

# Building an ML-Enabled Bot on AWS



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[www.awsgeek.com](http://www.awsgeek.com)



# Building an ML-Enabled Bot on AWS



# What's that?



1:50 PM



Edit profile

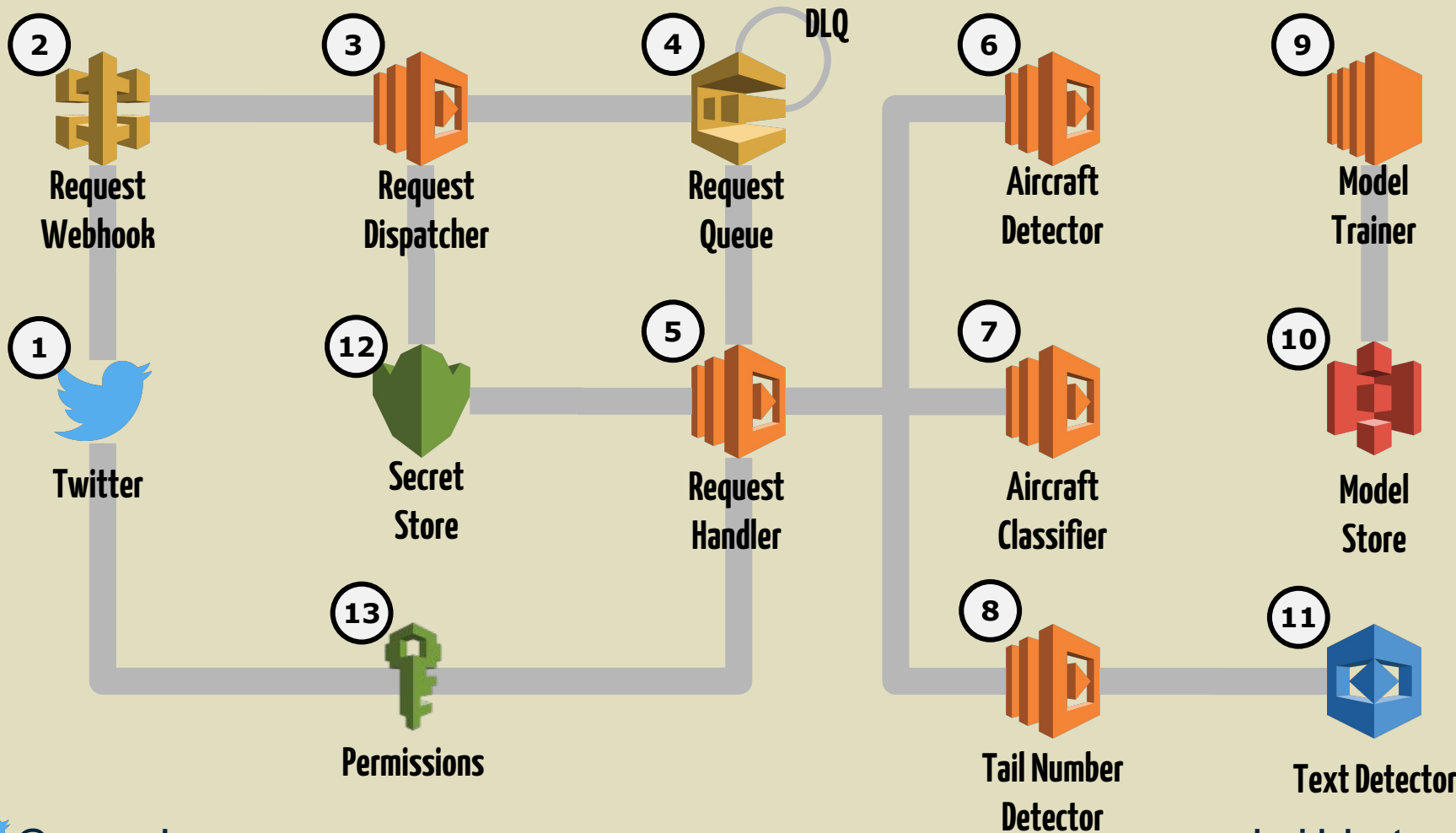
**AircraftML**

@AircraftML

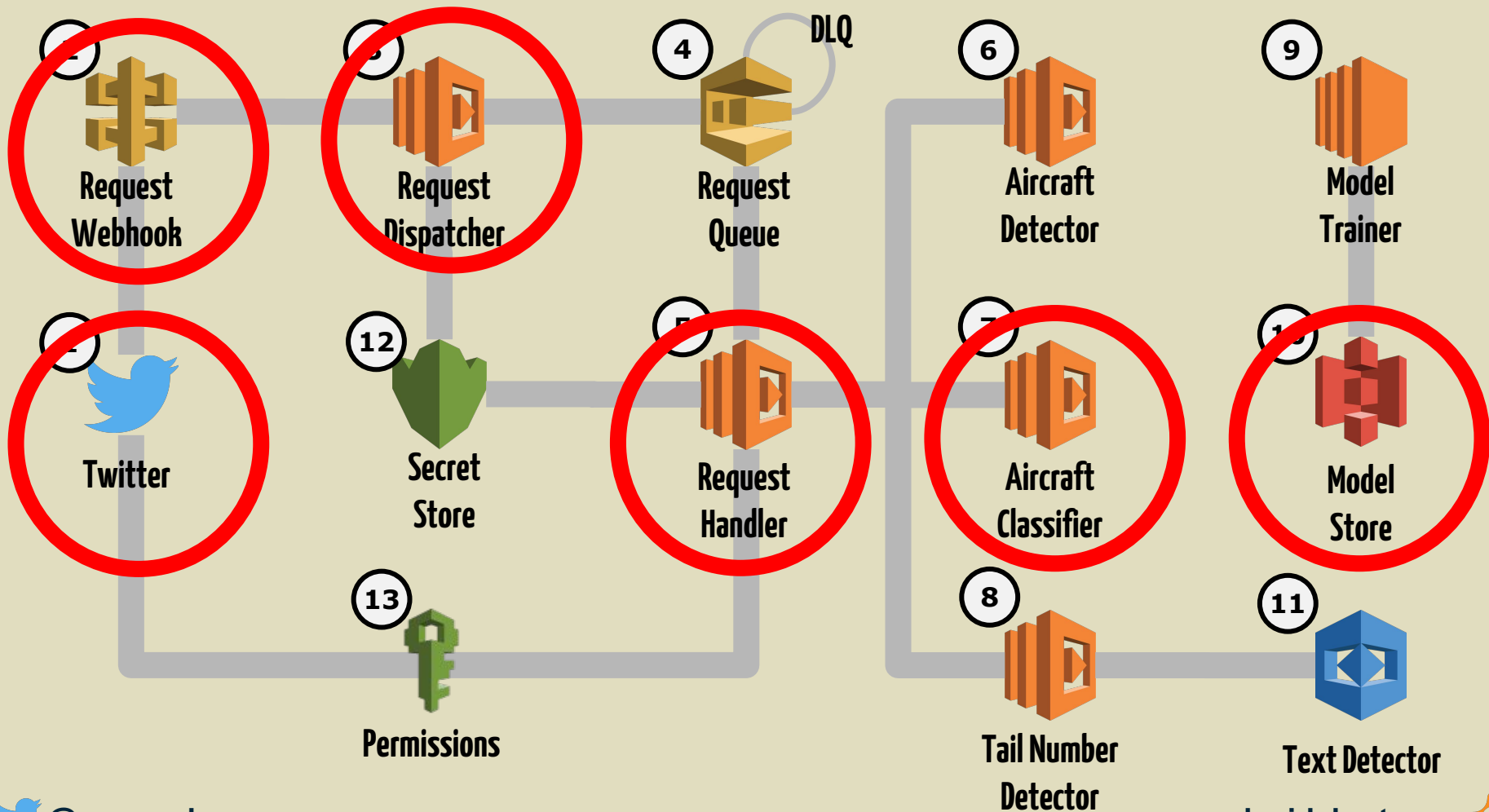
Send an aircraft pic & I'll guess what it is. Built w/Sagemaker, Rekognition, SQS, Lambda & Fargate. By [@awsgeek](#)

📍 Near PDX 🔗 [awsgeek.com](#) 📅 Joined April 2018





But we don't have  
**that** much time





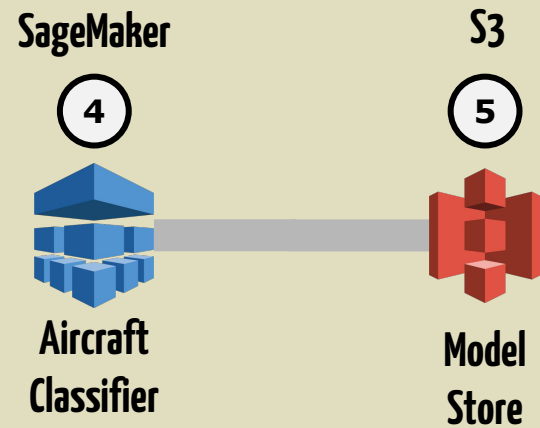
# Lets build this instead:



# An Aircraft Classifier

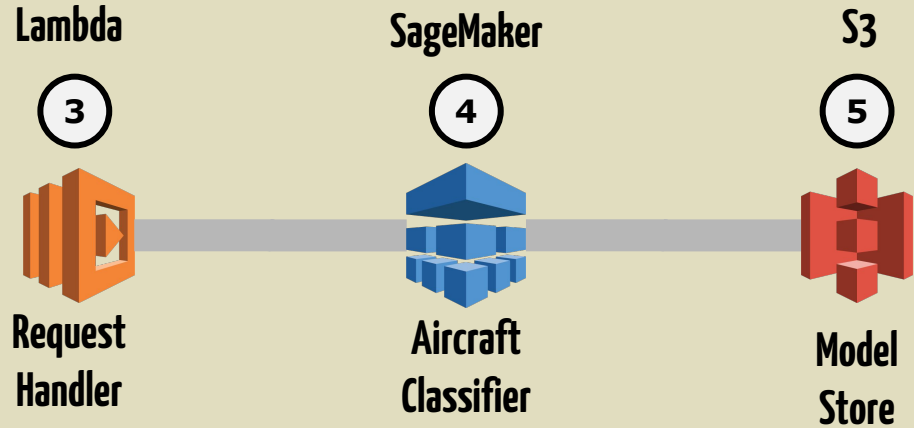
# agenda

# Lab 1



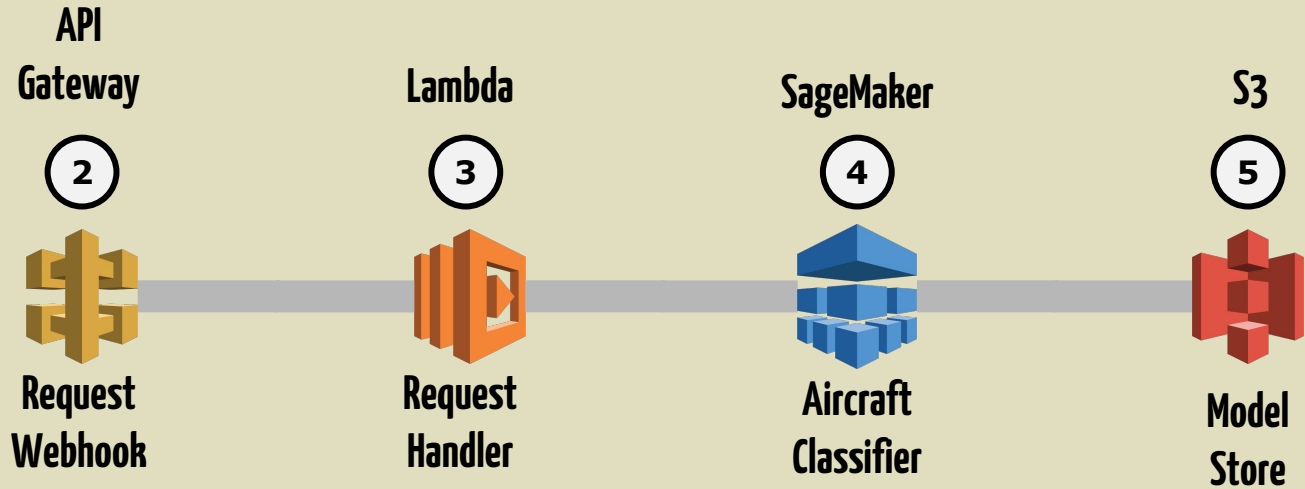
## The Classifier

# Lab 2



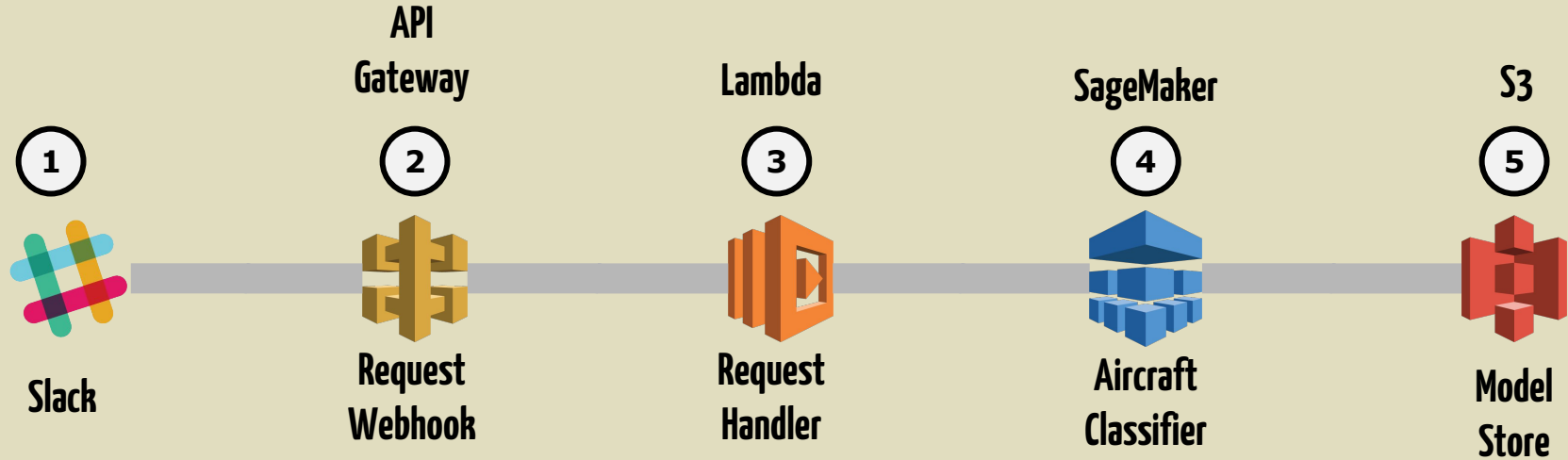
## Private interface

# Lab 3



## Public interface

# Lab 4



## Slack bot

# Before we get started:

To get the most out of this tutorial, you should:

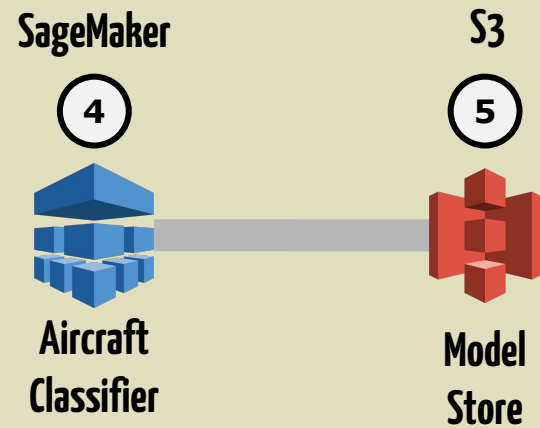
- Have some experience with AWS
- Have some experience with AI/ML



# Lab 1

**Train (and deploy) an aircraft classifier  
using Amazon SageMaker**

# Lab 1



## The Classifier

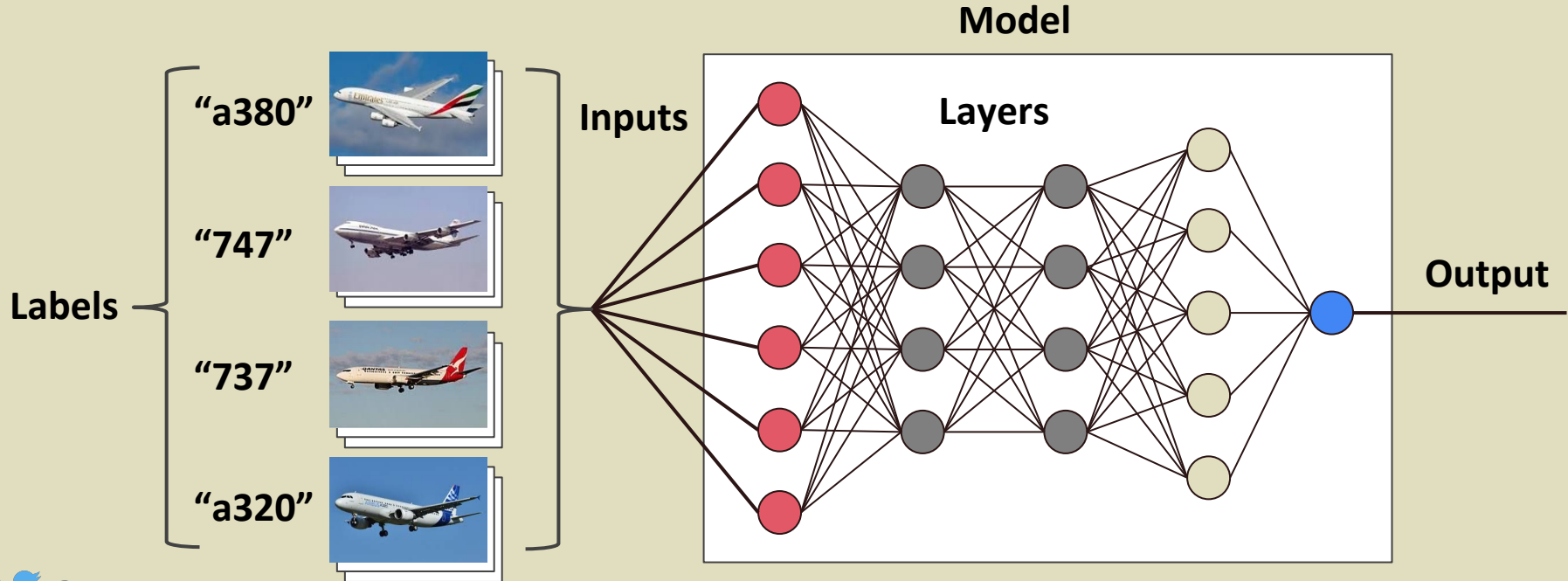


# Amazon SageMaker

**Build, train, and deploy  
ML models at scale**

- Ad targeting
- IoT & machine learning
- Credit default prediction
- Content quality prediction

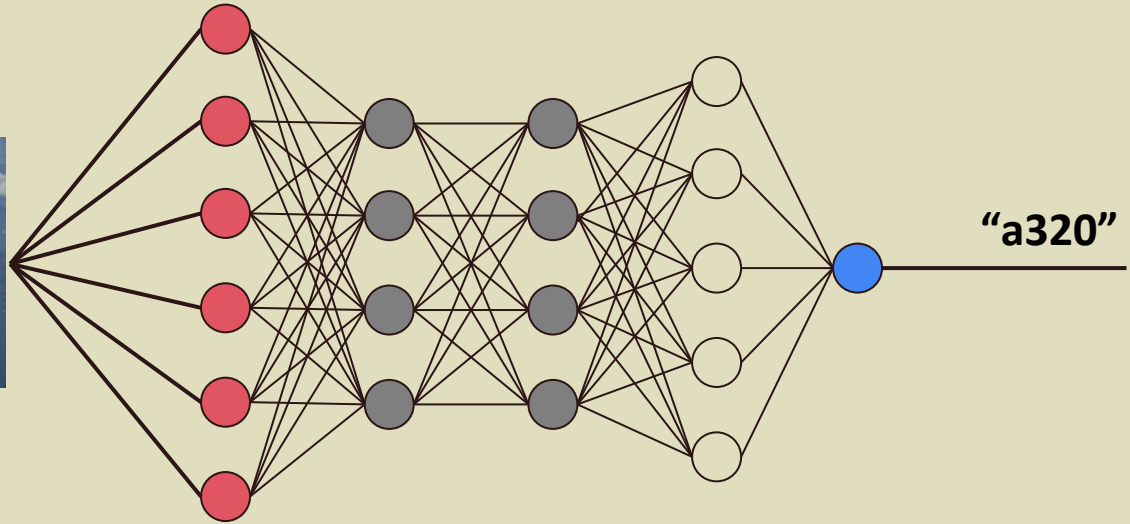
# Classification



# Prediction



Unlabeled image

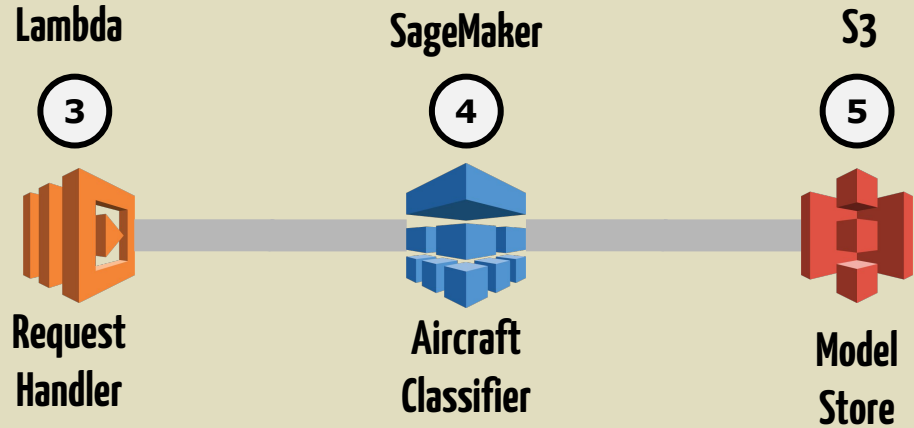


"a320"

# Lab 2

**Build a private interface**  
for your aircraft classifier using AWS Lambda

# Lab 2



## Private interface





# AWS Lambda

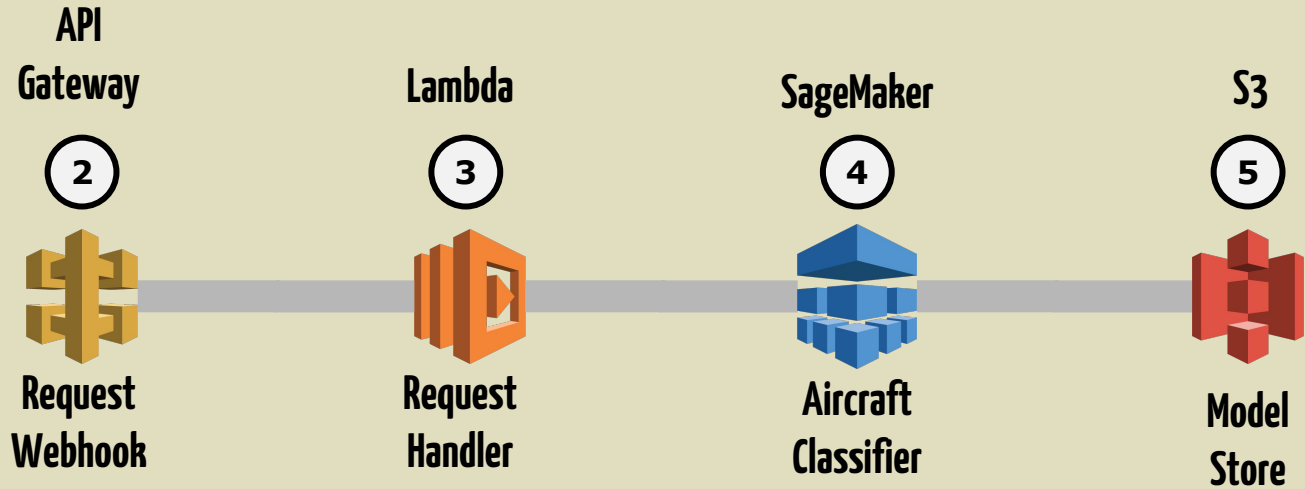
**Serverless computing**  
**Pay only while code runs**

- Bring your own code
- Java, Node.js, C#, & Python
- Fully managed, scalable
- Exec triggers like S3, API Gateway, DynamoDB, ect

# Lab 3

**Build a public interface  
for your aircraft classifier using  
Amazon API Gateway & AWS Lambda**

# Lab 3



## Public interface



# Amazon API Gateway

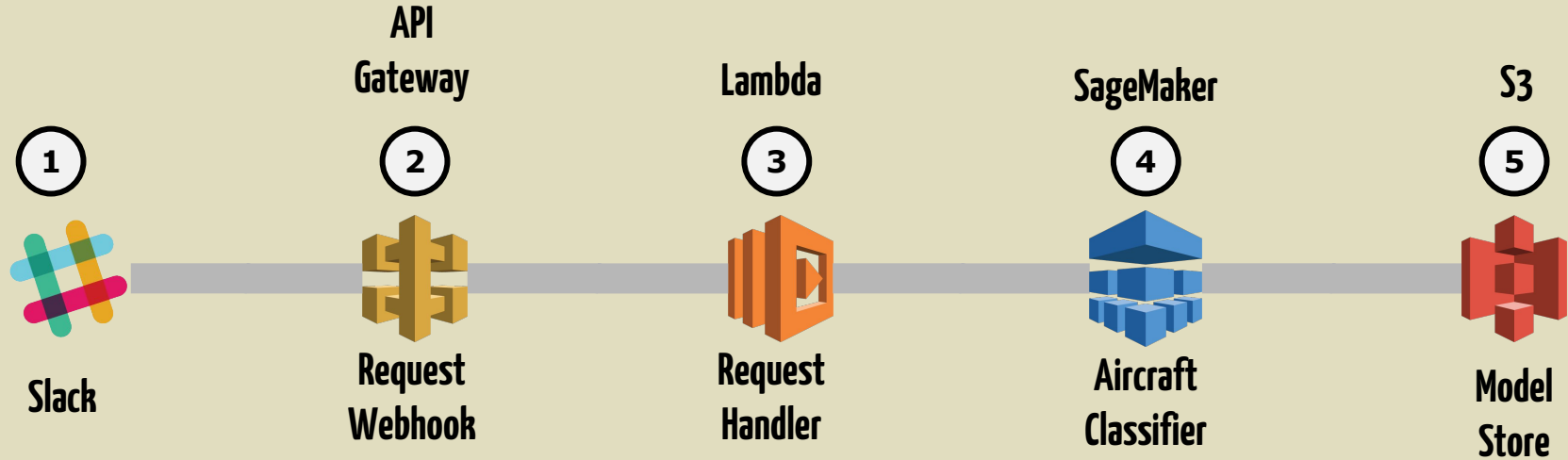
Create, maintain, and  
secure **APIs** at any scale

- Request throttling and response caching
- API Lifecycle management
- Monitoring & metrics
- Auth

# Lab 4

**Build a Slack bot**  
to send requests to your aircraft classifier

# Lab 4



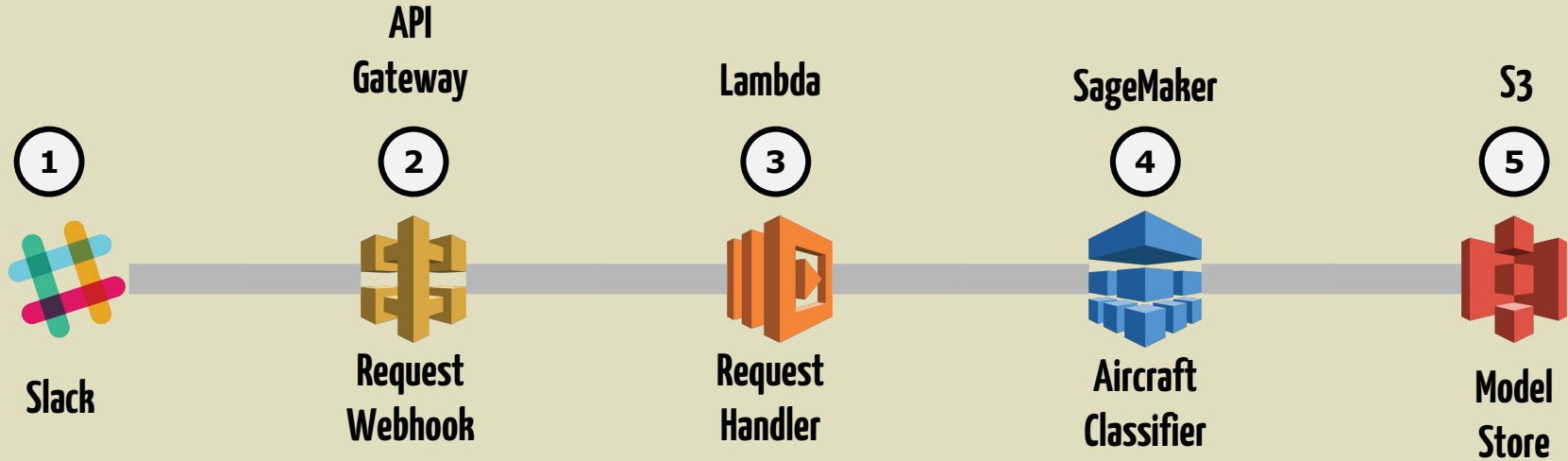
# Slack bot

# Lab 5

**Tear it all down!**



# Lab 5



# Cleanup

# Thank You!



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