Technical Documentation

Happy Mats Project

Peter Joraoul A. Parungao
Mary Grace M. Rivero

CERTIFICATE OF AUTHORSHIP

We hereby certify that this submission Project for CS123 abides by the principles stipulated in the DISCS' Academic Integrity Policy document. We further certify that we are the authors of this program/ project/ report/ paper and that any assistance we received in its preparation is fully acknowledged and disclosed in the documentation. We have also cited all sources from which we obtained data, ideas, or words that are directly copied or paraphrased in this document. Sources are properly credited according to accepted standards for professional publication.

_____ _____

Peter Joraoul Parungao Mary Grace M. Rivero

Submitted to: Mr. Raphael Alampay

Date of Submission: Oct. 15, 2014

As required in: CS123 Software Engineering
Sources:

Table of Contents

I. Statement of Work

Thunders

Project Name: Central Inventory Management System (CIMS)
TG Project Manager: Peter Joraoul A. Parungao

Customer: Happy Mats
Project Sponsor: Jennifer Saret

TG Development Staff Estimates (man-hours)

- Peter Joraoul A. Parungao (Developer) : 90
- Mary Grace Miranda (Developer): 90

Project Description

Goals

- This project will implement an inventory management system to keep for the whole company. The purpose of the system is to keep track of services, sales and inventory of all company sites to reduce paper work and to keep updated information to the manager and its management

Objectives

- Provide updated information of sales and inventory
- Provide reports for inventory status and sales trends.

II. Data Flow Diagram

The following diagram will explain the data flow inside the current system of the Happy Mats Furniture Merchandise. Level 1 shows how data from Client will be recorded in their manual journals and all the details of the purchase from the supplier. Level 2 will show how they manage and check their Inventory by conducting an Inventory Inspection and knowing if it needs a re-supply. Level 2 will explain how the Inspection is conducted.

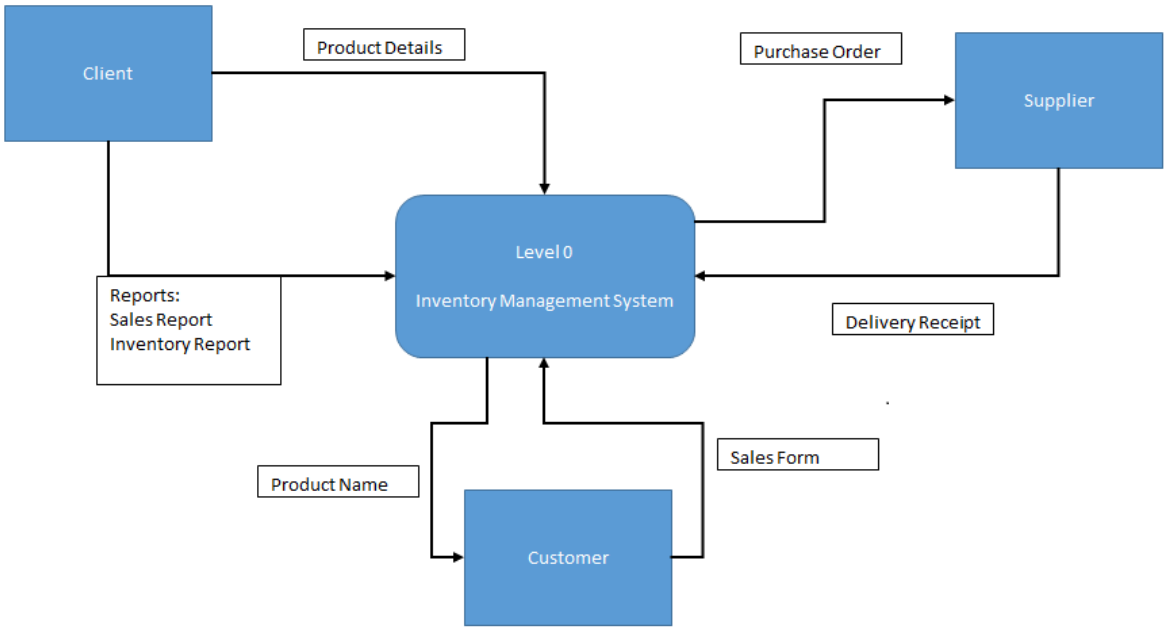

Figure 1: DFD Level 0

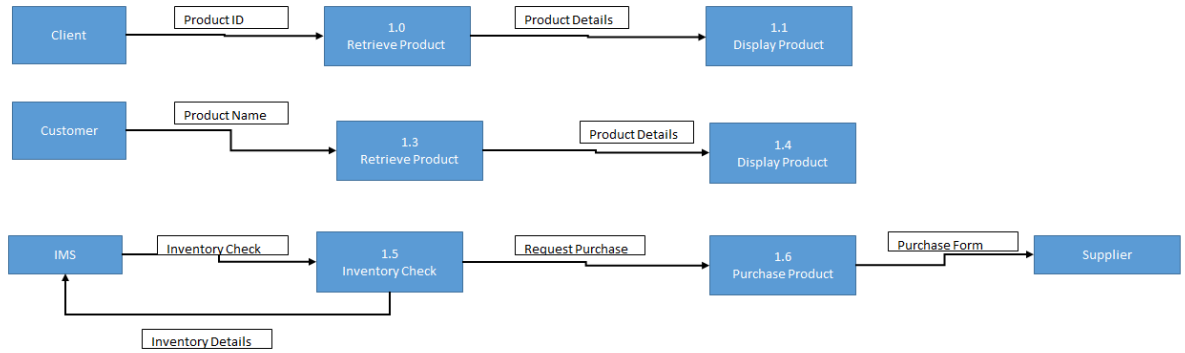

Figure 2: DFD Level 1

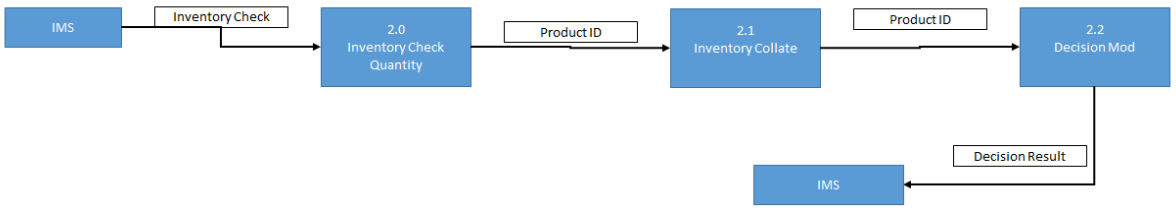

Figure 3: DFD Level 2

III. Entity-Relationship Model

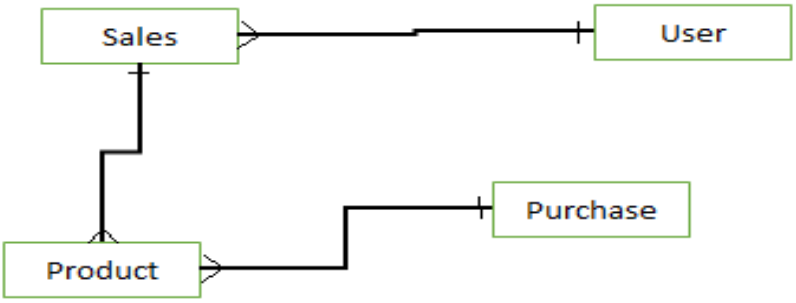

Figure 4: Entity-Relationship Diagram

The Figure 4 shows that the inventory management system is composed of four main tables, namely: Sales, User, Product, and Purchase. The User has one is to many relationship with Sales and Sales has many is to one relationship with User. This means that one user can input as many sales as he can.

Sales one is to many relationship with Products and Products has many is to one relationship with Sales. This means that in each entry in the sales tables, there can be a lot of products involved or inputted with it.

Products has many is to one relationship with purchase and Purchase has one is to many relationship with Products. This also means that in one purchase entry, there can be a lot of products in it.

Summary:
USER | 1 – MANY | SALES
SALES | MANY – 1 | USER
SALES | 1 – MANY | PRODUCTS
PRODUCTS| MANY – 1 | SALES
PRODUCTS | MANY – 1 | PURCHASE
PURCHASE | 1 – MANY | PRODUCTS

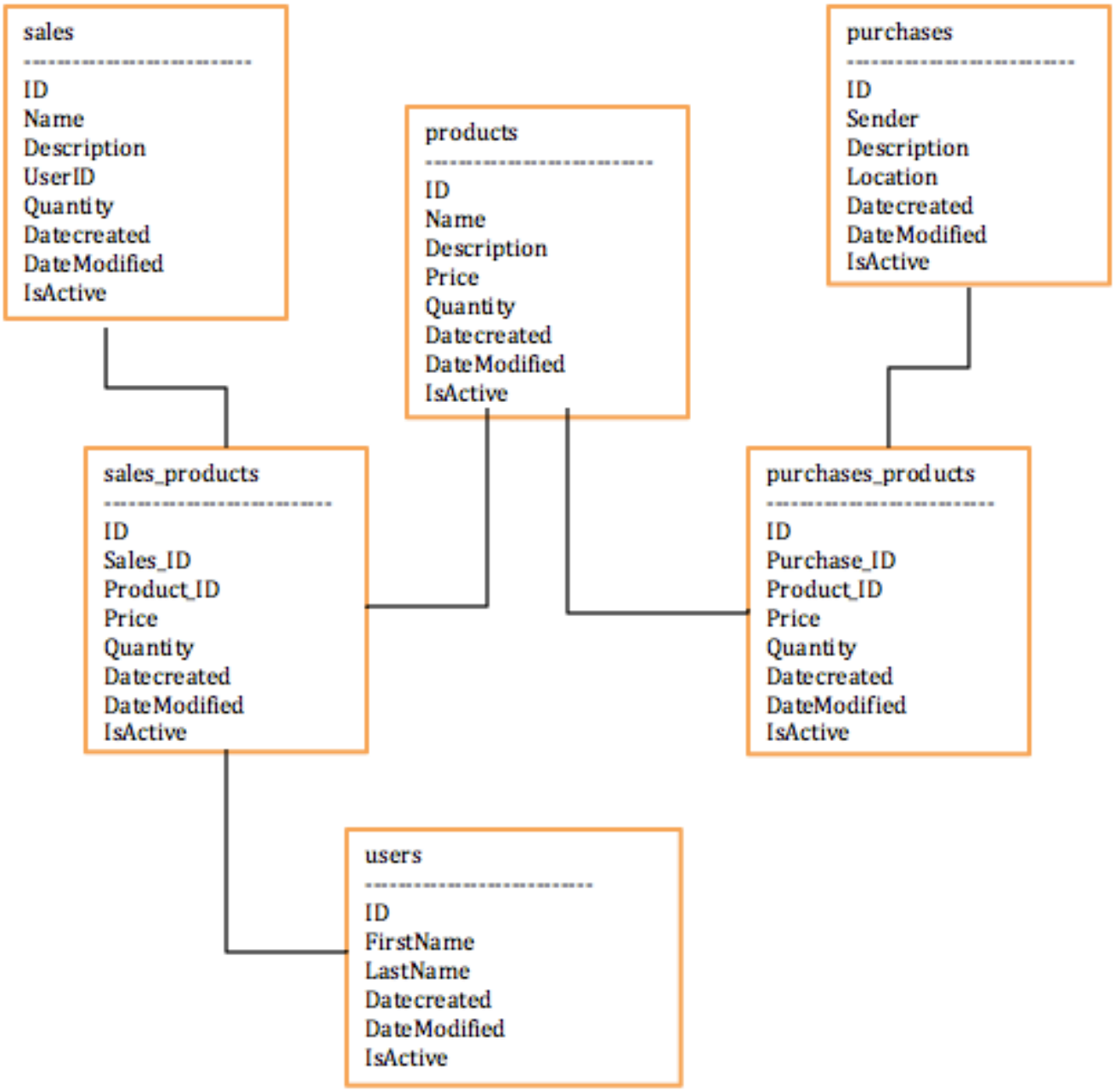

Figure 5: Entity Relationship Diagram Details

Figure 5 shows the attributes in each table. As one can see, each table has the "IsActive" attribute because the team believes that the integrity of the data will be preserved if we would not really delete an item but instead make use of the IsActive attribute of it. IsActive is a bit. We would just assign 0 as false, which entails that the item is inactive, otherwise if it is 1, then it is active. At the start, the default value that is set for IsActive is 1. A more detailed description, data type, length and constraint/rule of each attribute are identified in the next tables. These tables contain the data dictionary of the inventory system—how the database is designed.