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COSC-280
11/28/2022

Design Document

Warehouses (warehouse_id, city, the_state, country)

We are assuming there can be multiple warehouses in one city, so (city, the_state, country) cannot be a CK.

Users (user_id, first_name, last_name, email, uPassword, billing_address, date_registered)
CK: (email)

We are assuming there can only be 1 email associated with each user, so it is a CK.

Sellers (seller_id, number_of_items_sent, number_of_items_sold)
FK: seller_id references Users(user_id)

ProductCategories (category_name)

Products (product_id, product_name, product_category, product_description)
CK: (product_name, product_category, product_description)
FK: product_category references ProductCategories(category_name)

ItemListings (item_id, product_id, uploader_id, item_image, upload_date, item_price, shipping_price, item_condition)
FK: uploader_id references Users(user_id)
FK: product_id references Products(product_id)

ItemInfo (item_id, product_id, warehouse_id)
FK: product_id references Products(product_id)
FK: warehouse_id references Warehouses(warehouse_id)

Orders (order_id, item_id, buyer_id, seller_id, order_date, order_cost)
FK: item_id references ItemInfo(item_id)
FK: buyer_id references Users(user_id)
FK: seller_id references Users(user_id)

We are assuming that one order can have multiple items, hence order_id and item_id together will uniquely identify a row.

OrderStatus (order_id, tracking_id, paid_status, shipping_status, shipping_provider)
FK: order_id references Orders(order_id)

ItemSeller (item_id, seller_id)
FK: item_id references ItemInfo(item_id)

FK: seller_id references Users(user_id)