CMPSC 431W Course Project Report

[Phase 1] Requirement Analysis and Conceptual Design

Team: Fusion LTD.

Members:

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Requirement Analysis:

82/100

25/25

Conceptual Design:

24/40

Report Writing & Organization:

31/35

Extra Points:

+2

Total:

Summary

In this report, Team Fusion LTD. proposes to create a platform, Fusion LTD., which operates like a combination of Amazon and Ebay. All the twelve required functionalities are carefully discussed, with three extra features introduced: product notification system, affiliate feature, and social media API integration. The team also points out some possible system issues/directions, including: data encryption, access speed, and additions.

Introduction

The introduction is clear. However, it is suggested to provide the report organization, e.g. "The rest of the report is organized as follows. In Section 2, we provide.... In Section 3, we provide...." Another small issue is the inconsistent usage of terms, e.g., the platform name has been represented as "Fusion LTD." and "Fusion Limited" in different sections.

Requirement Analysis

All of the twelve required functionalities are carefully discussed, together with the corresponding ER design. Also, three extra features are introduced: product notification system, affiliate feature, and social media API integration.

Conceptual Design

There are several issues regarding to the design of the ER diagram. First, the team does not discuss the design of bidding clearly. To implement such feature, certain information needs to be stored in the database, thus design of corresponding entities/relationships are necessary. However, they are not shown in the ER diagram. Second, there are some isolated entities, e.g., the report to telemarketers in Figure 5, which is incorrect. Third, some attributes should relate to other entities, e.g., in Figure 1, the "type of same", "has been sold", "quantity" of Sale Item should be related to the seller. In other words, those attributes should be represented as relationships between entities. Fourth, no attributes associated with any relationship is designed in the ER diagram. Lastly, the team does not specify the primary key of entities in the ER diagram.

Report Writing & Organization

[Technical Details] Generally, the report provides enough descriptions for technical details. However, the ER diagrams are quite hard to follow, because the ER diagrams are separated into several pieces in different subsections, but the overall ER diagram is not presented. Also, the entity names are not consistent, e.g. "Sale Item" in Figure 1 and "Item" in Figure 4.

[ER Diagram] The ER diagram is presented well.

Strength

- 1. Some possible system issues/directions are also pointed out. [EX +2]
- 2. The introduction is clear.
- 3. The report provides enough descriptions for technical details.

Areas of improvement

- 1. The design of bidding is not discussed clearly.
- 2. There are several major issues with the ER design.
- 3. An integrated ER diagram should be included in this report with consistent names of entities/relationships/attributes, along with the partial ER diagrams for each functionality.