# Blog



NOSQL, SoSe 2017

by

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# Goal

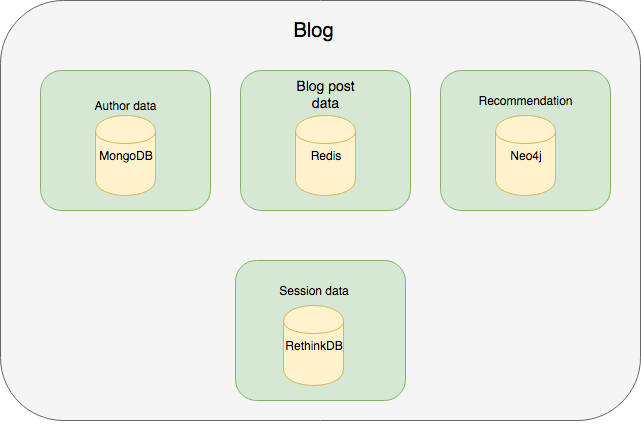
Create a blog website that should uses any three nosql databases

## 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

1. Meeting to discuss on project [@Sonali B](/ep/profile/iX86Va0dCNNJDjPG9iZ958RYhliqmVR1BgIUNu06NiuG3V4r4U) [@Sameer S](/ep/profile/iX86Va0dCNNJDjPG9iZ958RYhliq2CCPrPo0qhGkLs2l6Yacx1)
2. Agenda:
   * + 1. What Nosql to use, pros n cons
       2. Try to look for source code using python if any found for these
3. Meeting to discuss initial implementation [@Sonali B](/ep/profile/iX86Va0dCNNJDjPG9iZ958RYhliqmVR1BgIUNu06NiuG3V4r4U) [@Sameer S](/ep/profile/iX86Va0dCNNJDjPG9iZ958RYhliq2CCPrPo0qhGkLs2l6Yacx1) [@akarsh s](/ep/profile/iX86Va0dCNNJDjPG9iZ958RYhmtQLzQwDqoWju0TqmbVKxlFyz)
4. Meeting to discuss final implementation [@akarsh s](/ep/profile/iX86Va0dCNNJDjPG9iZ958RYhmtQLzQwDqoWju0TqmbVKxlFyz) [@Sonali B](/ep/profile/iX86Va0dCNNJDjPG9iZ958RYhliqmVR1BgIUNu06NiuG3V4r4U) [@Sameer S](/ep/profile/iX86Va0dCNNJDjPG9iZ958RYhliq2CCPrPo0qhGkLs2l6Yacx1)
5. Agenda:
   * + 1. Blog post creation
       2. Inline comments for project
6. Tasks
   1. Author page [@akarsh s](/ep/profile/iX86Va0dCNNJDjPG9iZ958RYhmtQLzQwDqoWju0TqmbVKxlFyz)
   2. Registration page [@Sameer S](/ep/profile/iX86Va0dCNNJDjPG9iZ958RYhliq2CCPrPo0qhGkLs2l6Yacx1)
   3. Login page [@Sameer S](/ep/profile/iX86Va0dCNNJDjPG9iZ958RYhliq2CCPrPo0qhGkLs2l6Yacx1)
   4. Blog post page creation [@Sonali B](/ep/profile/iX86Va0dCNNJDjPG9iZ958RYhliqmVR1BgIUNu06NiuG3V4r4U)
   5. Connection to redis [@Sonali B](/ep/profile/iX86Va0dCNNJDjPG9iZ958RYhliqmVR1BgIUNu06NiuG3V4r4U)
   6. Retrieval of Blogs on Home page [@Sonali B](/ep/profile/iX86Va0dCNNJDjPG9iZ958RYhliqmVR1BgIUNu06NiuG3V4r4U)
   7. Creation of a new dynamic page to show blog data [@Sonali B](/ep/profile/iX86Va0dCNNJDjPG9iZ958RYhliqmVR1BgIUNu06NiuG3V4r4U)
   8. Issues to be addressed: Confirm message on Blog data store and refresh issue while retrieving data from Redis [@Sonali B](/ep/profile/iX86Va0dCNNJDjPG9iZ958RYhliqmVR1BgIUNu06NiuG3V4r4U)
   9. Add category to blogdata page [@Sonali B](/ep/profile/iX86Va0dCNNJDjPG9iZ958RYhliqmVR1BgIUNu06NiuG3V4r4U)
   10. Add css to pages [@Sonali B](/ep/profile/iX86Va0dCNNJDjPG9iZ958RYhliqmVR1BgIUNu06NiuG3V4r4U)
   11. Presentation [@akarsh s](/ep/profile/iX86Va0dCNNJDjPG9iZ958RYhmtQLzQwDqoWju0TqmbVKxlFyz)
       1. Preparation [@akarsh s](/ep/profile/iX86Va0dCNNJDjPG9iZ958RYhmtQLzQwDqoWju0TqmbVKxlFyz) [@Sonali B](/ep/profile/iX86Va0dCNNJDjPG9iZ958RYhliqmVR1BgIUNu06NiuG3V4r4U)
       2. Modifications [@akarsh s](/ep/profile/iX86Va0dCNNJDjPG9iZ958RYhmtQLzQwDqoWju0TqmbVKxlFyz) [@Sonali B](/ep/profile/iX86Va0dCNNJDjPG9iZ958RYhliqmVR1BgIUNu06NiuG3V4r4U)
   12. Neo4J [@akarsh s](/ep/profile/iX86Va0dCNNJDjPG9iZ958RYhmtQLzQwDqoWju0TqmbVKxlFyz)
       1. Connect mongodb to neo4j [@akarsh s](/ep/profile/iX86Va0dCNNJDjPG9iZ958RYhmtQLzQwDqoWju0TqmbVKxlFyz)
       2. Show mongodb data in neo4j [@akarsh s](/ep/profile/iX86Va0dCNNJDjPG9iZ958RYhmtQLzQwDqoWju0TqmbVKxlFyz)
   13. Code clean up and project structure - 1 [@akarsh s](/ep/profile/iX86Va0dCNNJDjPG9iZ958RYhmtQLzQwDqoWju0TqmbVKxlFyz) [@Sonali B](/ep/profile/iX86Va0dCNNJDjPG9iZ958RYhliqmVR1BgIUNu06NiuG3V4r4U)
   14. Code clean up 2 [@akarsh s](/ep/profile/iX86Va0dCNNJDjPG9iZ958RYhmtQLzQwDqoWju0TqmbVKxlFyz)
   15. Code clean up 3 [@akarsh s](/ep/profile/iX86Va0dCNNJDjPG9iZ958RYhmtQLzQwDqoWju0TqmbVKxlFyz)
   16. Added new library moneo for adding data simultaneous in neo4j and mongodb [@akarsh s](/ep/profile/iX86Va0dCNNJDjPG9iZ958RYhmtQLzQwDqoWju0TqmbVKxlFyz)
   17. Demo project (<https://github.com/akarsh/test-for-moneo>) for showing the implementation of the neo4j and mongodb. [@akarsh s](/ep/profile/iX86Va0dCNNJDjPG9iZ958RYhmtQLzQwDqoWju0TqmbVKxlFyz)
   18. Updating readme and project documentation 1 [@akarsh s](/ep/profile/iX86Va0dCNNJDjPG9iZ958RYhmtQLzQwDqoWju0TqmbVKxlFyz)
   19. Storing Category in Redis
   20. Session storage in Rethinkdb [@akarsh s](/ep/profile/iX86Va0dCNNJDjPG9iZ958RYhmtQLzQwDqoWju0TqmbVKxlFyz)
   21. Last presentation [@akarsh s](/ep/profile/iX86Va0dCNNJDjPG9iZ958RYhmtQLzQwDqoWju0TqmbVKxlFyz) [@Sonali B](/ep/profile/iX86Va0dCNNJDjPG9iZ958RYhliqmVR1BgIUNu06NiuG3V4r4U) [@Sameer S](/ep/profile/iX86Va0dCNNJDjPG9iZ958RYhliq2CCPrPo0qhGkLs2l6Yacx1)
       1. Preparation [@akarsh s](/ep/profile/iX86Va0dCNNJDjPG9iZ958RYhmtQLzQwDqoWju0TqmbVKxlFyz) [@Sonali B](/ep/profile/iX86Va0dCNNJDjPG9iZ958RYhliqmVR1BgIUNu06NiuG3V4r4U) [@Sameer S](/ep/profile/iX86Va0dCNNJDjPG9iZ958RYhliq2CCPrPo0qhGkLs2l6Yacx1)
       2. Create UML Diagram of Architecture [@Sonali B](/ep/profile/iX86Va0dCNNJDjPG9iZ958RYhliqmVR1BgIUNu06NiuG3V4r4U)
       3. Presentation template [@akarsh s](/ep/profile/iX86Va0dCNNJDjPG9iZ958RYhmtQLzQwDqoWju0TqmbVKxlFyz)
       4. Live demo video [@akarsh s](/ep/profile/iX86Va0dCNNJDjPG9iZ958RYhmtQLzQwDqoWju0TqmbVKxlFyz)
       5. Literature [@akarsh s](/ep/profile/iX86Va0dCNNJDjPG9iZ958RYhmtQLzQwDqoWju0TqmbVKxlFyz)
       6. Logos [@akarsh s](/ep/profile/iX86Va0dCNNJDjPG9iZ958RYhmtQLzQwDqoWju0TqmbVKxlFyz)
       7. Screenshots of databases - backup
          1. Redis [@Sonali B](/ep/profile/iX86Va0dCNNJDjPG9iZ958RYhliqmVR1BgIUNu06NiuG3V4r4U)
          2. Rethink [@akarsh s](/ep/profile/iX86Va0dCNNJDjPG9iZ958RYhmtQLzQwDqoWju0TqmbVKxlFyz)
          3. Neo4j [@akarsh s](/ep/profile/iX86Va0dCNNJDjPG9iZ958RYhmtQLzQwDqoWju0TqmbVKxlFyz)
          4. Mongodb [@akarsh s](/ep/profile/iX86Va0dCNNJDjPG9iZ958RYhmtQLzQwDqoWju0TqmbVKxlFyz)
   22. Code clean up 4 [@akarsh s](/ep/profile/iX86Va0dCNNJDjPG9iZ958RYhmtQLzQwDqoWju0TqmbVKxlFyz)
   23. Displaying blog post in user page [@akarsh s](/ep/profile/iX86Va0dCNNJDjPG9iZ958RYhmtQLzQwDqoWju0TqmbVKxlFyz)
   24. Solved gitignore issue [@akarsh s](/ep/profile/iX86Va0dCNNJDjPG9iZ958RYhmtQLzQwDqoWju0TqmbVKxlFyz)
   25. UI improvements [@akarsh s](/ep/profile/iX86Va0dCNNJDjPG9iZ958RYhmtQLzQwDqoWju0TqmbVKxlFyz)
       1. Add CSS [@akarsh s](/ep/profile/iX86Va0dCNNJDjPG9iZ958RYhmtQLzQwDqoWju0TqmbVKxlFyz)
       2. Indentation and template in Jade [@akarsh s](/ep/profile/iX86Va0dCNNJDjPG9iZ958RYhmtQLzQwDqoWju0TqmbVKxlFyz)
   26. Display data from neo4j by using cypher Query [@akarsh s](/ep/profile/iX86Va0dCNNJDjPG9iZ958RYhmtQLzQwDqoWju0TqmbVKxlFyz)
   27. Continuous Integration - Travis CI [@akarsh s](/ep/profile/iX86Va0dCNNJDjPG9iZ958RYhmtQLzQwDqoWju0TqmbVKxlFyz)

# 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](https://github.com/frank06/connect-riak/issues/7)

Connect-riak is not in development & causes errors.