Blog

NOSQL, SoSe 2017

by

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Goal

Create a blog website that should uses any three nosql databases
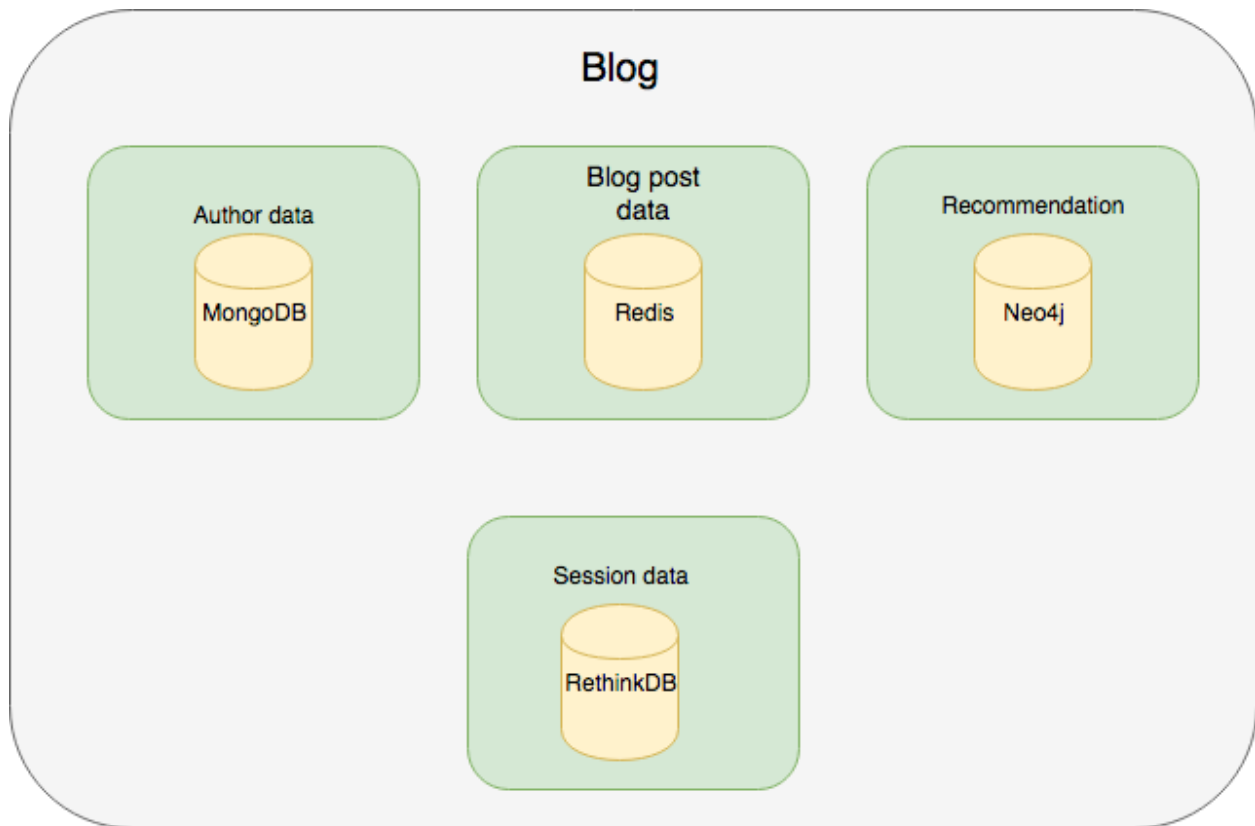
Inspirations

The article regarding nosql database has inspired us to use nosql databased for our project
https://www.thoughtworks.com/de/insights/blog/nosql-databases-overview

Ideas

Description
Graph db - Neo4j
Documentstore - Mongodb
Document store - Rethink DB
Key value store - Redis

Architecture:

Blog Website

3 pages: Home,Blog post, Author

To store Blog post: Redis

Author: MongoDB

Author session : RIAK

Graph: Author-Blog post (Neo4j)(option)

Sample data

http://www.lipsum.com/

Action items

Meeting to discuss on project @Sonali B @Sameer S

Agenda:

What Nosql to use, pros n cons

Try to look for source code using python if any found for these

Meeting to discuss initial implementation @Sonali B @Sameer S @akarsh s

Meeting to discuss final implementation @akarsh s @Sonali B @Sameer S
Agenda:

        Blog post creation
        Inline comments for project

Tasks

    Author page @akarsh s
    Registration page @Sameer S
    Login page @Sameer S
    Blog post page creation @Sonali B
    Connection to redis @Sonali B
    Retrieval of Blogs on Home page @Sonali B
    Creation of a new dynamic page to show blog data @Sonali B
    Issues to be addressed: Confirm message on Blog data store and refresh issue
    while retrieving data from Redis @Sonali B
    Add category to blogdata page @Sonali B
    Add css to pages @Sonali B
    Presentation @akarsh s
        Preparation @akarsh s @Sonali B
        Modifications @akarsh s @Sonali B
    Neo4J @akarsh s
        Connect mongodb to neo4j @akarsh s
        Show mongodb data in neo4j @akarsh s
    Code clean up and project structure - 1 @akarsh s @Sonali B
    Code clean up 2 @akarsh s
    Code clean up 3 @akarsh s
    Added new library moneo for adding data simultaneous in neo4j and mongodb
    @akarsh s
    Demo project (https://github.com/akarsh/test-for-moneo) for showing the
    implementation of the neo4j and mongodb. @akarsh s
    Updating readme and project documentation 1 @akarsh s
    Storing Category in Redis
    Session storage in Rethinkdb @akarsh s
    Last presentation @akarsh s @Sonali B @Sameer S
        Preparation @akarsh s @Sonali B @Sameer S
        Create UML Diagram of Architecture @Sonali B
        Presentation template @akarsh s
        Live demo video @akarsh s
        Literature @akarsh s
        Logos @akarsh s
        Screenshots of databases - backup
            Redis @Sonali B
            Rethink @akarsh s
            Neo4j @akarsh s

Mongodb @akarsh s

Code clean up 4 @akarsh s

Displaying blog post in user page @akarsh s

Solved gitignore issue @akarsh s

UI improvements @akarsh s

Add CSS @akarsh s

Indentation and template in Jade @akarsh s

Display data from neo4j by using cypher Query @akarsh s

Continuous Integration - Travis CI @akarsh s

Literature research

Definition of nosql and how many different providers are available in the nosql market
http://nosql-database.org/

Article by martin fowler regarding polyglot persistence
https://martinfowler.com/bliki/PolyglotPersistence.html

NoSQL academic projects
https://ecs.syr.edu/faculty/fawcett/handouts/webpages/BlogNoSql.htm

Redis vs Riak
https://db-engines.com/en/system/Redis%3BRiak+KV

Using redis in node.js
https://www.sitepoint.com/using-redis-node-js/

Using python and Mongodb
https://realpython.com/blog/python/introduction-to-mongodb-and-python/

Keystone supports MongoDB
http://keystonejs.com/
We can also use Redis instead of MongoDB for user session
http://keystonejs.com/docs/configuration/

Found a git repo that implements the user login/registration feature. It's implemented using node.js and mongoDB as it's backend.
https://github.com/braitsch/node-login.git

Neo4J
https://www.npmjs.com/package/neo4j#usage


```
Users collection
 - id
 - name
 - email
 ...


Posts collection
 - id
 - title
 - content
 ...
 - user_id
```


mongo has no joins so you would have to select posts for the user id in a separate query

you could query for users that comment posts with `iot` tag
as soon as you have the id's of users from neo4j, you can do a simple mongodb query
like select users where ids in ...
and an array of these IDs

https://neo4j.com/blog/neo4j-doc-manager-polyglot-persistence-mongodb/

https://github.com/mongodb-labs/mongo-connector

Neo4j - docmanager
https://neo4j.com/developer/mongodb/

Moneo plugin/middleware for integrating mongodb and neo4j
https://github.com/srfrnk/moneo

Moneo - plugin for neo4j and mongoose (mongodb)
https://www.npmjs.com/package/moneo

Rethink DB
https://www.rethinkdb.com/

Rethink DB - Session storage
https://www.npmjs.com/package/connect-rethinkdb

Why not using Riak for session storage
https://github.com/frank06/connect-riak/issues/7

frank06/connect-riak#7
Connect-riak is not in development & causes errors.