

WHAT IS DYNAMODB?

WHY DYNAMODB?

DYNAMODB COMPONENTS

DEMO: CREATING A SAMPLE TABLE ON DYNAMODB

# WHAT IS DYNAMODB?



No Schema Required

**DynamoDB** is a fully managed NoSQL database service offered by AWS. It works on key-value pair and other data structure documents provided by Amazon.

# WHAT IS DYNAMODB?



Attribute



Item



Table

Fundamental Components of DYNAMODB

# WHY DYNAMODB?

## Scalability



Scales seamlessly no matter the traffic

## Customisable



Database is highly customizable according to priorities of the App

## Data Types



Data can be stored in multiple data types

## Stable Performance



No matter the traffic or modifications, user gets stable app performance

# DYNAMODB vs OTHER DB SERVICES

Features	DYNAMODB	RDS	RedShift	Aurora
Scaling	Scales Seamlessly	Relatively Easy to Scale	More Complexity in Scaling	Relatively Easy to Scale
Storage	Unlimited Storage	64TB	2PB	64TB with RDS
Pricing	Pay-per-Use Model	Generally Cheaper than Others	On-Demand model with added costs	Pricing depends upon RDS
Maintenance	Maintained by AWS	Maintained by AWS	Requires more Maintenance	No Maintenance Required

# DYNAMODB COMPONENTS



**Attribute:** An attribute is a single field that is attached to an item. E.g. Employee Name.



**Item:** An item is a set of attributes in a table. You can also understand an item as a set of attributes that can uniquely define your entry in a table. For example, an item in Employee records will identify a single employee.



**Table:** A table can be visualized as a group of items. Taking an example of Employee records, you will have Employee Name, Employee ID, Address and Phone Number all such items will be stored in a table.

# DYNAMODB COMPONENTS

**Primary Key** is a unique attribute that is necessary while creating a table, it cannot be null at any given point. Hence, while inserting an item into the table, a primary key attribute is a must.



# DYNAMODB COMPONENTS



Simple Primary Key

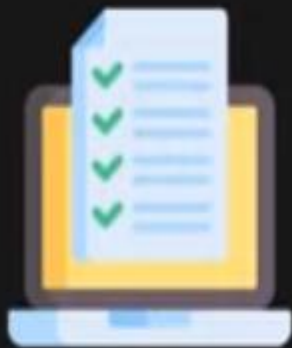


Composite Primary Key

**Primary Key** is a unique attribute that is necessary while creating a table, it cannot be null at any given point. Hence, while inserting an item into the table, a primary key attribute is a must.



# DYNAMODB COMPONENTS



Query Data



Independent of Primary Key



Additional Access

A **secondary index** can be understood as the attribute that lets you query the data, with or without the help of a Primary key. DynamoDB has these secondary indexes that help you achieve this additional access.



