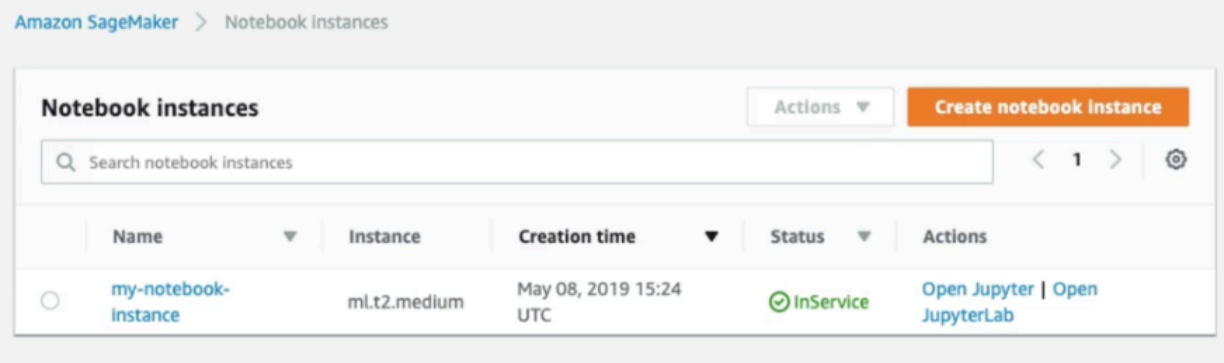


We create a new IAM role for that instance

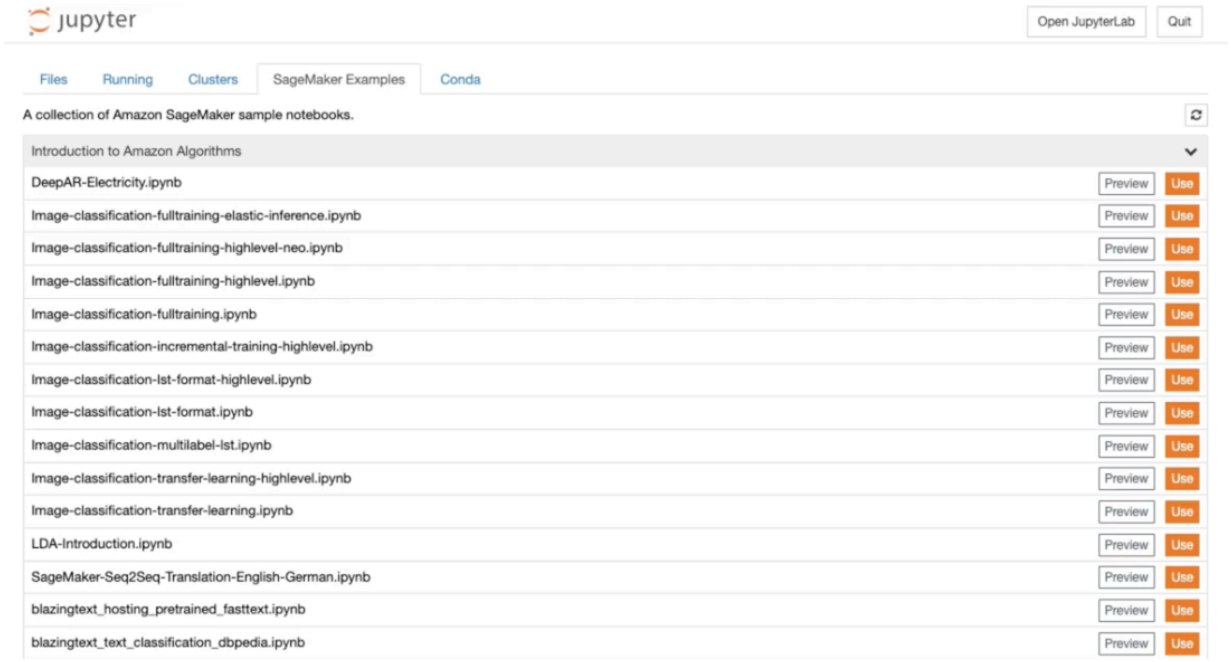




Now notebook instance is available



A great thing that AWS gives us is a library of SageMaker examples


jupyter
Open JupyterLab
Quit
Files
Running
Clusters
SageMaker Examples
Conda
A collection of Amazon SageMaker sample notebooks.
Introduction to Amazon Algorithms
DeepAR-Electricity.ipynb
Image-classification-fulltraining-elastic-inference.ipynb
Image-classification-fulltraining-highlevel-neo.ipynb
Image-classification-fulltraining-highlevel.ipynb
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Preview
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