

Relational Schema:

User(<u>Email</u>, Address, Name, Password) Owns(<u>Email</u>, SystemUID) Account(SystemUID, Balance)

Seller(<u>email</u>, address, name, password)

Inventory(seller_email, productID, price, quantity)

StockedBy(seller_email, productID)

Has(Email, CartID)

Submits(OrderID, CartID)

Cart(CartID, UserID, InventoryID, totalprice)

Order(OrderID, UserID, orderdate, orderprice, status)

Fulfills(OrderID, SellerID)

Places(<u>UserID</u>, OrderID)

Addedto(ProductID, CartID)

Product(<u>product id</u>, name, description)

ProductPage(page id, url)

Image(<u>image id</u>, url)

Describes(<u>page_id</u>, product_id)

ProductImage(<u>product_id</u>, <u>image_id</u>)

Tags(tag id, name)

IsTagged(product id, tag id)

Review(<u>review_id</u>, rating, content, date, helpfulness)

ReviewImage(review id, image id)

ReviewedBy(<u>review_id</u>, <u>Email</u>)

ProductReview(<u>review_id</u>)

SellerReview(review id)

ReviewsProduct(review id, product id)

ReviewsSeller(<u>review_id</u>, Email)

Page-by-Page Design of Website:

- All Pages
 - Header
 - LOGO
 - Search
 - Login / Account access
 - Cart
- Main Page
 - Highest rated items
 - Categories
 - o Recently Viewed
- Search Page
 - List of products (25 default) (can go to next set of 25 at bottom)
 - For each product
 - Image
 - Name
 - Lowest Price
 - Rating
 - Clicking on product will send you to Product Page
- Product Page
 - o Image
 - o Name
 - o Sellers, Price
 - Rating
 - Average from reviews
 - o Reviews
 - Recommendation (for other products)
 - Will look the same as on search page
 - Add to cart
 - Quantity
 - Seller
- User Page
 - Personal information (can be modified, checks will be in place to ensure email is unique):
 - Name
 - Address
 - Email
 - Password (hidden)
- Cart Page
 - Products added to Cart
 - Product Name
 - Product ID

- Description
- Image
- Price
- Quantity
- Remove from Cart
- o Checkout
- o Total Price of all items in the cart
- Order Page
 - Current Order (Repeat for all distinct orders)
 - Products
 - Image
 - Total Price
 - Date of order
 - o Option to view order histoy
- Seller Page
 - o Inventory (can be modified)
 - Price
 - Quantity
 - Items sold
 - Fulfillment History
 - o Total Revenue
 - o Reviews + aggregate review scores