CMPSC 431W Course Project Report

[Phase 2] Logical Database Design and Normalization

Team: Fusion LTD.

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Requirement Analysis:	20/20
Conceptual Design:	20/20
Normalization & SQL Statements:	30/30
Technology Survey:	10/10
Report Writing & Organization:	19/20
Extra Points:	+3

Total: 102/100

Summary

In this report, Team Fusion LTD. extends their proposal for Fusion LTD., a combination of Amazon and Ebay. Issues regarding to conceptual design are addressed in this new report. A detailed process of identifying functional dependencies and normalizing schema is provided. A very strong technology survey is also provided.

Introduction and Conclusion

The introduction motivates the project well, provides background and clear organization of this report. The conclusion is relatively short, which can be improved by adding lessons learned in the two phases and future plan.

Requirement Analysis

The requirement analysis is very thorough and detailed. The partial ER diagrams gives a clear picture of how each functionality is designed in the ER model.

Conceptual Design

A complete ER diagram is also shown to give an overall view of the conceptual design. The issues raised regarding to the ER design in last phase are also addressed.

Normalization and SQL Statements

In the normalization section, four normalizations/decompositions are carried out based on the identified non-trivial functional dependencies to make the tables satisfy 3NF. Wonderful! Also, all of the required create table statements are attached.

Technology Survey

The team demonstrates a very strong technology survey! All aspects, including front-end, back-end, and project management, are considered with pros and cons analyzed. Based on the investigation, the team decides to use draw.io, MySQL, Java, HTML5, Node.js and .NET to develop their project.

Writing and Organization

The report is very well written and organized. The contents are presented with great details yet still easy to follow. Figures are also very clear and easy to understand. Overall, the report is pleasant to read!

Others

The team plans to develop Android application, and the discussion on the plan for developing mobile application is very complete and detailed. It's also great that the team uses data from actual websites to make the data in the project realistic. Finally, the report is bounded nicely.

Strength

- 1. The report is very complete and insightful.
- 2. Great technology survey, considering all aspects of the project development, including mobile application.

Areas of improvement

N/A. Keep up the good work!