SOEN 363: Database Project

Peer Review Report

April 18, 2025

Report Reviewer: Jad Hanna

Reviewer's Team: Team #29 - awesomeTeam

Reviewed Project: **Team #17 – TheBrothers**

Team Members: Hicham Kitaz, Ziad-Tarik Taufeek, Adib Akkari, Zaheer Quraishi

Video Link: https://concordia.yuja.com/V/Video?v=1192783&node=6538689&a=21090291

Evaluation

1. Overall presentation quality: Very Good (A)

Reason: The presenter delivered a detailed walkthrough of the project, explaining concepts clearly and demonstrating the system in action. The flow covered both relational and NoSQL aspects well, and the live demos gave a solid sense of how the application works. While only one team member spoke, the explanation was thorough and engaging.

2. Complexity / Applicability of the database application: Very Good (A)

Reason: ThreadVolt is based on a meaningful and real-world topic (CVEs) which gives the project strong practical value. The data model included complex elements like weak entities, hierarchies, and multiple data sources, reflecting a deep understanding of database design.

3. Use of Technology: Excellent (A+)

Reason: Excellent use of PostgreSQL and Neo4j. The team created well-structured scripts to populate and query the database and demonstrated migration from SQL to Neo4j effectively. Their use of views, triggers, indexing, and performance testing shows a solid grasp of both technologies.

4. The Presenters addresses all challenges: Excellent (A+)

Reason: The team identified and tackled several technical challenges, especially in data migration and adapting the data model to fit Neo4j's graph format. Flattening the ISA hierarchy and transforming weak entities into full nodes were thoughtful decisions that showed adaptability.

5. Teamwork and Participation: Good (A-)

Reason: The quality of the implementation suggests strong collaboration. However, since only one team member presented, it was hard to evaluate participation from the rest of the group. Including more voices would have given a better picture of team dynamics.

Additional Comments / Suggestions

- Great job integrating two APIs (MITRE and NVD) and filtering by date ranges.
- The indexing tests clearly showed performance improvements, nice touch.
- Neo4j migration was well-done, especially handling the lack of inheritance.
- In future presentations, consider involving more team members to showcase broader participation.

Conclusion

Team #17 delivered a technically strong and relevant project. Their understanding of both relational and graph databases was clear, and their problem-solving throughout the project stood out. ThreadVolt is well-executed, practical, and demonstrates excellent technical depth.