Christopher Morcom

Ismael Granillo

CS 425 Final Project

28 February 2018

**Online Distribution Center**

**Development Environment: PHP**

The database will be implemented using PHP in PHPMyAdmin to allow a user interface which allows the database to be updated. (See UML Case diagram for more information.)

**RDBMS: MySQL**

MySQL Workbench will be used to implement and test the MySQL code (queries and create tables and data insertion).

**Framework for Object Relational Mapping: PHP**

Because we are using PHP in PHPMyAdmin to host the database, we will be using PHP to convert user data into objects that the database can read and store. For instance, a user date of birth can be entered in separate month, day, and year fields, this is sent to the database as a string of characters that is passed via PHP and converted into a SQL DATE object and stored in the database.

**Testing Methodology**

After configuring permissions for each type of user, we will attempt testing by attempting to add both invalid and valid objects to the database and see if the database properly handles the information (throwing an error or proceeding with insertion). We will test the levels of user access between different users:

1. Admin with full privileges (also user creation and deletion)  
2. Warehouse manager – access to products, customers in his region only.  
3. Customer login – view, edit and update her information only.

Finally, we will test the privileges of each user by trying to access data and delete it (accessing restricted data throws an error).