

SYBASE

COURSE SYLLABUS

Introduction to NoSQL and Apache Cassandra

Why NoSQL?

Relational DB vs. NoSQL?

Type of NoSQL Databases

CAP Theorem and Tunable Consistency

Advantages of NoSQL

Where does Cassandra fit in?

ACID vs BASE

Getting Started Apache Cassandra

Apache Cassandra Setup

Important Configuration

Basic CLI Commands

Cassandra Keyspace and Column Family

Writing and Reading Data

Key Concepts (Key Space, Column Family, Super Column etc.)

[Column Options\(Column Sorting, Super Columns\)](#)

[Rows Options\(Wide Rows, Skinny Rows\)](#)

[Distributed and Decentralized](#)

Data Modelling

[Differences between RDBMS and CASSANDRA](#)

[Query Language](#)

[Indexes](#)

[Sorting](#)

[Design Patterns](#)

[Materialized Views](#)

[Programmatically Defining Keyspaces and Column Families](#)

[Building a Cluster](#)

[Backup and Restore](#)

[Performance Tuning](#)

Cassandra Query Language

[Data modeling](#)

[Indexing](#)

[Data Definition](#)

[Data Manipulation](#)

Queries

Architecture

Sybase Architecture

Database access tools

Interactive sql

Database Objects

Database Object Creation

Column Modification

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Constraint

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Basic Query

Simple Select Clause

Record Filtering

Record Search

Pattern Search

Medium Query

Data Aggregation

Group Restriction

Analytical Functions

Delete operation

Complex Query

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Join Operator

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Canned Data

Sub queries

View Creation

View Security

View Restriction

Security

Access Groups

Policy

User Roles

User Connection

Data Consistency

[Save point](#)

Database installation

[Database Dbspaces](#)

[Altering Dbspaces](#)

[Database Server Startup](#)

[Database Server Shutdown](#)

[Sybase Agent Installation](#)

[DBspace Monitoring](#)

[User Monitoring & Access](#)