Glossary: Working with Cassandra

Welcome! This alphabetized glossary contains many of the terms you'll find within this course. This comprehensive glossary also includes additional industry-recognized terms not used in course videos. These terms are important for you to recognize when working in the industry, participating in user groups, and participating in other certificate programs.

Term Definition

Cluster

A group of interconnected servers or nodes that work together to store and manage data in a NoSQL database, providing high availability and

fault tolerance.

Consistency In the context of CAP, consistency refers to the guarantee that all nodes in a distributed system have the same data at the same time.

Dynamic table A dynamic table allows flexibility in the columns that the database can hold.

Keyspace A keyspace in Cassandra is the highest-level organizational unit for data, similar to a database in traditional relational databases.

Lightweight Lightweight transactions provide stronger consistency guarantees for specific operations, though they are more resource-intensive than

transactions regular operations.

Partition key The partition key is a component of the primary key and determines how data is distributed across nodes in a cluster.

Primary key

The primary key consists of one or more columns that uniquely identify rows in a table. The primary key includes a partition key and,

optionally, clustering columns.

Replication factor The replication factor specifies the number of copies of data that should be stored for fault tolerance.

Replicas Replicas in Cassandra refer to the copies of data distributed across nodes.

Replication strategy The replication strategy determines how data is copied across nodes.

Secondary indexes Secondary indexes allow you to query data based on non-primary key columns.

Static table A static table has a fixed set of columns for each row.

Table A table is a collection of related data organized into rows and columns.

