# Wipro – Velocity

#### **Amazon Web Services**

**Training** 



#### <u>Team</u>

- 1. Aishwarya
- 2. Apurva
- 3. Rajan
- 4. Sadiq Basha



#### **Outline**

- Problem Statement
- Objective
- Architecture
- Services
- Project Flow
- Technology and Tools Used
- Conclusion

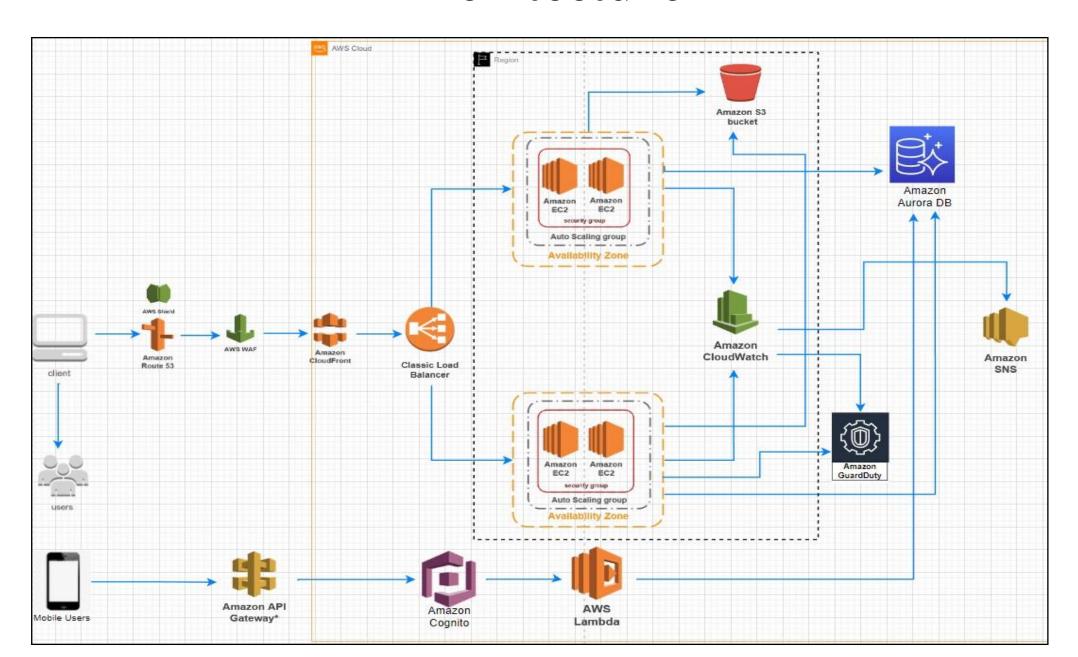
#### **Problem Statement**

- Due the lack of quality travelling products at offline market.
- Emart offer the best travelling products with the feasibility of online shopping at affordable range.

#### **Objective**

- Emart is a Online Store in the market for Travelling accessories.
- Our objective is to provide best user experience by offering convenient way of online shopping through our wide product gallery, along with easy shopping experience.

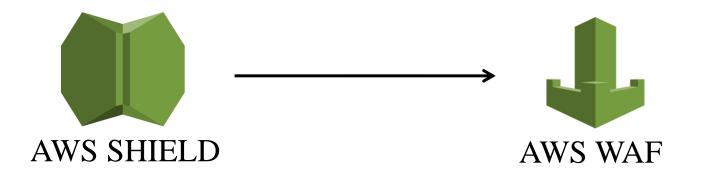
#### **Architecture**



#### Services (Route 53)

- Highly Available and Reliable
- Scalable
- Easy configuration
- Improve application performance

#### Services (AWS Shield & WAF)

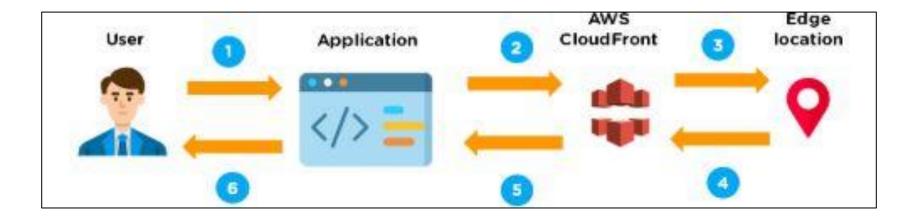


Protections against
Distributed Denial of
Service (DDoS) attacks

Protections against web exploits and bots

# Services (Cloud Front)

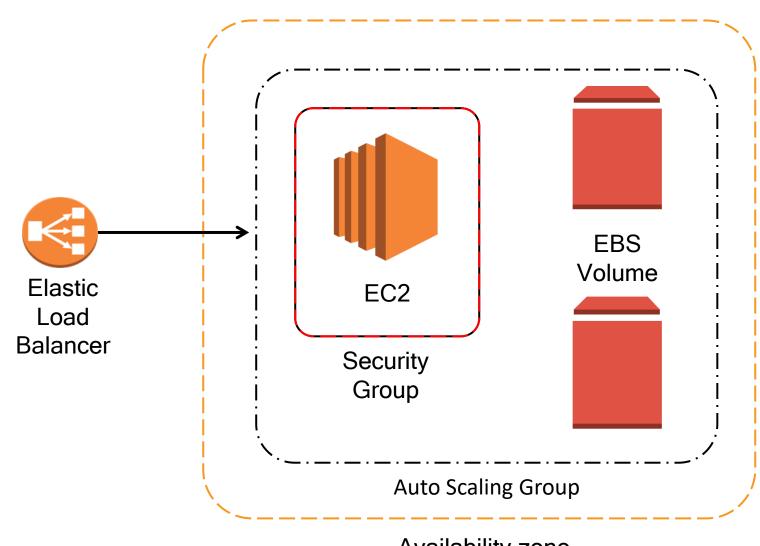
- Speeds up distribution of your static and dynamic web content
- Provide low latency and high performance
- Global delivery using CloudFront Improve application performance



# Services (EC2)

- EC2 is a service that enables users to run applications on computing environment.
- Auto Scaling is used to add and remove EC2 instances as per the demand.
- Elastic Block Store is Root volume of EC2.
- Security Group controls incoming and outgoing traffic.
- Load Balancer automatically distribute incoming traffic across multiple targets.

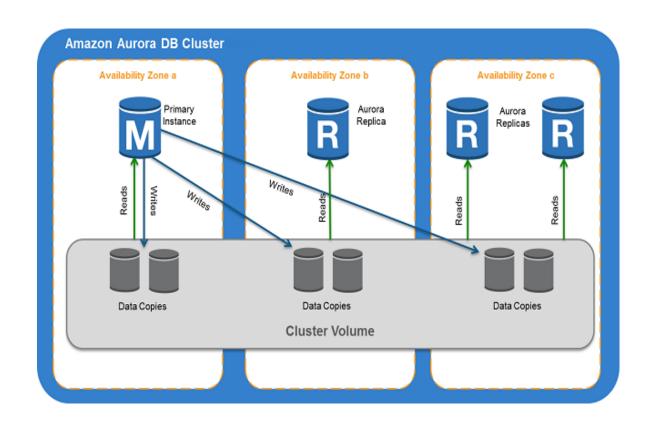
## Services (EC2 (Cont.,))



Availability zone

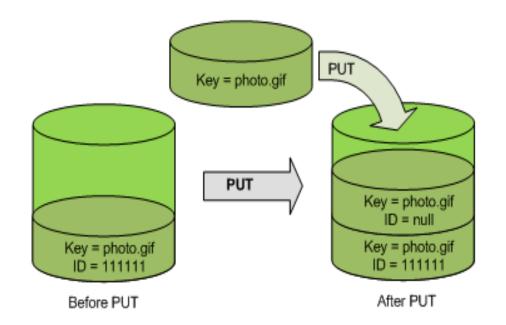
### Services (Aurora DB)

- The Amazon Aurora is managed by Amazon Relational Database Service (RDS).
- Availability and Durability
- Performance and Scalability
- Security
- Compatibility with MySql and PostgreSQ



#### Services (Amazon S3)

- Amazon S3 provides object storage, which is built for storing and recovering any amount of information.
- It move and store data across the S3 Storage Classes.
- Low cost and Easy to Use.
- Higher performance and Scalable.
- Secure.

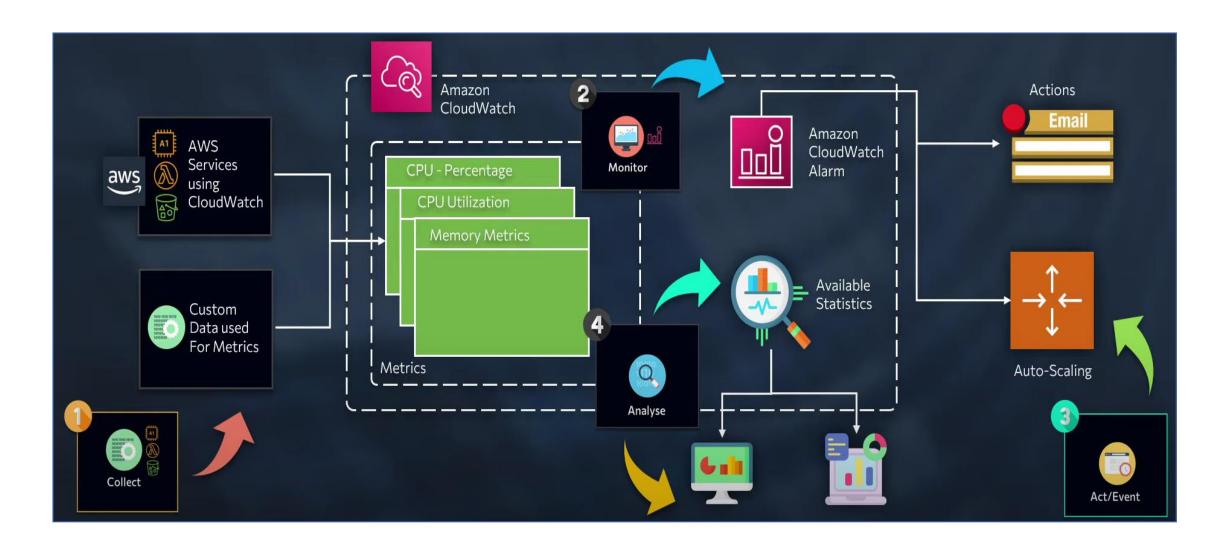


#### Services (Cloud Watch) 👢

- Cloud Watch: Collects, monitoring and operational data in the form of logs, metrics and event and visualize it using automated dashboard so you can get a unified views of your AWS resources, applications and services that run in AWS.
- Effectively usage will surely helps us in debug time and solving issues.

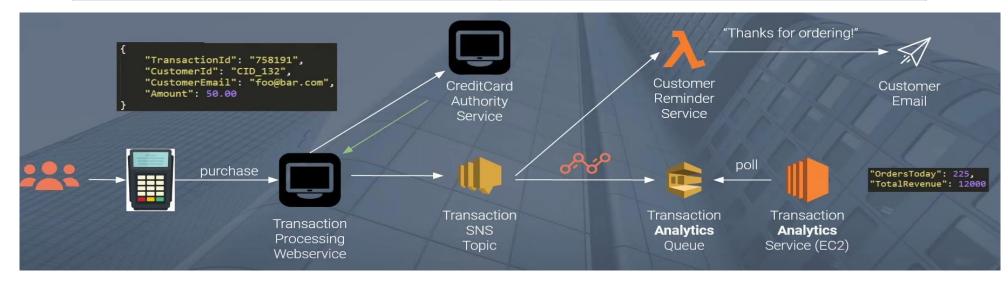


#### Services (Cloud Watch (Cont.,)) **!**



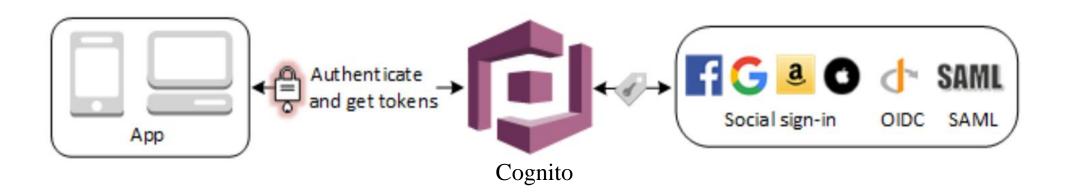
#### Services (Amazon SNS and SQS) III III

SNS	SQS
Simple Notification Service	Simple Queue Service
Subscriber System	Queuing Service for message processing
Publishing message to a topic can deliver to many subscribers of different types.	Messages in the queue are typically processed by a single consumers.



#### Services (Cognito)

- Authentication and Authorization
- Allows to add user registration, sign in and Access Control.
- Scalable and highly available supporting millions of users.
- Support standard based identity provides (SAML, OAuth 2.O, OIDC).



#### Services (API Gateway)

- Supports WebSocket, HTTP, REST APIs
- Highly secured authentication mechanism.
- Cloud watch logging support, which helps to monitor the API performance.
- Support custom domain names.
- Integration with AWS X-ray.
- No upfront fee or commitment required.

#### Services (Lambda)

IaaS

CaaS

Lambda

App1 App1
Runtime Runtime
Guest OS Guest OS

Hypervisor

**Physical Server** 

App1 App1
Runtime Runtime

**Guest OS** 

**Container Engineer** 

Hypervisor

**Physical Server** 

App1 App1

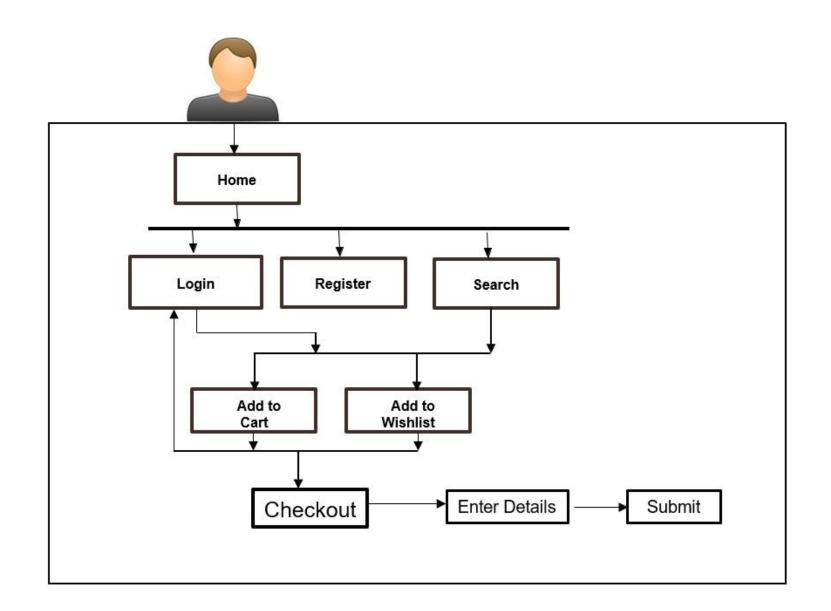
**Guest OS** 

**Container Engineer** 

Hypervisor

Physical Server

#### **Project Flow**



#### **Technology and Tools**







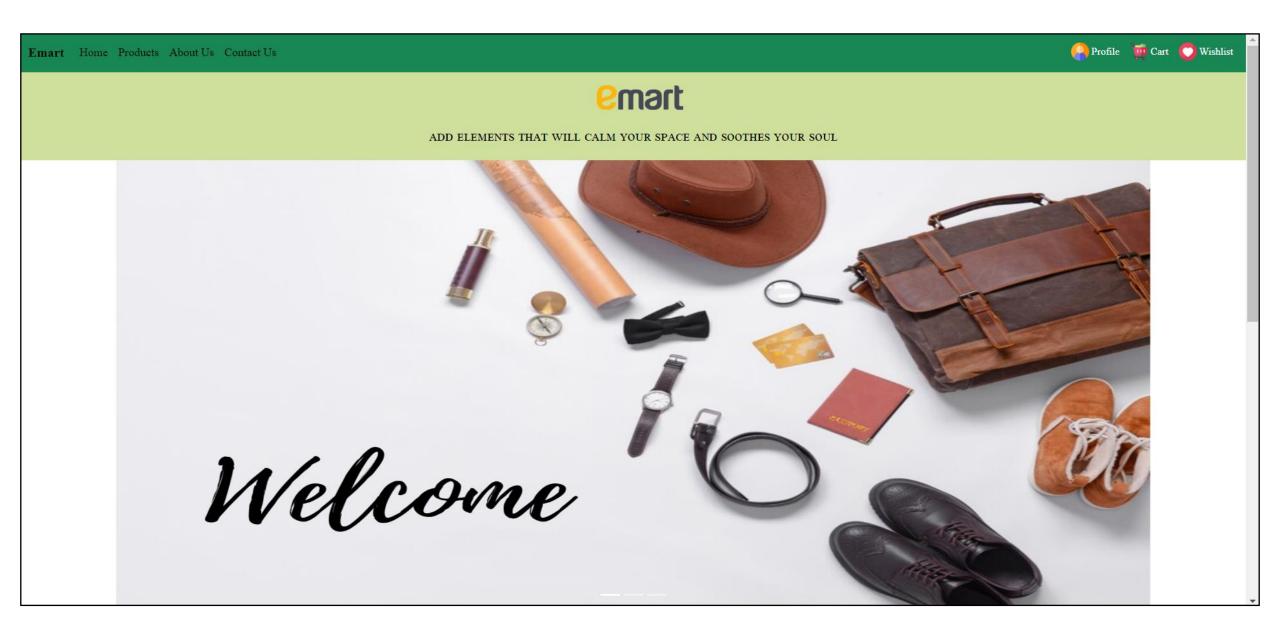




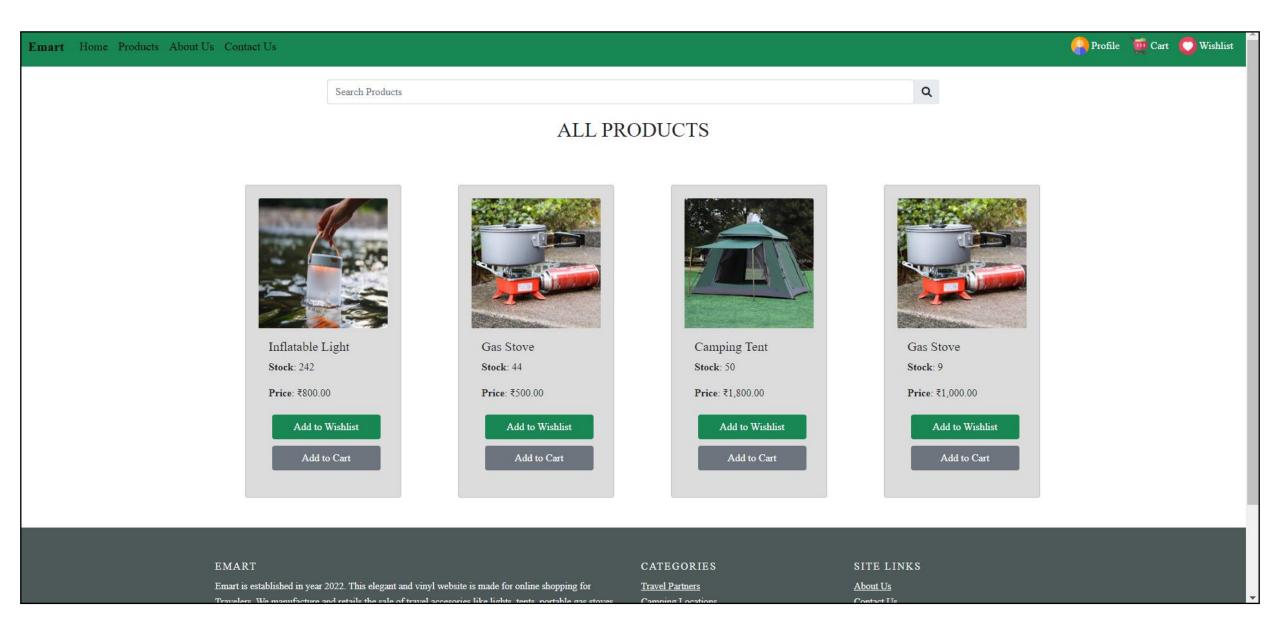




#### **Conclusion**



#### Conclusion (Cont.,)





# Thank you!