**Abstract**

This document discusses the structure and components of a database for a real-world E-commerce system. We first presented what are we going to sell for the consumer? We went with selling men and women t-shirts. We then discuss logical components of a typical e-commerce database system for the admin user. Finally, we illustrate the layout and detailed design of an e-commerce website that correlates with the database system, such as the primary key, foreign key, outer join, etc.

Administrator Business Rules:

- Admin must signup with first name, last name, and email.

- Admin can insert one or more product items to the website

- Admin can remove one or more product items from the site

- Admin can change one or more product images and product prices from the

- Admin can view all of the products listed on the site

- Admin can remove one or more products listed in the cart

- Each product must be assigned/associated with men or women category.

Customer Business Rules:

- A user can buy or more products from the site.

- A user can add one or more products to the shopping cart

- A user can remove one or more products from the shopping cart

- The user has an optional to sign up and login in with first name, last name, and email.

- A user can log out.

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The database will include price lists for available products

The search tool will draw on a complete data set

The database will be easily searchable

The database would store users' first name, last name, email, and password.

Entities:

Users- shop admin

Products - products to sell

Categories - category of products. e.g., men and women

Orders - customer placed an order

Order details - order always won't have a single item. Store details here