

NoSQL Database

Date: 01/24/2016

Overview

The NoSQL Data Gathering and Query project is owned and sponsored by Jack Zheng. JSON has been used widely these days for data exchange and even storage. New data management systems beyond SQL (NoSQL, or Not Only SQL) have been developed to handle semi-structured and unstructured data. In this project, the team is charge with comparing two major NoSQL database system solutions for typical data management and query applications.

The purpose of this project is to identify and analyze the key features of NoSQL databases and compare them against the more common SQL platforms.

Project Team

Roles	Name	Major responsibilities	Contact (Email and/or Phone)
Project owner	Jack Zheng	Provide project details; act as a resource for specifics on deliverables; critique milestones and final project	gzheng@kennesaw.edu
Team leader	Bryan Turner	Facilitate member responsibilities; coordinate meetings; ensure timely submission of project milestones	
Team members	Marius McNeil	Be awesome!	
	Kyle Rogers	Help in anyway I can	
Tech Consultant	Srija	Act as support to team members and project owner	
Advisor / Instructor	Jack Zheng	Facilitate project progress; advise on project management and technical solutions.	gzheng@kennesaw.edu

Project website

<https://sites.google.com/site/nosqldatagatheringquery/>

Final Deliverables

1. One complete book database implemented using MongoDB, installed, configured and tested using data from Google Books API, with major administrative tasks implemented.
2. Research report on MongoDB including 3 different GUIs and comparison to Oracle.
3. A copy of the raw data and database backups.
4. A full documentation of common database administration tasks, including data definition, data control, and data manipulation, on the MongoDB database.
5. Web applications that supports book query to the MongoDB databases.

Milestones

#1 - By 2/19/2016

- MongoDB set up and operational (database and vmware viewer)
- Retrieve sample Google Books Data (4000 books - 40 books per request)
- Upload all data to MongoDB
- Analysis and Research MongoDB

#2 - By 3/18/2016

- Implement a list of data admin operations.
- Produce research report. (PPT, References)
- Research on external application using noSQL DB. Provide review of initial findings

#3 - By 4/22/2016

- Complete web application.
- Complete documentation.
- Complete comparative analysis report of SQL and NoSQL.
- Presentation including poster.

Future milestone meetings date/time

2/19/2016 Friday 3:00pm (Kyle, Bryan, Marius)

3/18/2016 Friday 3:00pm (Kyle, Bryan)

4/22/2016 Friday 3:00pm (Bryan, Kyle, Marius)

4/26/2016 Tuesday (Bryan, Kyle, Marius)

Communication and Meeting Planning

The main methods of communication for this project will be through Gmail, Google Drive, and Google Hangouts. The team will meet weekly at predetermined times, based upon available schedule, in Google hangouts to discuss milestone objectives. They will also meet in person, as able, every two weeks.

The project leader, Bryan Turner, will coordinate weekly and in-person meetings between group members. The team leader will also act as a go-between to facilitate communication between the team and the project owner, Mr. Zheng.

Project Schedule and Tasks Planning

See the Gantt chart file attached.