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Theoretical

- Lambda

Lambda permits you to run code without owning or managing servers. Users only pay for the computer time consumed.

- CloudFront

CloudFront is a content delivery network platform that executes at rapid rates with the secure distribution of data, videos, apps, and APIs on a global scale with low delay-times.

- SNS (Simple Notification Service)

Amazon SNS is a fully managed messaging solution that provides low-cost infrastructure for bulk message delivery, primarily to mobile users.

- Dynamo DB

DynamoDB is a document database with key-value structuring that delivers single-digit millisecond performance at scale.

- IAM (Identity and Access Management)

AWS Identity and Access Management provides secure access and management of resources in a secure and compliant manner.

Mina Sameh Wadie [[LinkedIn](#)][[github](#)]

- [Theoretical and Practical](#)
- [EXTRA: Typescript generics presentation](#)

David Alfons [[LinkedIn](#)]

1-cognito

registration : aws cognito allows to user self registration and also allow registration with social identity providers, such as Facebook, Google.

User pool : securely store user profile data for users who sign-up directly and for federated users who sign-in with external identity providers.

Migration: aws cognito allows to upload a CVS file input with users.

customizable: Select the required attributes that must be provided by the user prior to completion of the sign-up process.

Security: aws cognito offers security features such as multi-factor authentication and phone and email verification.

Roles and access control: aws cognito generates token and can use cognito groups for creating roles for the users.

2- SQS Simple Queue Service

It offers a secure, durable, and available hosted queue that lets you integrate and decouple distributed software systems and components (microServices) together using queues.

It provides a generic web services API that you can access using any programming language.

It offers two queue types for different application requirements.

A- Standard Queues

- * unlimited number of transactions per second
- * A message is delivered at least once, but occasionally more than one copy of a message is delivered.
- * messages might be delivered in an order different from which they were sent.

B- FIFO Queues

- * support up to 300 messages per second
- * A message is delivered once and remains available until a consumer processes and deletes it. Duplicates aren't introduced into the queue.
- * First-In-First-Out The order in which messages are sent and received.

3 - SNS Amazon Simple Notification

SNS is a service that provides message delivery A2A 'application to application' or A2P 'application to Person'

A2A: Application-to-application messaging supports subscribers such as Lambda functions, Amazon SQS queues, HTTP/S endpoints.

A2P: Application-to-person notifications provide user notifications to subscribers such as mobile applications, mobile phone numbers, and email addresses.

4- s3 Simple Storage Service

It offers an object storage service that stores data as objects within buckets.

A bucket is a container for objects stored in Amazon S3. You can store any number of objects in a bucket

it provides management features so that you can optimize, organize, and configure access to your data to meet your specific business need.

5 - CloudWatch

collects and visualizes real-time logs, metrics, and event data in automated dashboards to streamline your infrastructure and application maintenance.

can monitor Amazon Services such as EC2, RDS, DB instances and any log files your applications generate.