

PART 1 - Reading Assignment

Chapter 1. A database for the modern web [MongoDB in Action]

https://learning.oreilly.com/library/view/mongodb-in-action/9781617291609/kindle_split_010.html

PART 2 - Read the following papers, and write a short summary/report for each paper. Google has, over the past few years, built out a massively scalable infrastructure for its search engine and other applications, including Google Maps, Google Earth, GMail, Google Finance, and Google Apps.

Google's approach was to solve the problem at every level of the application stack. The goal was to build a scalable infrastructure for parallel processing of large amounts of data.

Google therefore created a full mechanism that included a distributed file system, a column-family-oriented data store, a distributed coordination system, and a MapReduce-based parallel algorithm execution environment.

Graciously enough, Google published and presented a series of papers explaining some of the key pieces of its infrastructure.

The most important of these publications are as follows. Read the following papers, and write a short summary/report for each paper.

<http://static.googleusercontent.com/media/research.google.com/en/us/archive/gfs-sosp2003.pdf>

<http://static.googleusercontent.com/media/research.google.com/en/us/archive/mapreduce-osdi04.pdf>

<http://static.googleusercontent.com/media/research.google.com/en/us/archive/bigtable-osdi06.pdf>

<http://static.googleusercontent.com/media/research.google.com/en/us/archive/chubby-osdi06.pdf>

PART 3 - Read the attached papers, and write a short summary/report for each paper.

1. Application of NoSQL Database in Web Crawling.pdf
2. Comparing NoSQL MongoDB to an SQL.pdf