# Cassandra.
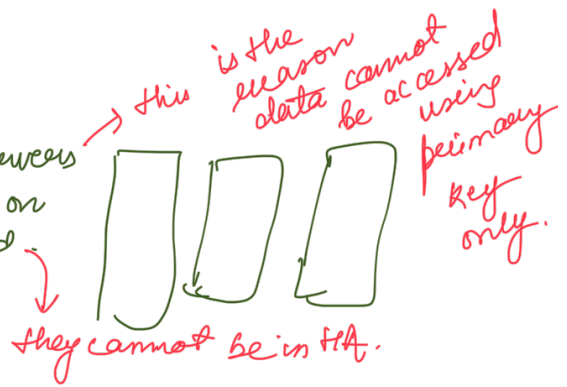
→ No SQL (Not only SQL)

→ Stores data in clusters of servers Although developer do store on single machine for dev, prepod. It is advised to use cluster for prod.

→ *this is the reason data cannot be accessed using primary key only.*

→ *they cannot be in HA.*

→ 2 Keys are available to access data (rows across multiple cluster of serves

- Partition Key - To determine which node in cluster to use when storing or retrieving a row.

- Clustering Column - defines order in which rows are stored

Servers in cassandra clusters are called nodes.

CQL is Cassandra Query Language

No fixed schema - Some rows have different column than other rows.

Eventually consistent - Replicas of a row may have different versions of data for a short time As it keeps multiple copies of data in different nodes to ensure HA.

Keyspace - Schema in traditional databases. They are logical container for tables, index and other data structures. Also defines Replication.

Simple Replication - Sets a number of replicas when using a single data center for a cluster. of nodes.

Network Topology Replication - Set a number of replicas and manages replicas across multiple data centres.

# Architecture