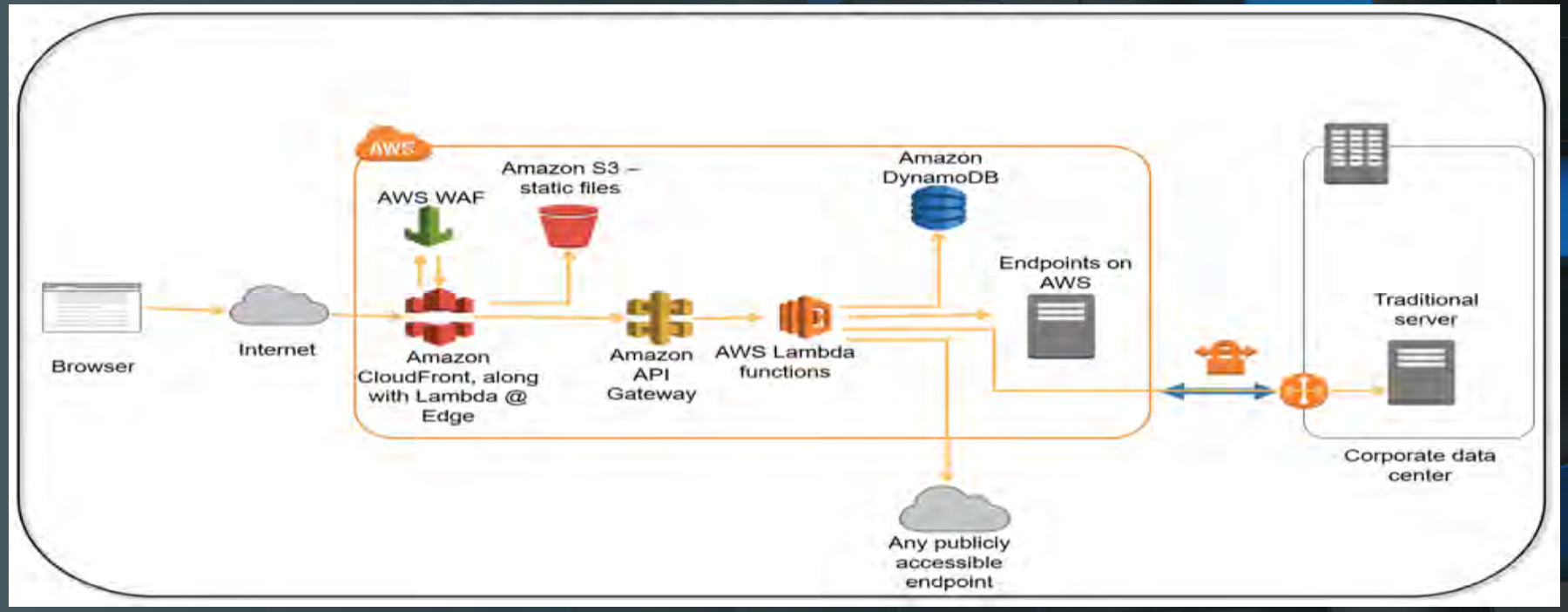
Serverless Application

21st March 2019



ES2 PEOPLE ES2 KIDS ES2 IR INCIDENT RESPONSE

Agenda

- Welcome Drinks - 16:00
- Canapes -16:30
- Serverless Application Presentation - 17:00
- Drone to be won with Kahoot! quiz!
- More Food and More Drinks – 17:30

ES2 ES2 PEOPLE ES2 KIDS ES2 IR INCIDENT RESPONSE

About Us

- ES2 Enterprise Security
- ES2 Enterprise Solutions
- ES2 Incident Response
- ES2 Kids
- ES2 People

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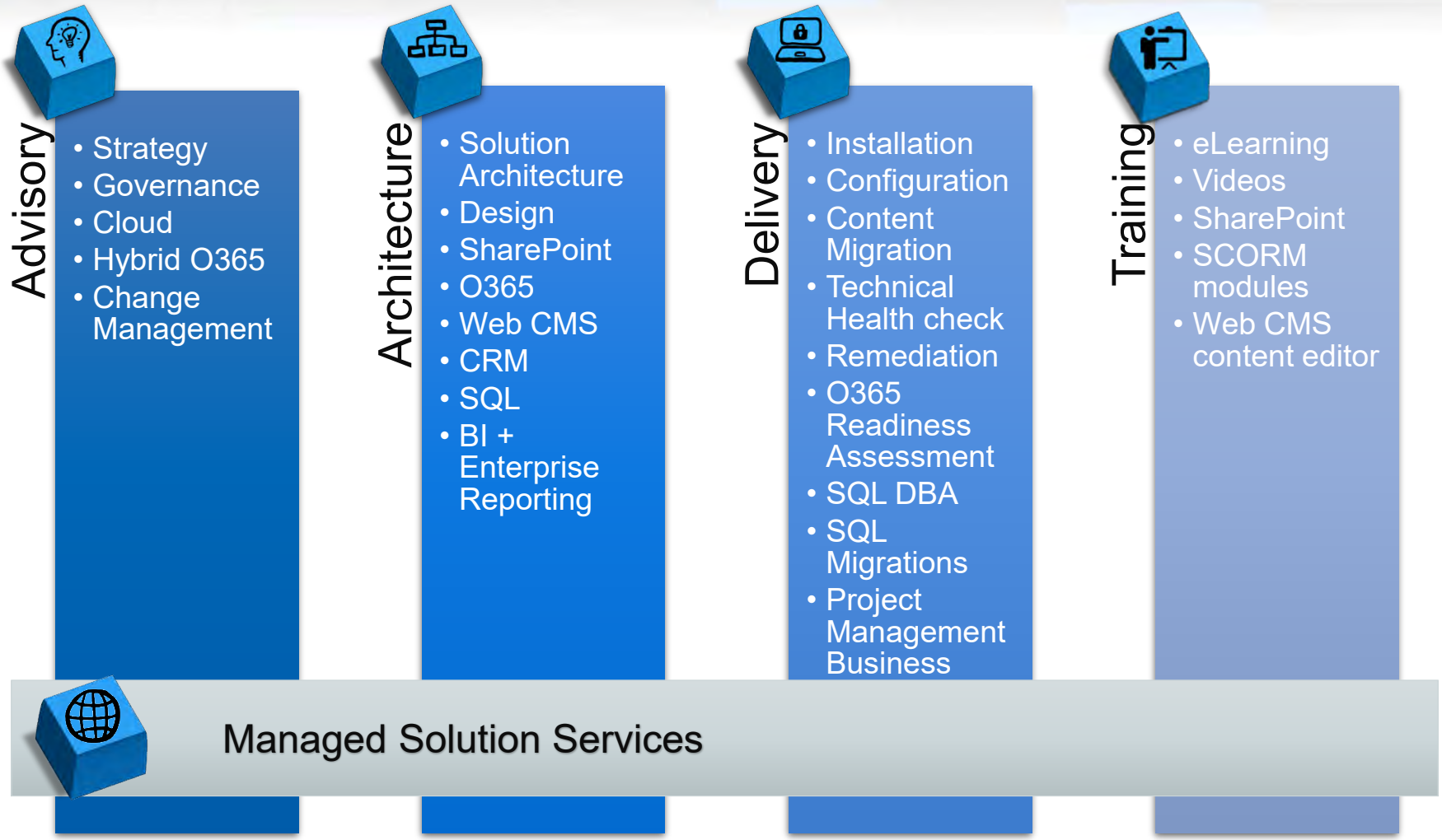
Solution Services



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By Kids For Kids

ES2 Kids is a foundation that assists in bridging the gap of Cyber Security Awareness for K-12 kids (1st - 12th grade)

Focus is to facilitate Cyber Security Awareness messages from the private and government sectors to K-12 kids (and their parents)

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ES2 Cyber Incident Response

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Introduction

Ajay Chauhan

More than 13 years of experience in Data Warehouse Design & Development – On Prem / Cloud, Data Analytics, Solution Design, Consulting.

Worked in various industries such as Utilities, Government, Health Care, Oil & Gas, Education.

Dilip Jambula

More than 12 years of experience in Developing Application using C#, .Net, SharePoint, Angular, React, Node.js, AWS Serverless.

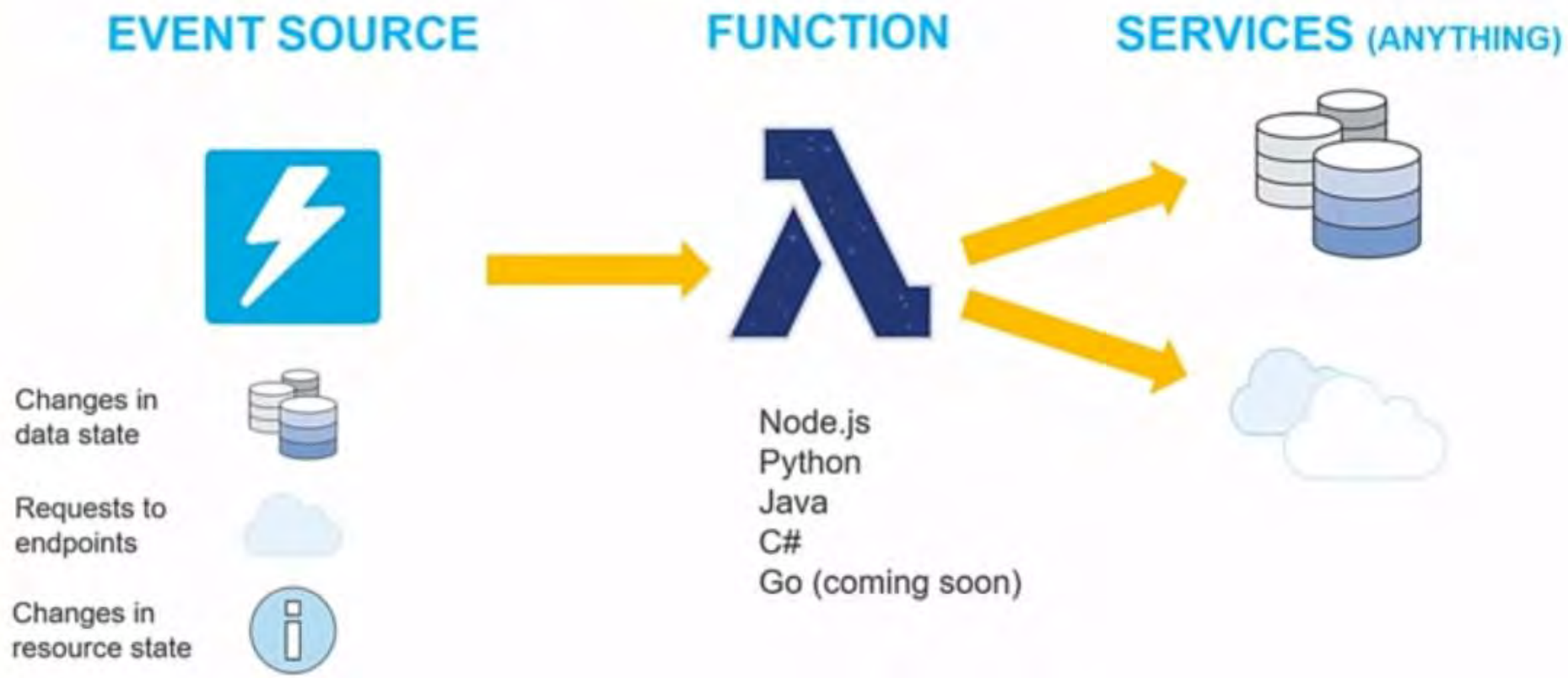
Worked in various industries such as Oil & Gas, Mining, Professional Services.

Serverless Application

What is it?

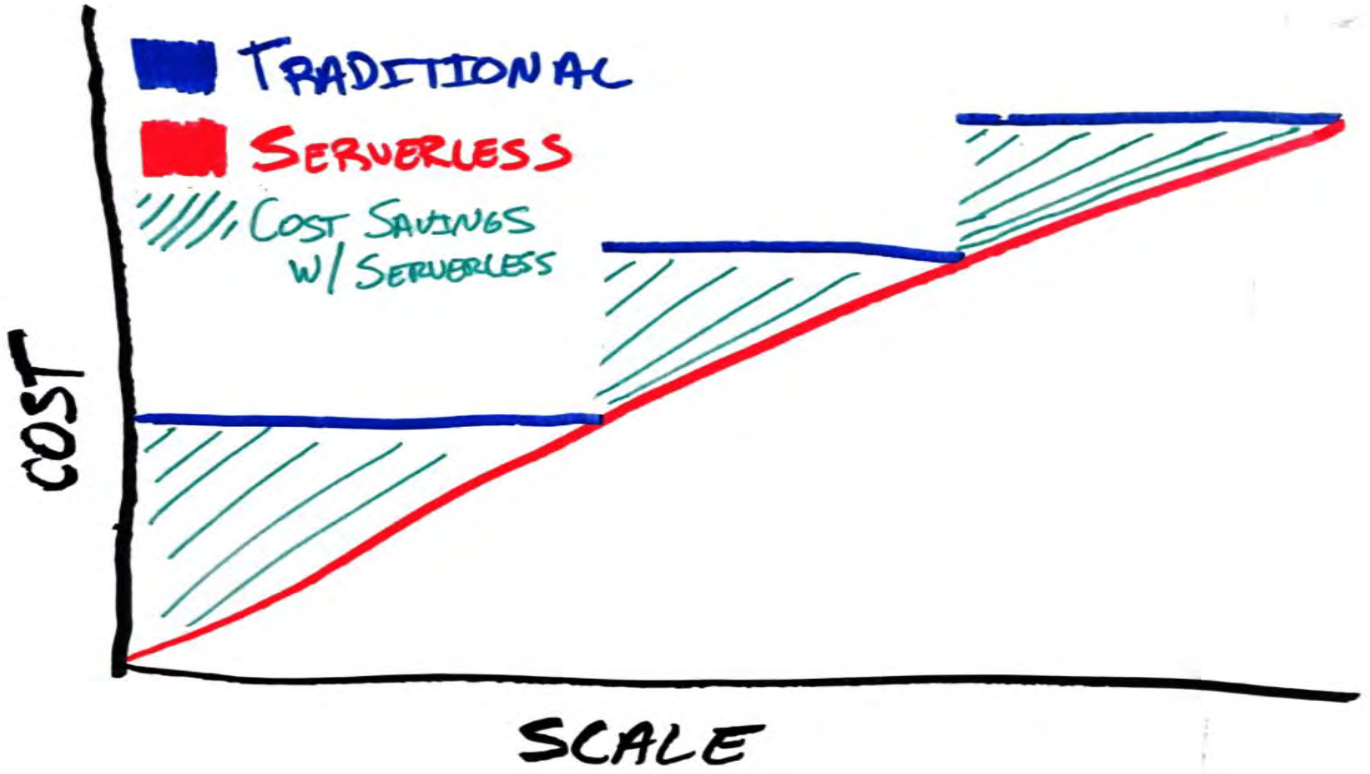
- Serverless computing is abstraction of Servers, Infrastructure and Operating systems.
- No servers to provision or manage
- Scales with usage
- Never pay for idle
- Availability and fault tolerance built in
- Serverless = Compute + Pattern

Serverless applications



Why should we use it?

- Seamless and Scale flexibly
- Low cost
- On-demand
- No Infrastructure
- Pay for What you use
- Load Balancing
- Less code



Serverless Application

Customers who use AWS Serverless:

Source: AWS re:Invent 2018: A Serverless Journey: AWS Lambda Under the Hood (SRV409-R1)

Customers who use Azure Serverless:

Source: Customers building serverless applications with Functions: https://azure.microsoft.com/en-us/services/functions/

Principles of Serverless

- Use a compute service to execute code on demand
- Write single-purpose stateless functions
- Design push-based, event-driven pipelines
- Create thicker, more powerful front ends
- Embrace third party services

Serverless Application

Pros

- It’s serverless! (no servers)
- Versatile
- Scalable
- More focus on user experience and fewer things to worry about
- Low cost
- Less code

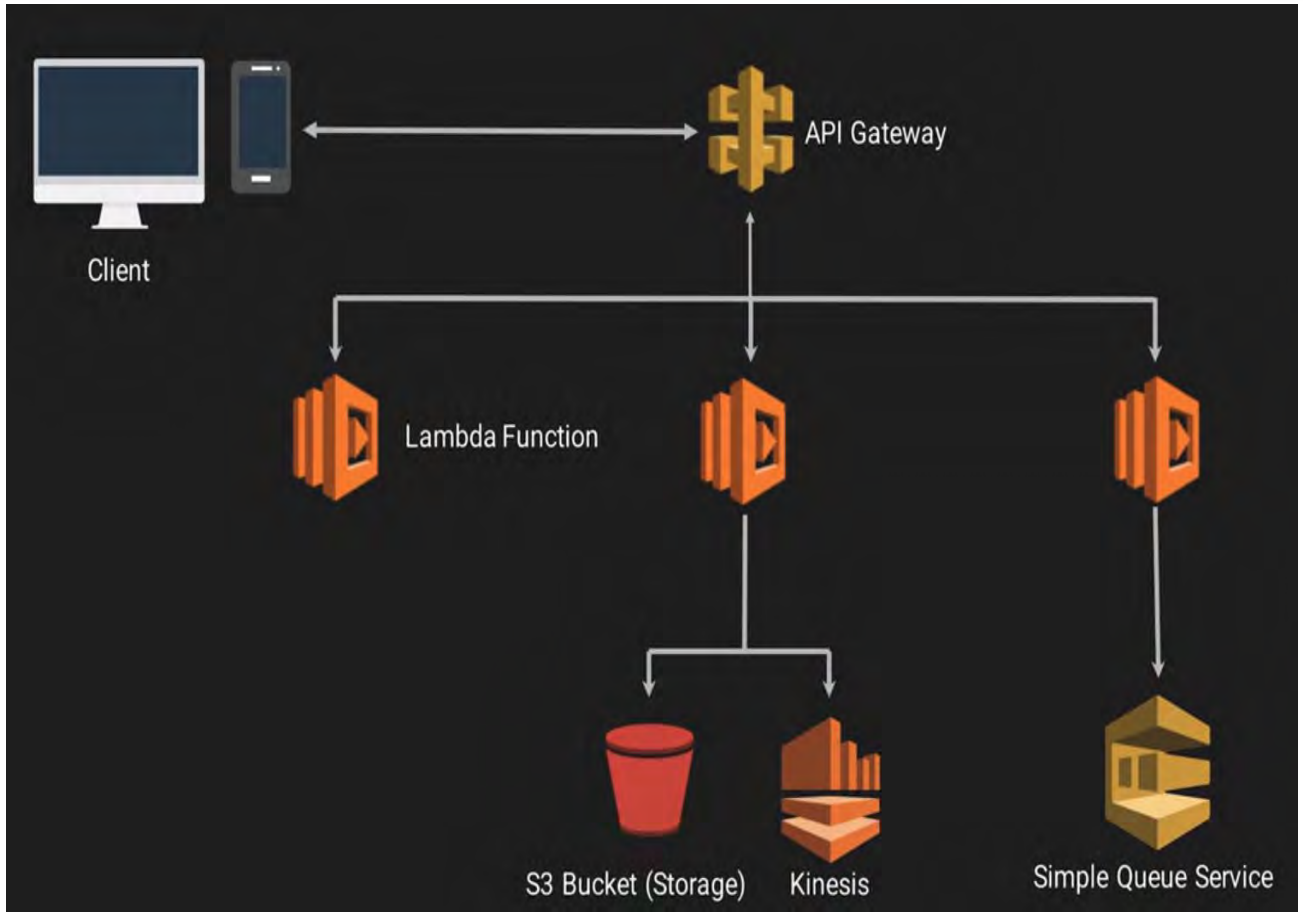
Cons

- Public cloud
- Reliance on Server Level Agreements
- Limited customisation
- Vendor lock-in
- Decentralised challenges
- Unsuitable for long duration tasks

Serverless Application

Serverless Patterns

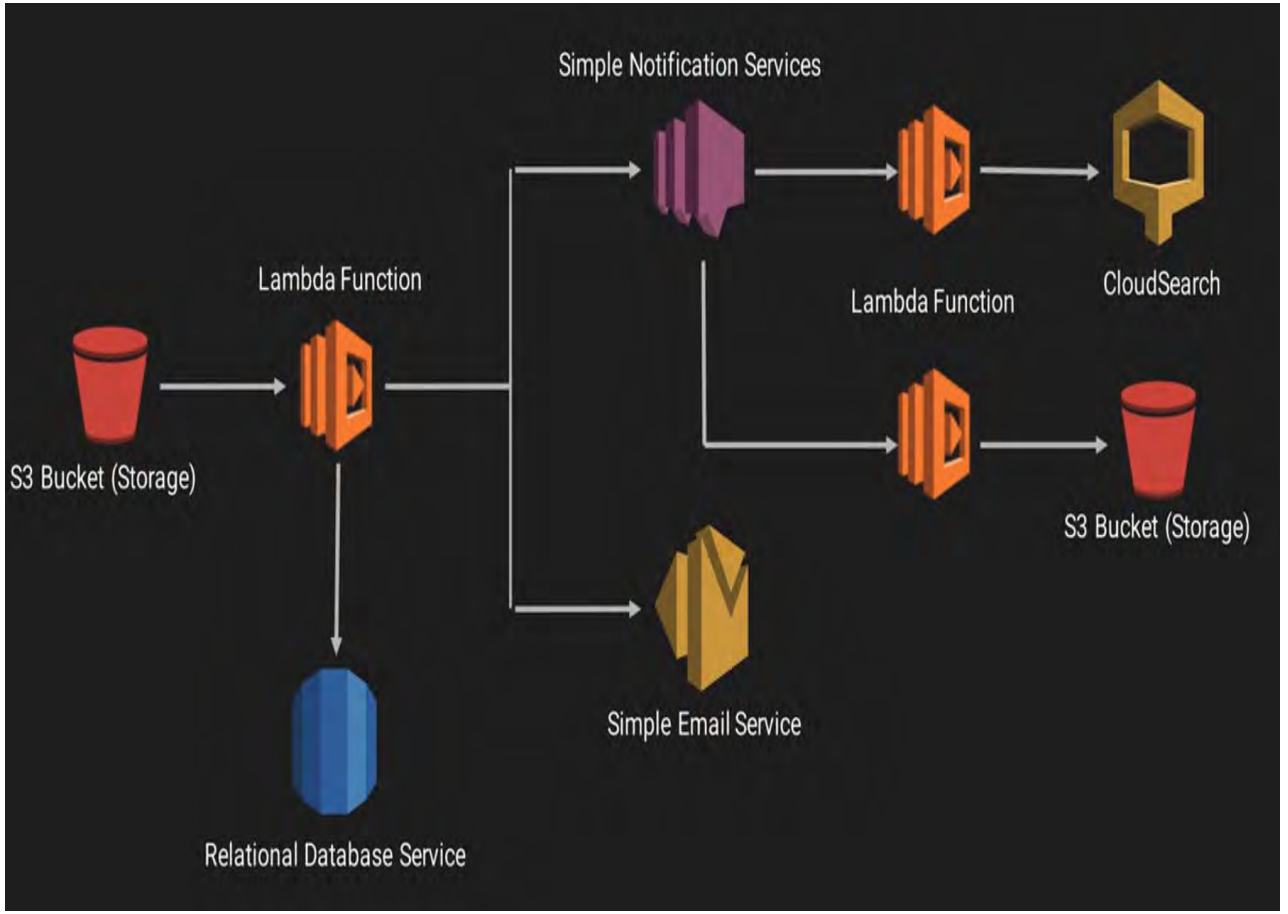
- Compute as Back End



Serverless Application

Serverless Patterns

- Compute as Glue



Serverless Patterns

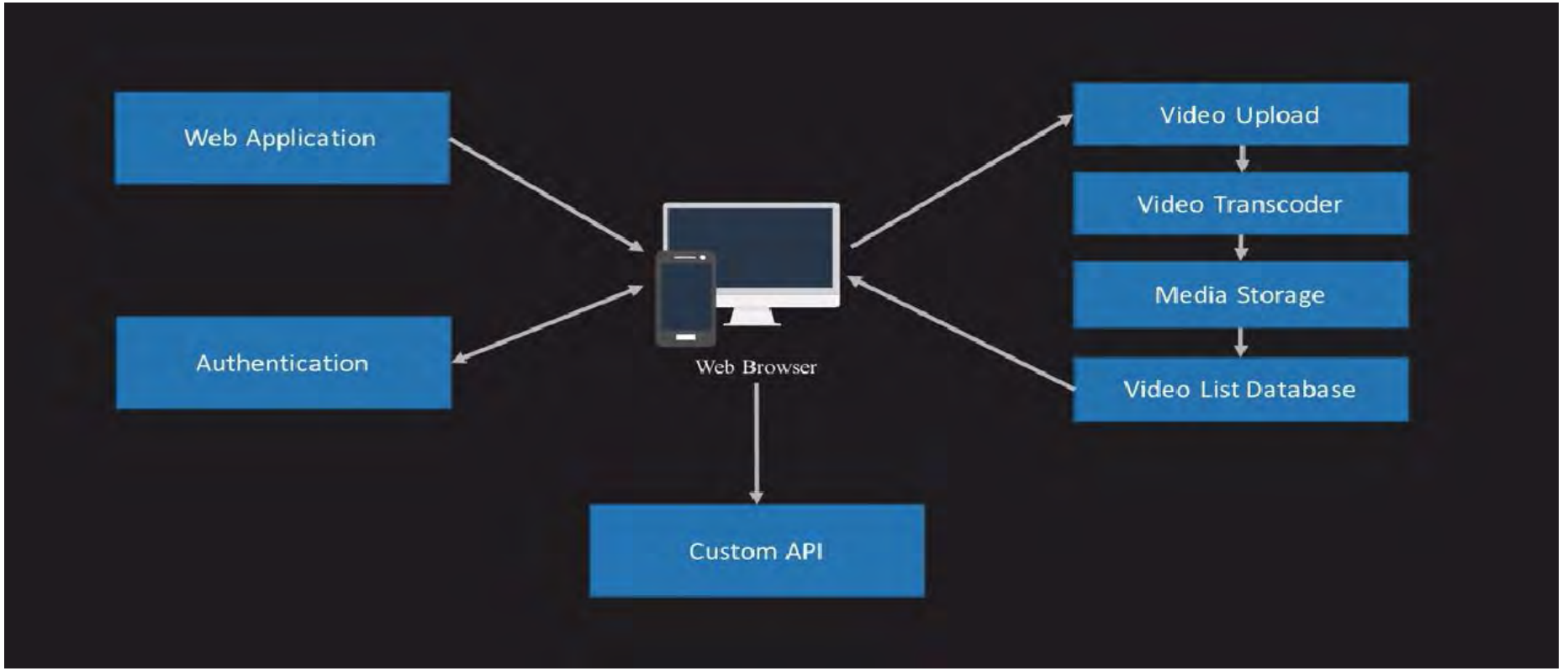
- Web Applications
- Stream Processing
- Data Lake Foundation
- Operation Automation
- Message pattern
- Priority Queue pattern

Quick Demo

- Set up Amazon Web Service Account
- Install Node.js
- Download zip file containing code : https://github.com/ACloudGuru/serverless-workshop
- Create two S3 buckets for Upload and Transcode
- Use AWS Lambda function to convert uploaded video to friendly format
- Create an API in AWS cloud & authenticate calls
- Connect Google firebase database to list videos
- Link to access the demo site: https://bit.ly/2TSQRNO

Serverless Application

Quick Demo



1- Discovery – NO COST

- Identify Use Case (Workshop)

2- Proof of Concept – $5K Fixed Price

- Build the prototype

Questions?

Play Kahoot! to win a drone!

- Go to Kahoot.it or use the mobile app

Thank You!

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