

WHAT WE WILL LEARN

SERVERLESS FRAMEWORK & AWS AI SERVICES



COURSE CONTENT

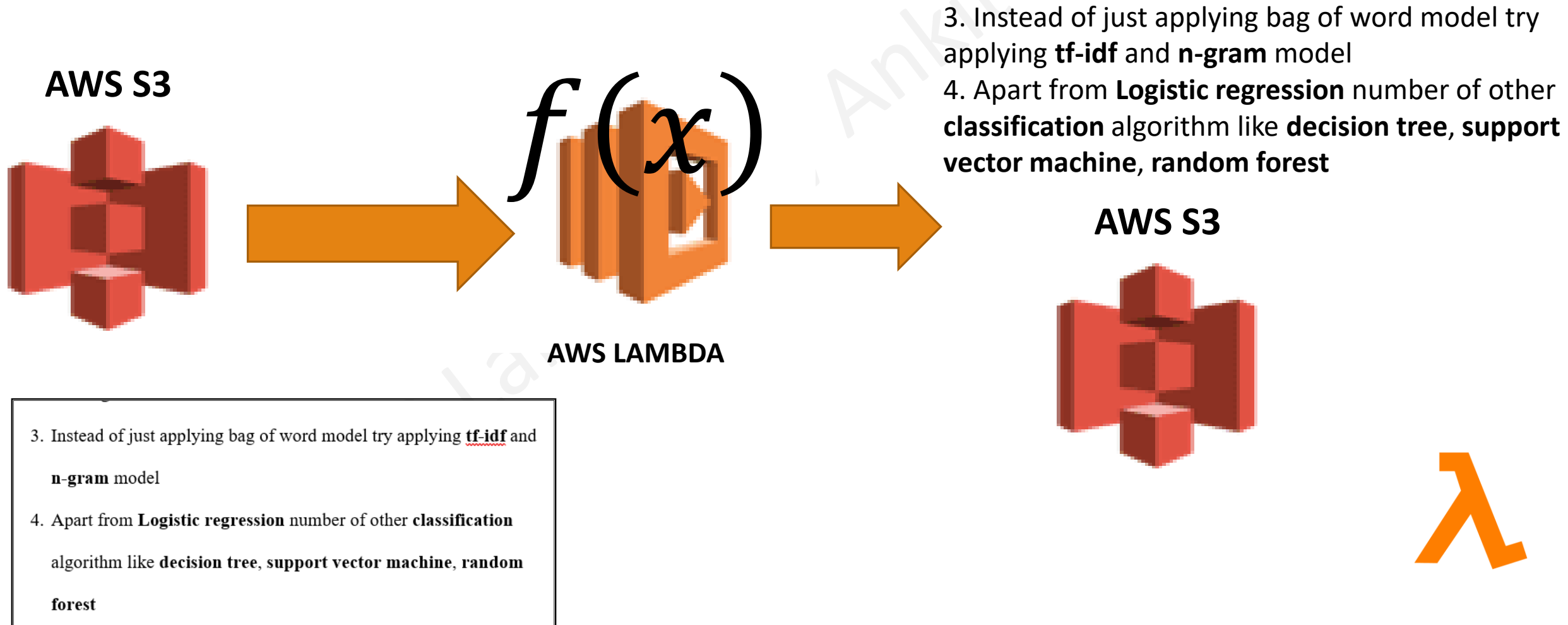
- AWS Lambda Overview
- Deploy First Lambda Function from Console
- Serverless Installation
- Deploy Lambda through serverless
- 3 Practical Projects



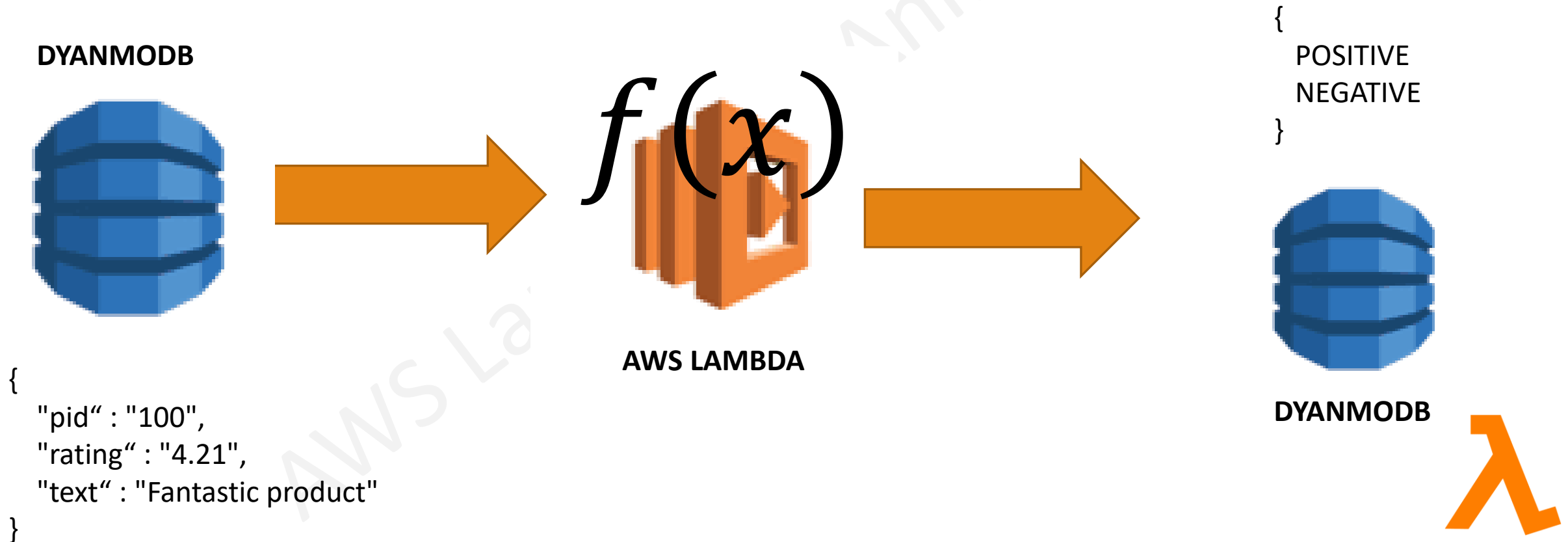
AWS LAMBDA



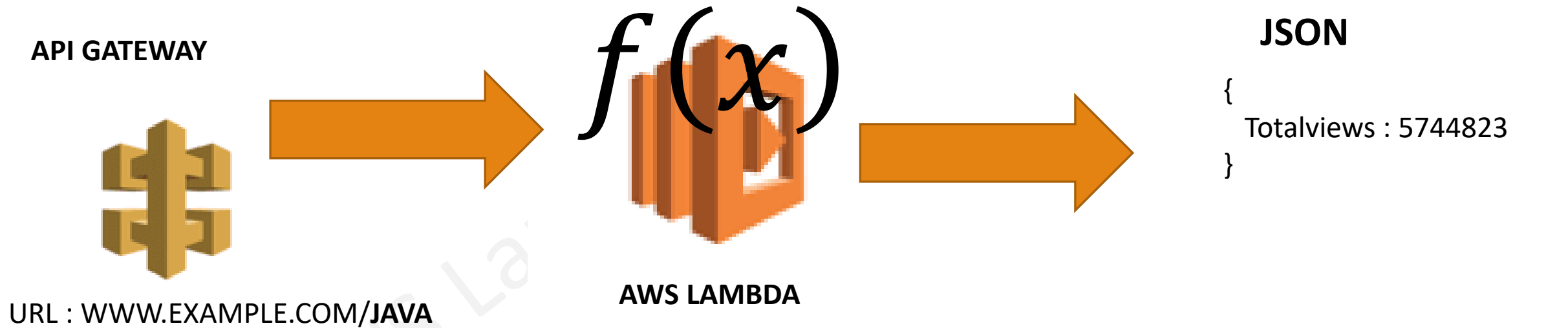
1. CHARACTER RECOGNITION



2. SENTIMENT ANALYSIS



3. CRAFTING API

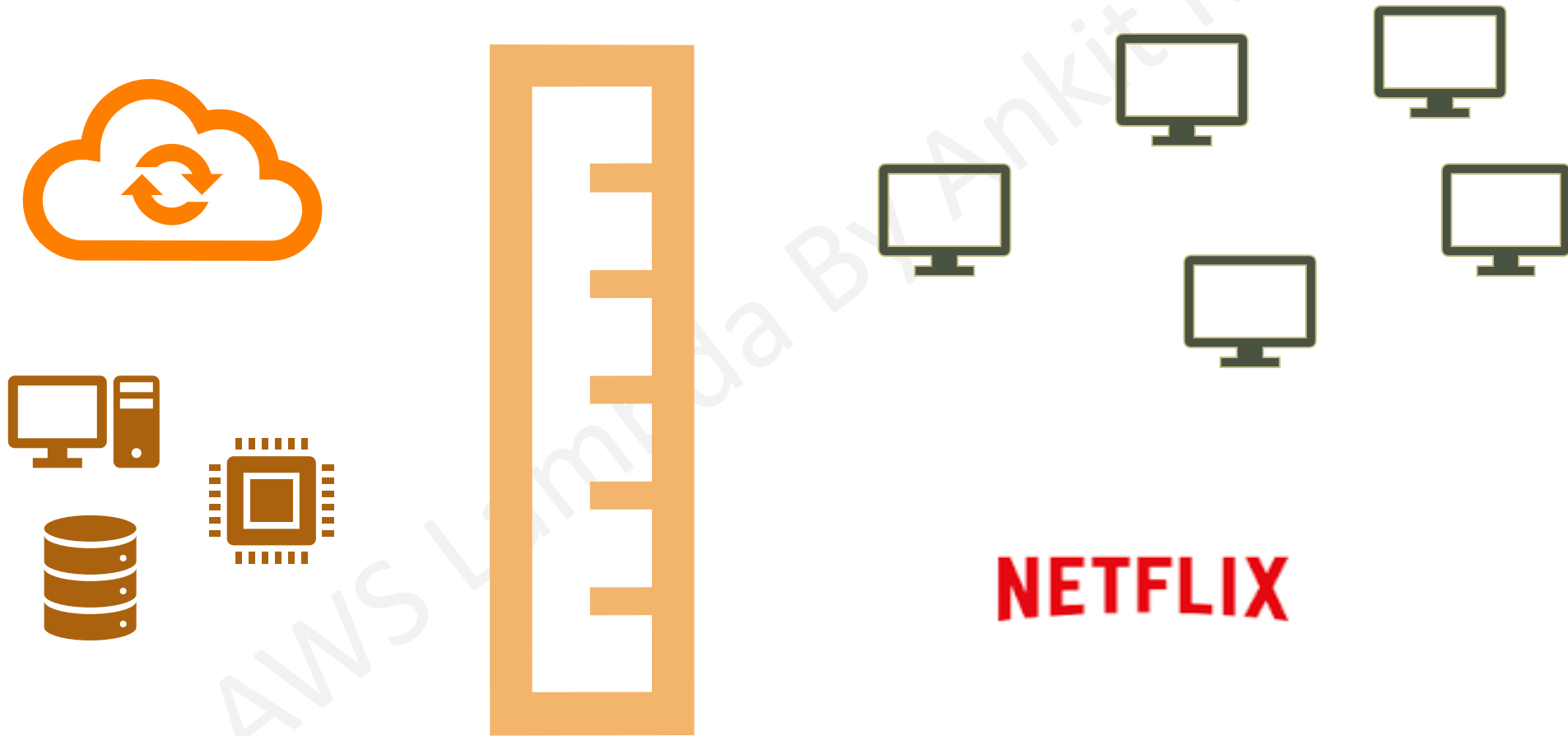


AWS LAMBDA

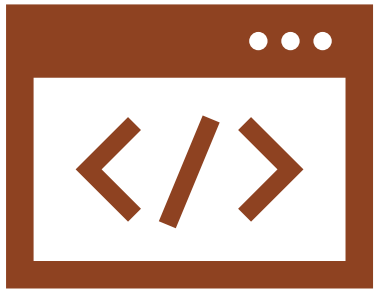
SERVERLESS FRAMEWORK & AWS AI SERVICES



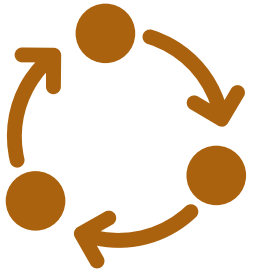
AWS CLOUD COMPUTING



ISSUE WITH SERVERS



- Add/remove servers
- Fixed RAM and CPU
- Need Manage all services running on server
- Once it's started, running continuously.



SERVERLESS TECHNOLOGY



SERVERLESS TECHNOLOGY

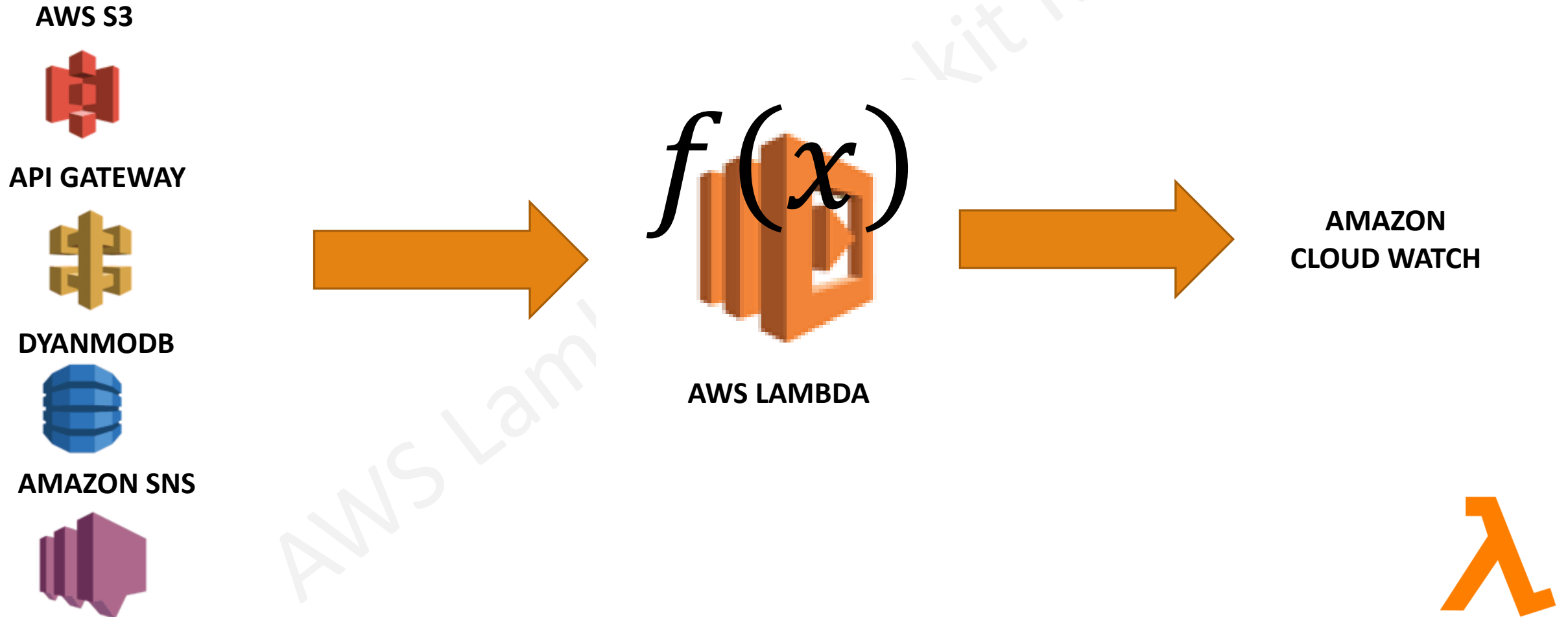
- There is no server.
- You don't need to manage server.
- Don't worry about scaling.
- Billed only when used.
- Just focus on Business logic.



AWS LAMBDA



HOW AWS LAMBDA DEV WORKS



MORE ON AWS LAMBDA

- Lambda Support many languages.
 - Python, Java, Nodejs, C#
- Billing
 - Pay Per request
 - Free Tier : 1M free requests per month and 400,000 GB-seconds of compute time per month
 - <https://aws.amazon.com/lambda/pricing/>



AWS LAMBDA



Deploy First Function AWS LAMBDA



SERVERLESS INSTALLATION



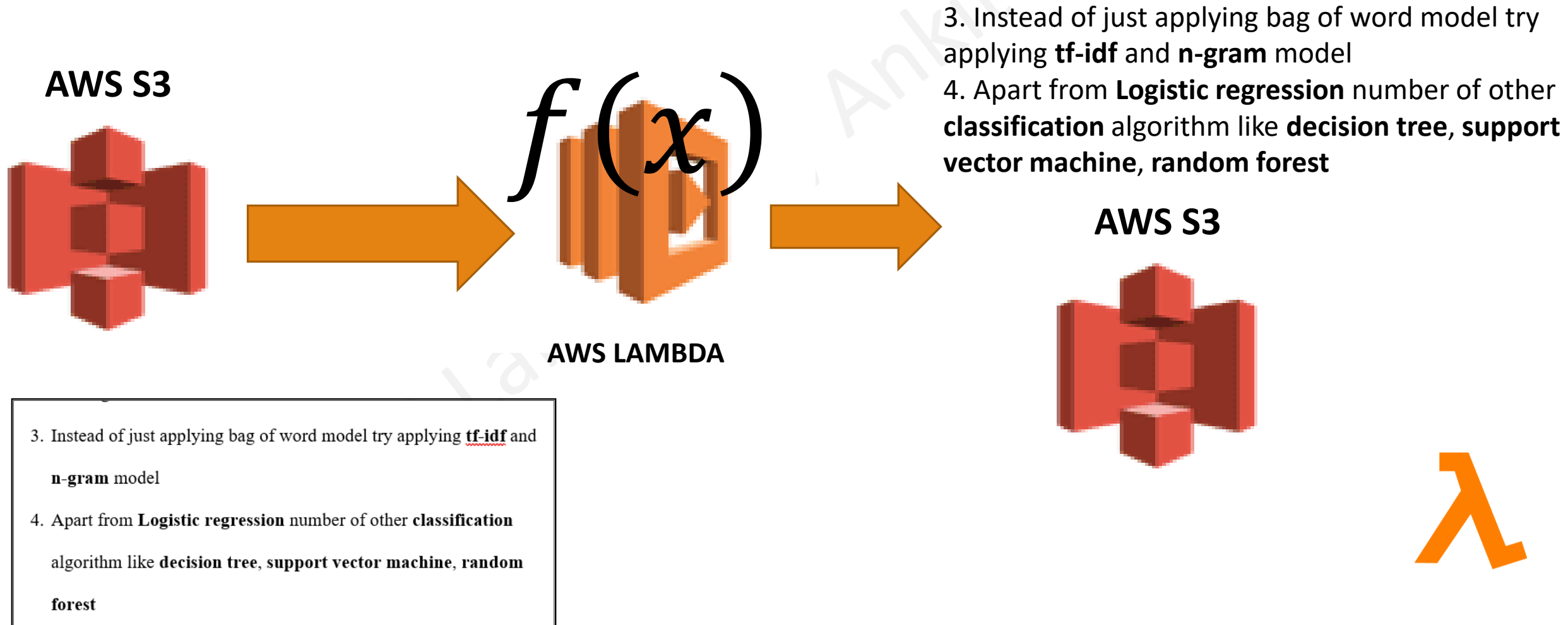
CREATE AWS USER



CREATE FIRST FUNCTION FROM SERVERLESS



1. CHARACTER RECOGNITION



1. CHARACTER RECOGNITION

➤ Reading S3 Bucket

➤ Recognize character –

➤ Amazon Rekognition API

➤ Upload extracted text back to S3

Role

➤ S3 Read/Write Permission

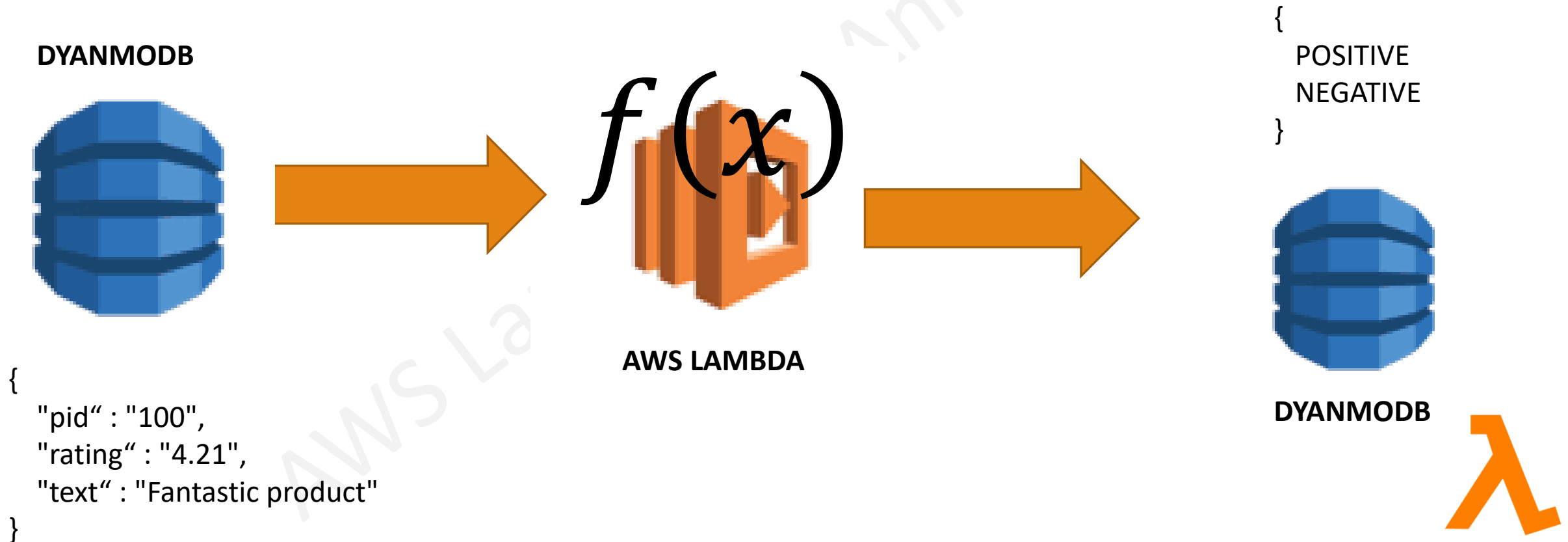
➤ Amazon Rekognition API Permission

Event

➤ S3 Event Trigger



2. SENTIMENT ANALYSIS



2. SENTIMENT ANALYSIS

Role

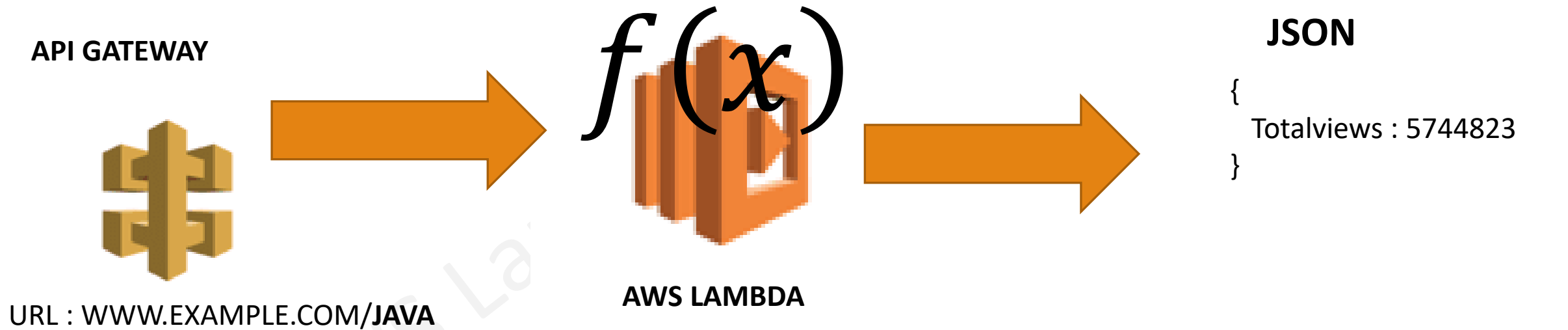
- Reading stream from Dynamo DB
- Analyze sentiment
 - Amazon Comprehend API
- DynamoDB Permission
- Amazon Comprehend API Permission

Event

- Update sentiment in Same Dynamo DB
- Dynamo DB Stream



3. CRAFTING API



3. CRAFTING API

➤ Reading search Term

➤ Get all videos for given search term on Youtube First page.

➤ Scrap views of every single video and return totalviews and average views.

Role

➤ No Special Permission from other services required.

Event

➤ HTTP Get Method

