



DynamoDB

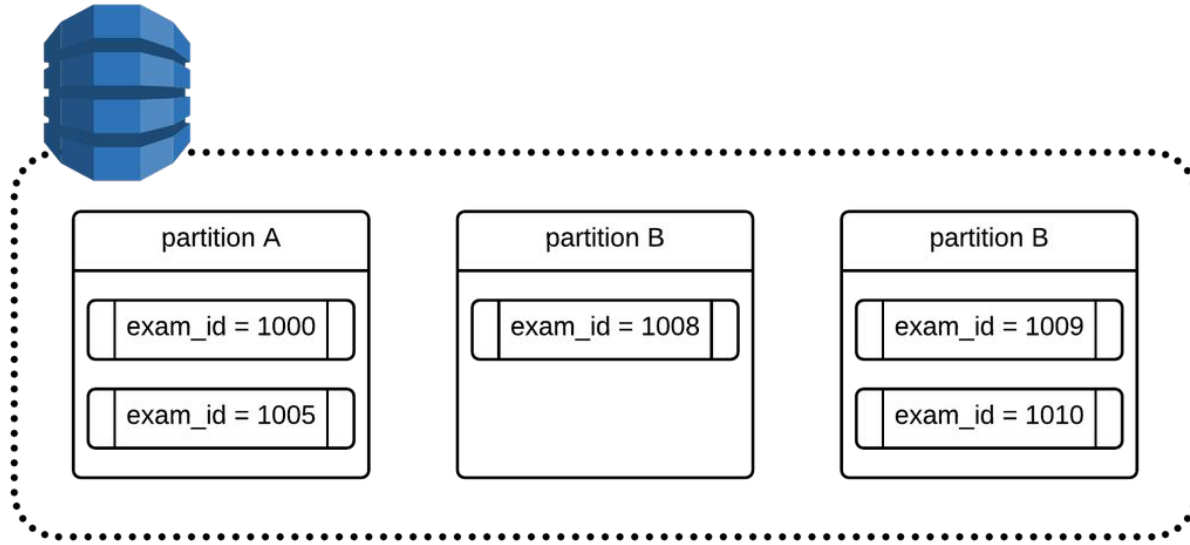
Part 2

DynamoDB Keys

PK + SK

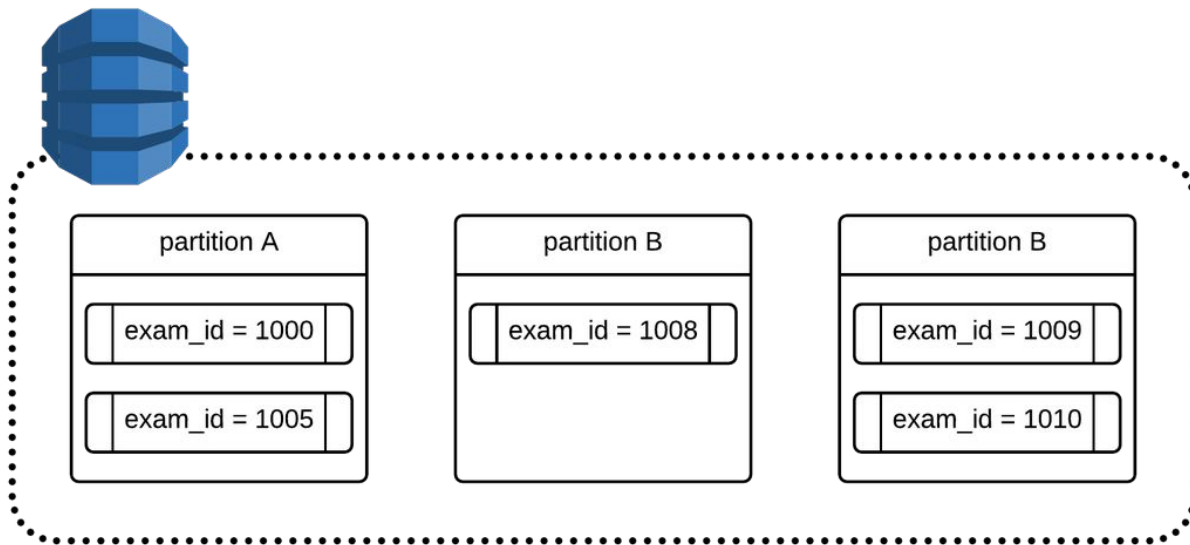
Uniqueness of an item depends on the combination of
Partition Key and Sort Key

DynamoDB Partitions



The partition Key determines how the data is distributed across the partitions

DynamoDB Partitions

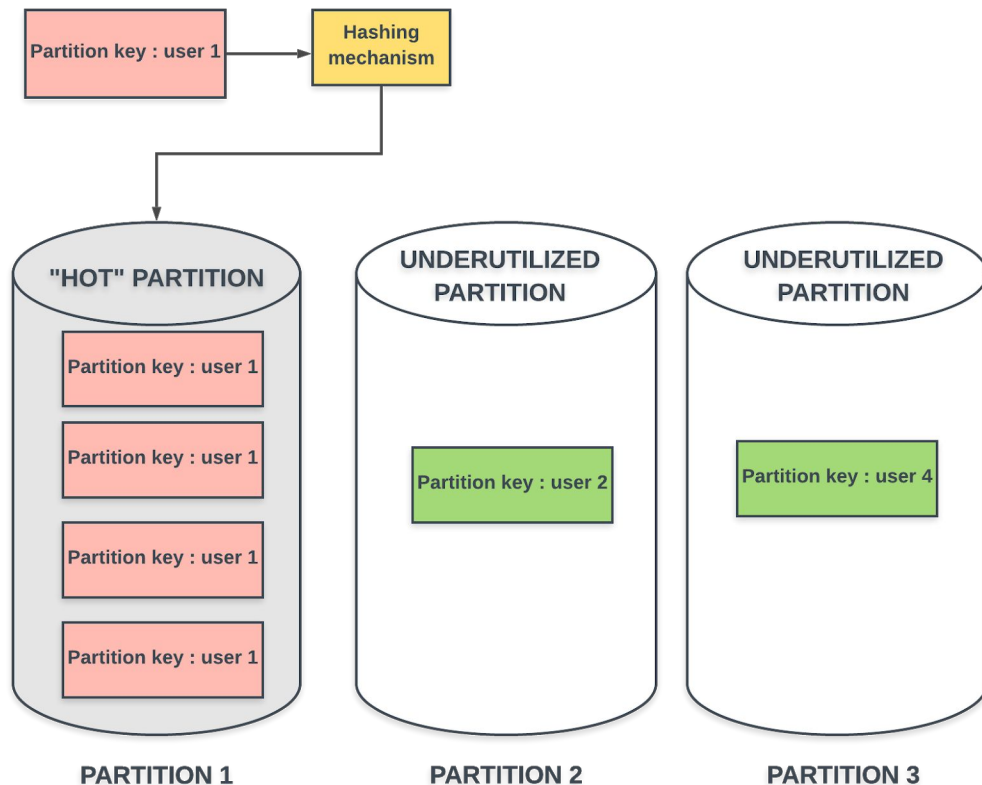


Your RCUs and WCUs are evenly distributed amongst
your partitions

DynamoDB Partitions

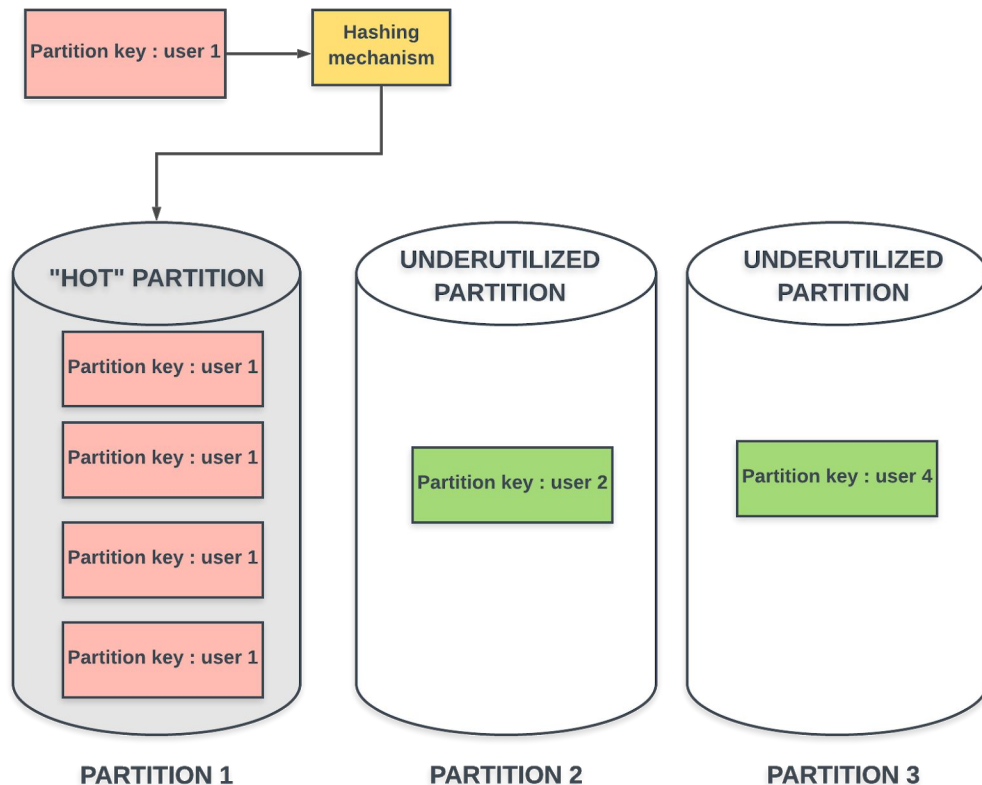
A hot partition has way too many records

An cold partition has way too few records



DynamoDB Partitions

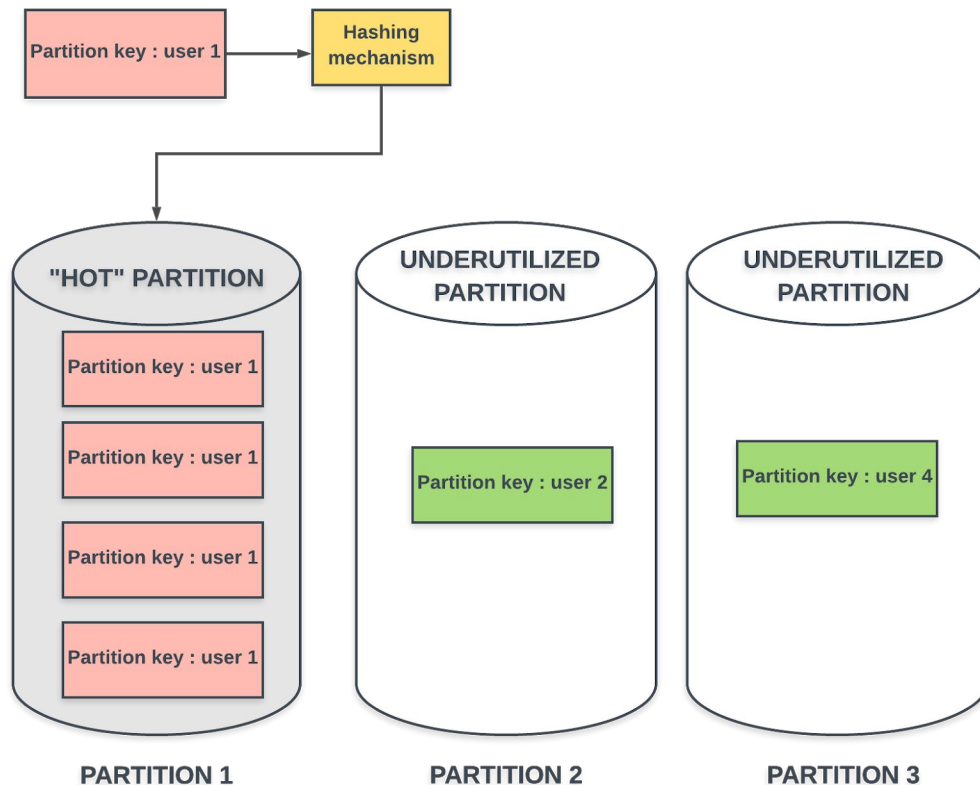
One partition can serve at most 3,000 RCUs and 1,000 WCUs



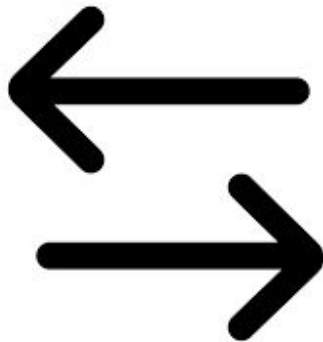
Data that can cause hot partitions

Dates

States



Design First



Modeling DynamoDB requires you to know what kind of data i/o you will need

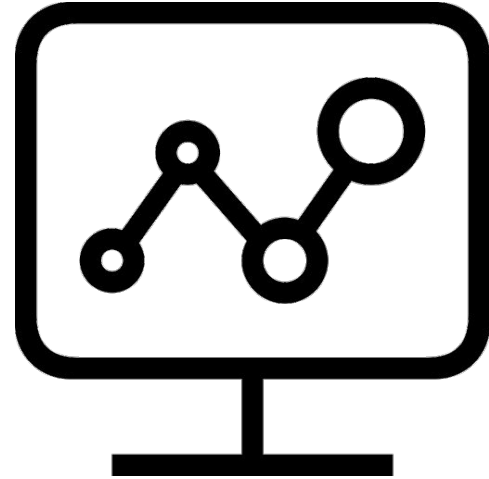
Design First



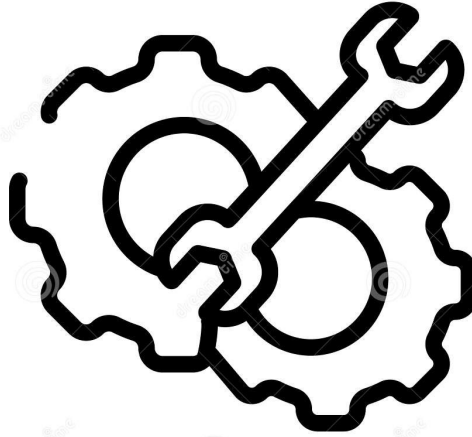
Think about all the most important queries and writes you will need in the application

Things you need to know

1. Data Size
2. Data Shape
3. Data Velocity

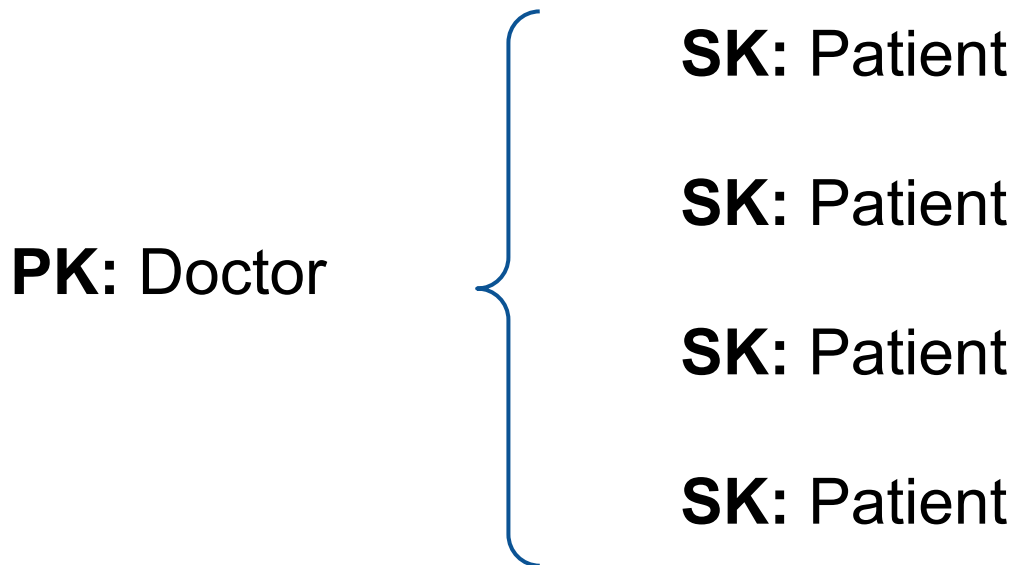


Design First



Now design based on the applications needs

DynamoDB Partitions



Partitions are a way to group related data

Data Relations

Cliente_id: Juan

orden: orden_01

orden: orden_02

orden: orden_03

direccion: dir_02

Partitions are a way to group related data

Adjacency lists

PK: Patient



SK: Doctor

SK: Doctor

SK: Doctor

SK: Doctor

You can use GSI to invert relationships

GSI Overloading

PK: Doctor



SK: Patient

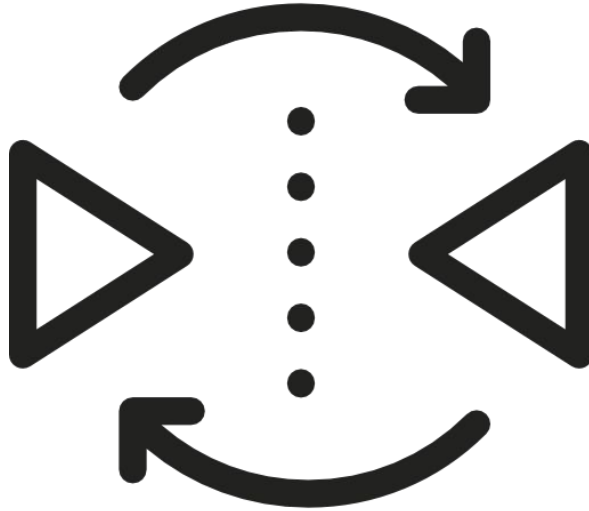
SK: Patient

SK: Room

SK: Equipment

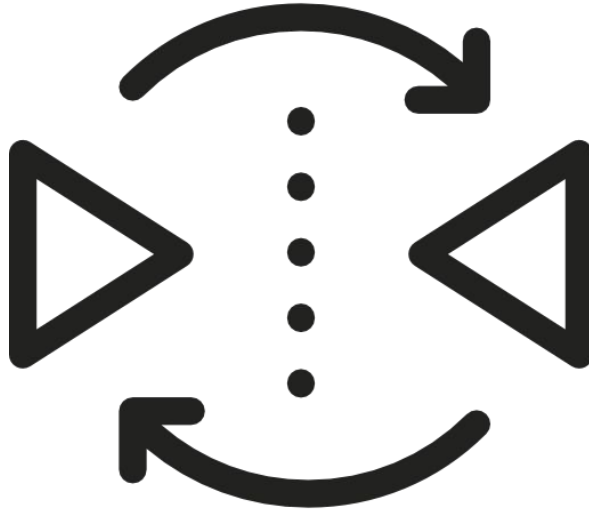
You can even extend the SK to other types of data

GSI data



Not every record is reflected in a GSI. Only the records that contain its partition key

GSI data



Every GSI has its own RCUs and WCUs