

Bug Report #6: Cart ID Dependency on User Login

Shopping Cart Inaccessible Without User Login Due to Cart ID Dependency

Description:

A design issue was discovered where the shopping cart system required a user to be logged in to generate a cart ID. This prevented guest users (not logged in) from adding products to their cart, disrupting typical e-commerce flow and lowering conversion rates for unregistered users.

Steps to Reproduce:

1. Navigate to the product catalog without logging in.
2. Attempt to add an item to the cart.
3. Observe the failure or blocked action due to the absence of a cart ID tied to a logged-in user.

Expected Behavior:

The system should allow adding items to the cart even if the user is not logged in, by generating a guest cart ID (e.g., via a browser cookie or session).

Actual Behavior:

The system prevented adding to cart unless the user was logged in, due to the cart ID being generated only after login.

Severity: Medium

Affected Component: CartService

Root Cause:

Cart ID generation was strictly tied to user authentication, with no fallback mechanism for guest users.

Fix Implemented:

Modified the logic to generate a unique cart ID as a cookie value during the first addToCart call, even if the user is not logged in. This allows unauthenticated users to begin shopping.