

**Apache CouchDB for Developers**

**Course Number:** NSQL-102  
**Duration:** 2 days

**Overview**

This CouchDB for Developers training course teaches attendees how to leverage CouchDB as the data store in their applications. Attendees learn how to add, update, and query documents in CouchDB, work with REST API, apply best practices in CouchDB, build high-availability CouchDB clusters, and more.

**Prerequisites**

Students must have basic programming knowledge, preferably Python, Java, or Scala, and a basic understanding of databases.

**Materials**

All CouchDB training students receive comprehensive courseware.

**Software Needed on Each Student PC**

* Computer with Internet connectivity
* Ability to install software on the computer
* Recent Windows, macOS, or Linux operating system

**Objectives**

* Add, update, and query documents in CouchDB
* Create and edit databases and documents
* Apply best practices and design patterns while using CouchDB
* Work with REST API
* Handle bulk operations
* Scale CouchDB and ensure high availability by using clustering and replication

**Outline**

* Introduction
  + SQL vs. NoSQL
  + Overview of NoSQL databases
  + Understanding document databases
  + CouchDB overview
  + CouchDB use cases
* Installing CouchDB
  + Local installation
  + Using Docker
  + Using Fauxton
* Data Manipulation
  + Setting up Postman
  + Creating and deleting databases
  + Creating, updating, and deleting documents
  + Documents with attachments
* REST API: Database Commands
  + Introduction to database commands
  + All docs function
  + Bulk docs function
  + Changes function
* Design Documents
  + Design documents in Futon
  + Making design documents in Fauxton
  + Introduction to views
  + Basic and complex views
* Mango Query
  + Introduction to Mango
  + Understanding Index
  + Find command
  + Conditionals
  + Combiners
* Replication
  + Task setup in Fauxton
  + Using REST API for replication
  + Using Mango in replication
* Clusters
  + Introduction clusters
  + Cluster installation
  + Node setup
* Conclusion