

Background

The project is a database containing inventory data and user information for an e-commerce application. The database keeps track of user purchase history, shopping cart, user profiles with what they purchased (if they choose to make that information public), and stock levels. This is inspired by people who want to buy PCs and build using PC parts. The intent for this database is to provide an easy way to organize items for an e-commerce site. For new PC buyers, buying individual parts can be a daunting task because there are many different parts to consider, and new buyers may not know what to buy. They might try to google what to do, but may end up confusing themselves more or enter a rabbit hole that they cannot escape. Two many-to-many relationships would be the store selling a particular part to many customers, and each customer can buy many parts, as well as there are many different versions of one product, and there are many products of one PC part.

Application Requirements

The following describe what is required from the application:

R1.1) Provide an indexing database that catalogs all available PC parts. The database should be usable to search for parts, as well as provide indexing information so it can be added to shopping carts, and purchase history

R1.2) The database will contain inventory data, which consists of product name, product ID, prices, manufacturer, and information that will tell whether certain parts will be compatible or not. It will also contain user information, such as name, address, contact information, unique customer ID, username, and password.

R1.3) The target size of the database should be around 60 parts.

R1.4) The database should allow users to add parts to their shopping cart/purchase history by reference number/product ID.

R1.5) Application hosting will be web-based with user interaction through any popular browser.

Due Diligence (Copyright Issues)

The only copyright issue I might face are the photos for the PC parts, because the manufacturer owns the right to those images. I either have to get royalty-free photos, or just not use photos (which is not ideal because this is an e-commerce site). I'm hoping that because this website is just a project and will not be publicly made, that I can just use the PC parts from the manufacturer's website without permission. Since these are just indexing product names, and is just simulating transactions, there should be no copyright issues. There are also no links to any other e-commerce sites, and thus no actual way to obtain these products and no way to profit off said products. The data is owned by the respective manufacturers. I should have the right to make it public because these products are being used for non-profit reasons, and there are no direct links/redirects to places you can actually buy the product.

