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Video Link -

Description -

The FreshCart app, created with Flask, enables users to browse products, add to cart, view and remove items, and make purchases. Admins can manage products. It offers a user-friendly experience.

- **How To Use**

- To access as ADMIN, the email is **'manasverma012345@gmail.com'** and password is **'1'**.
- To access as USER, the email is **'123@manas'** and password is **'1'**.

- **DataBase Structure**

1. "User" model: Represents user sign-up information, containing attributes id, email, password, first_name, and Place.
2. "Categories" model: Represents product categories, containing attributes id and cat_name, as well as a relationship with the "Products" model.
3. "Products" model: Represents individual products, including attributes id, product_name, manufacture, expiry, p_per_u, stock, and c_id (foreign key referencing the "categories" table).
4. "Cart" model: Represents user's shopping cart, holding attributes cart_id, cart_item_id (foreign key referencing the "products" table), cart_user_id (foreign key referencing the "user" table), cart_cat_id (foreign key referencing the "categories" table), cart_quantity, and cart_amount. It establishes relationships with the "Products" and "Categories" models using foreign keys.

Technologies Used

The FreshCart web application is built using the following technologies:

- **Flask:** A micro web framework used for creating routes, handling requests, and managing the backend logic.
- **Jinja2 Templating:** Used to render dynamic content in HTML templates.
- **Bootstrap:** Provides CSS styling and responsive design for improved user experience.
- **SQLite:** A lightweight, embedded relational database management system used to store product information and user data.

Important Routes:

- Users: `'/'`: First page with login options. `'/user/login'`: User login. `'/user/register'`: User registration. `'/userhome/int:userid'`: User's home page with categories and products. `'/add_to_cart/string:user_name'`: Add items to cart. `'/see_cart/string:user_name'`: View cart items. `'/make_purchase/string:username'`: Proceed to payment. `'/payment/string:username'`: Handle payment.
- Admin: `'/admin/login'`: Admin login. `'/adminhome<bool1>'`: Admin's home page for inventory and categories. `'/adminhomecategories'`: Display all categories. `'/category/adding'`: Add categories. `'/category/int:category_id/delete'`: Delete a category and associated products. `'/products/int:category_id'`: Show products within a category. `'/add_product/int:category_id'`: Add products to a category. `'/product/int:product_id/edit'`: Edit product details. `'/category/int:category_id/edit'`: Edit category details.
- Common: `'/searching/string:user_name'`: Search for an item. `'/addtocart/string:product_id/int:userid'`: Add items to cart. `'/showcart/string:product_id/int:userid'`: Show cart items. `'/delcart/int:cartid/int:userid'`: Delete item from cart. `'/purchase/int:userid'`: Complete purchase and clear cart. `'/searchcat/int:userid'`: Search for a category. `'/search_cat/int:userid'`: Search based on category name. `'/searchitem/int:userid'`: Search for items. `'/search_item/int:userid'`: Search based on item details.
- Authentication: `'/user_login'`: User login. `'/admin_login'`: Admin login. `'/user_signup'`: User sign-up. `'/logout'`: Logout.

Final summary

Making this application using Flask has been a great experience, I have learned a lot in this process and this kind of application can be extremely useful for various kinds of grocery stores and also can be scaled to bigger ones.