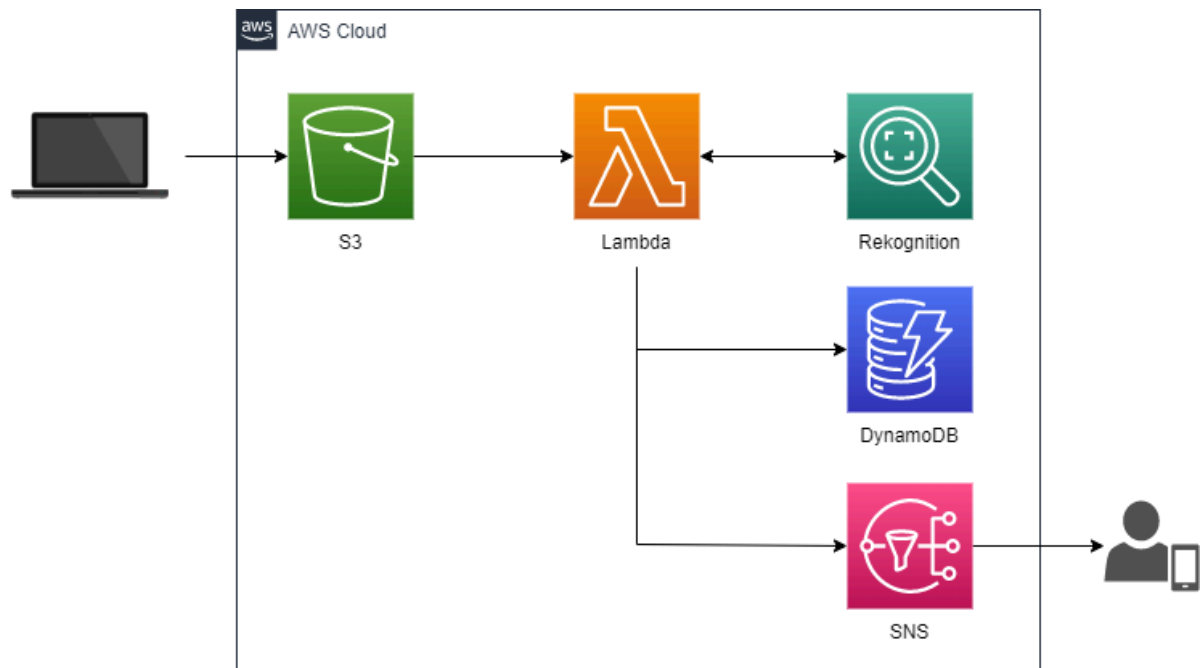


CHALLENGE 12 (2024)



Challenge Question: Serverless Face Analysis

Overview

For this project, we will explore both serverless and machine-learning services. A serverless service does not eliminate the need for servers to run your apps; rather, you will let AWS manage the servers so you can focus on development. While artificial intelligence has many components that you can use depending on your needs, we'll use the image recognition feature of Amazon Rekognition. After you finish the project, you can try integrating it into an online application form that will analyse the uploaded image to determine whether it is a person or not.

Objectives:

- Create an Amazon S3 bucket with event notifications to trigger the Lambda function.
- Use Amazon Rekognition to detect faces in the uploaded image.



- If the image contains a face, populate the DynamoDB table and trigger Amazon SNS to send email notifications.

Requirements

- 1. AWS Account
- 2. GitHub Repository

Services:

- Amazon S3
- AWS Lambda
- Amazon Rekognition
- Amazon DynamoDB
- Amazon SNS

Challenge Steps

1. Create an s3 bucket using the console, best approach using IaC for the bucket creation.
2. Write a Lambda code in the language you are okay with but best approach python for this project to pick the image from the bucket
3. Using lambda, if possible send triggered image events to Amazon Rekognition to detect faces in the uploaded image from the bucket.
4. If the image contains a face, populate the DynamoDB table and trigger Amazon SNS to send email notifications.

Note:

Be mindful of AWS free tier limits to avoid incurring any charges. Double-check the resources you create and remember to clean up after completing the challenge.

Good luck with the challenge! Remember to refer to the AWS documentation and utilise the available resources to complete the task successfully.