Research on ARANGODB

2 To critically evaluate a range of conceptual and technical tools and to apply them selectively in the design and implementation of an effective database system

3 To assess and evaluate the theoretical and technological underpinnings of distributed database systems

Guidelines and background to the assessment

Hand in date 23-June-2020 Assessment type INDIVIDUAL TAKE-HOME ASSIGNMENT

TERM PAPER [50 marks]

Your company has for the past decades implemented and is currently using a relational database management system (RDBMS) for their Database. Everything was working fine until quite recently when in the process of implementing additional functionalities, it was discovered that the current Relational database Models is deficient in implementing some of these functions on the existing database system. A decision has therefore been made to switch to a non-relational database model since it is believed that such a model will bring the much needed upgrade to the existing system.

As an expert in the field, you have been tasked to come up with a recommendation for the use of a particular non-relational database to be used, by writing and submitting technical report in the form of a term paper to technical committee of the new project.

REQUIREMENTS:

Select ONE technology from the list of non-relational database technologies in the attached file. Conduct a desk research and write a report in the form of a term paper that will have the following structure:

 Abstract

1. Introduction

Introduction to non-relational database systems and technology, Historical background, Benefits, Current trends and issues of non-relational database systems and technology, etc.

2. The chosen non-relational database technology

Information about developer and owner, Versioning history, Purpose of the technology, Market share, support for distributed database, etc.

3. Architecture of the technology

The architecture and components of the chosen system

4. Modeling and models of the technology

Discuss the different models and views of the chosen technology

5. Justification for the choice

Justify the choice of the technology for your company and Provide examples of companies successfully using the chosen technology to support you choice

6. Security of chosen technology

Discuss the security feature of the chosen technology

7. Conclusion

Your Personal reflections, Lessons learnt, your Prediction for the future of the technology (justify the basis for the prediction)

8. References

Create your diagram using Visio, Microsoft Paint, or other graphical creation utility of your choosing. Note: The graphically depicted solution is not included in the required page length. All assumption made about the company must be clearly stated.

You MUST Use at least ten (10) quality academic resources in this assignment. Note: Wikipedia and similar Websites do not qualify as quality resources. You are required to reference the report using the Harvard Referencing system (both in-text and references).

DOCUMENT FORMATING

Formatting of the Proposal must be [Times New Roman, size 12, 1.5 spacing, margin top 3 cm, bottom: 1.5cm, Left: 3cm, Right: 1.5cm; Align: Justify].

DELIVERABLE:

The term paper in a single document submitted through turnitin on the course page.

SUBMISSION:

Last date for submitting the final report is in accordance with the Graduate School’s course calendar and procedure.

NOTE:

Copying (full/part) from any other source without acknowledgement or outsourcing this work is strictly prohibited and any such act shall result in an award of a 0 (zero) mark for the project.

MARKING SCHEME

0-39 40-49 50-59 60-69 70+ 80+

Work mainly incomplete and /or weaknesses in most areas Most elements completed; weaknesses outweigh strengths Most elements are strong, minor weaknesses Strengths in all elements Most work exceeds the standard expected All work substantially exceeds the standard expected