Presented by Cloud Warriors- Egypt Squad

# AWS-Based Solution for Secure File Upload and Sharing

# Introduction

- • - Objective: To provide a scalable, secure solution for users to upload and share files.

- • - Key Requirements:
  - • Secure user authentication
  - • Scalable storage for file uploads
  - • Real-time monitoring and auditing

# Solution Overview

- Services used:

1. S3

2. Lambda

3. API Gateway

4. DynamoDB

5. Cognito

6. WAF

7. KMS

8. CloudWatch

9. CloudTrail

# Frontend and User Authentication

- S3 for hosting the static website

- Amazon Cognito for user sign-up/sign-in

# API Gateway and Backend Logic

- API Gateway routes requests to Lambda functions

- POST requests handled for file uploads, GET requests for retrieval
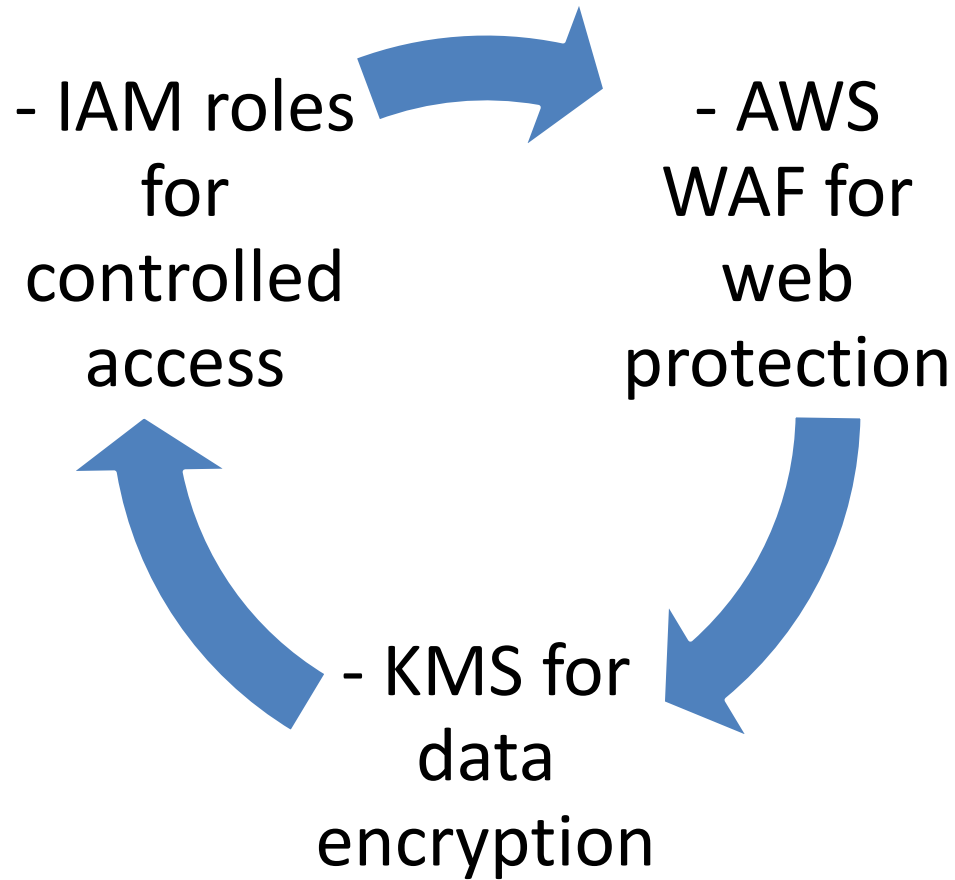
# Data Storage and Management

- S3 FOR STORING FILES

- DYNAMODB FOR STORING FILE METADATA

# Security Features

# Monitoring and Logging

- CLOUDWATCH FOR PERFORMANCE MONITORING

- CLOUDTRAIL FOR AUDITING AND LOGGING API CALLS

# Benefits of the Architecture

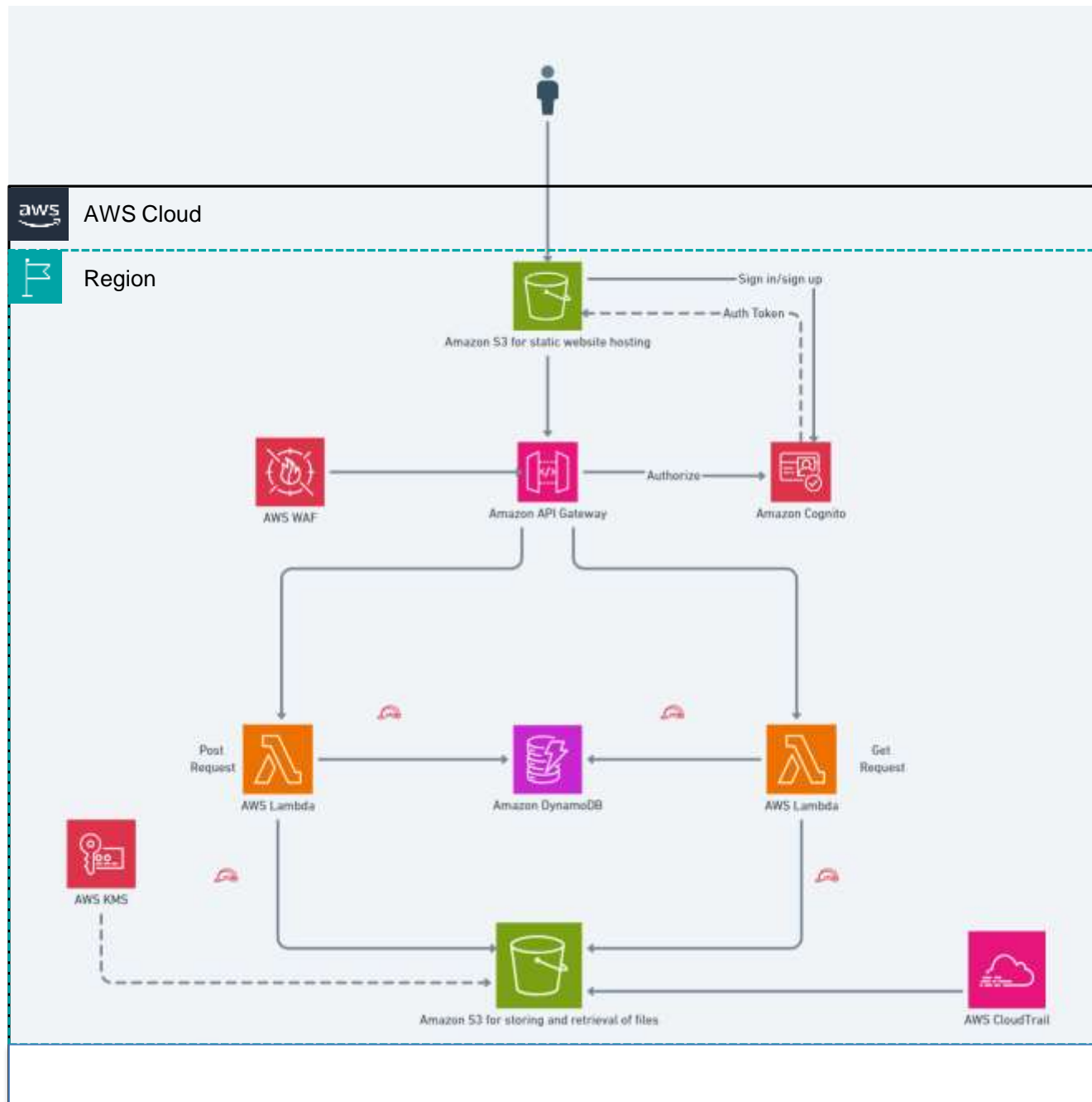- Scalability: Serverless and auto-scaling with S3 and Lambda

- Security: Robust authentication, encryption, and firewall protection

- Cost-Efficiency: Pay-as-you-go model with AWS serverless services

# AWS S3 File sharing diagram

# Conclusion

This solution meets the requirements for secure, scalable file uploads.

Thank you! Questions?