AWS

Serverless

❖ SERVER LESS:

- Serverless is a new paradigm in which the developers don't have to manage servers anymore.
- A serverless architecture is a way to build and run applications and services without having to manage infrastructure.
- They just deploy code and deploy… functions!
- Initially... Serverless means **Function as a Service (FAAS).**
- Serverless does not mean there are no servers…it means you just don't manage/provision hardware.

WHY USE SERVERLESS ARCHITECTURES:

- By using a serverless architecture, your developers can focus on their core product instead of worrying about managing and operating servers or runtimes, either in the cloud or on-premises.
- This reduced overhead lets developers reclaim time and energy that can be spent on developing great products which scale and that are reliable.

SERVERLESS SERVICES ON AWS:

- AWS Lambda
- Amazon SQS
- Amazon EventBridge
- Amazon EFS
- Amazon SNS
- Amazon S3
- Amazon DynamoDB
- AWS AppSync
- AWS Fargate
- AWS Step Functions
- Amazon API Gateway
- Amazon Aurora Serverless…. etc.

➢ **TRADITIONAL vs SERVERLESS:**

- A traditional architecture has physical servers which are accessed over the Internet to provide access to services and information.
- A Serverless computing offers a number of advantages over traditional cloud-based or server-centric infrastructure.

"Traditional" Web Hosting	"Serverless" Web Hosting
Provision Capacity	Runs On-Demand
How much Server Capacity? CPU, RAM, Memory	Unlimited Capacity Only Pay for Code Executions
Scaling (Pay too much or Server Issues)	Scales Automatically (Pay what you Need)
Update OS & Software	Runs on Managed AWS Infrastructure
Prevent Security Issues by thoughtfully updating Software	Code runs in up-to-date and secure Environment
Lots of Overhead for SPA + API Apps Great Support for Fullstack Apps	Great for SPA + API Apps Limited Support for Fullstack Apps