# **Neo4j Graph Database : Course Details**

# Day 1

# **Graph Database**

Normal DB Transactions

Graph Theory

Graph DB

Relational DB

NoSQL DB

## Neo4j

Why use?

Cypher

Browser

Usage

Indexes

Caching

Extending Neo4j

# **Using Cypher**

Nodes

Properties

Relationships

Use of Browser

REST API

# **Handling Cypher Query**

Create

Read

Update

Delete

Constraints

Merge

Hands-on exercises

## Day 2

## **Managing Data**

Bi-directional relations Common data structures Importing & exporting data Backups

### **Querying Data**

Recommendations Location based

## Steps for Building a Graph DB Application

Data Modeling Application architecture Clustering Load Balancing Redundancy

Hands-on exercises

#### Day 3

### Graphs in the Real World

Common Use cases

Social

Recommendations

Network & data center management

Logistics

### **Graph Database Internals**

Native Graph Processing Native Graph Storage

Kernel

Core

Recoverability

Availability

Recap of JS language

Introduction to Node.js

Http server

Middlewares

Express server

Integration of Neo4j with Express server

Hands-on exercises