**A smart application for household grocery management, inventory tracking, and personalized recipe suggestions**

SE-D-8

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GroceriEz is a smart application for managing household grocery shopping and food inventory, designed to address everyday challenges such as lack of product tracking, food waste, and inefficient purchasing habits. The app enables users to monitor items in their refrigerator and create dynamic shopping lists. A key feature is the reduction of food waste through expiration alerts and personalized recipe suggestions based on the home inventory. This allows users to consume food before it spoils and reduce overall costs. The system was developed using Python and Qt Design technologies, with an SQL relational database, and integrates a recommendation engine, a chatbot, and an intuitive user interface — enabling smart, cost-effective, and sustainable consumer behavior.

**Keywords**:**** expiration alerts , food inventory tracking , food waste reduction , household consumption , personalized recipes , smart grocery management , sustainable behavior