Christian O. Montes Tirado

José A. Virella Velázquez

Juan J. Nieves Miranda

Project Phase 1 E-R Model Overview

**Entities**

1. **User –**

Database representation of a user in shopping site. A user may perform a variety of functions from buying a product to viewing an order. User functions as well as associations with other things, such as addresses or phone numbers, are represented in the ER diagram.

1. **Administrator –**

A special entity capable of creating and modifying categories, as well as deleting or modifying users. The administrator can view reports as well. These interactions are represented in the ER diagram

1. **Product –**

Database representation of a product in a shopping site. The entity affords a lot of characteristics, from belonging to a category to being in a shopping cart. The product may be in auction or on sale.

1. **Auction –**

Database representation of an offering of a product in form of an auction. It harbors current bidding price and initial bidding price

1. **Sale –**

Database representation of an offering of a product in form of a sale. It harbors its price and the time left for sale.

1. **Order –**

Represents a customer purchase. This can be viewed at any time by a customer

1. **Category –**

Represents a product category. A product may be associated with many categories.

1. **Report –**

Represents a sales report of different times. May be viewed by Administrator entity.

1. **ShoppinCart –**

Conglomeration of products that a customer wishes to purchase. It contains the item quantity of the cart and is associated with only one user

1. **ShippinAddress –**

Representation of customer shipping address. A customer may have many address but they may be associated with only one customer.

1. **Review –**

A customer may receive and issue reviews. Each customer may receive and issue many reviews.

1. **CreditCard –**

Represents customer credit card. Card number is used as identifier

1. **PhoneNumber –**

Represents customer phone number. Customers may have many phone numbers.

1. **BilingAddress –**

Represents customer billing address associated with credit card. A credit card may have only one billing address associated with it.