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| Function | Statement | Acceptance criteria | Priority |
| Product Attribute Extraction using NLP | As a user, I want to view important product attributes (such as size, weight, nutritional information, or price per unit), so I can easily compare similar products across different groceries. | * Since we are scraping groceries website, it is essential to automatically identify these product attributes to ensure accurate and standardized comparisons. The function must automatically extract relevant attributes (e.g., size, weight, nutritional information, price per unit) from product descriptions. * The attributes should be displayed alongside product information for easy comparison across different grocery stores. | Priority: 1  High priority |
| Opinion Mining | As a user, I want to see summarized customer opinions about specific aspects of products (price, taste, packaging), so I can make informed purchasing decisions. | * The website should extract and summarize customer feedback related to price, taste, and packaging. * Positive and negative opinions should be clearly highlighted. * The system should display sentiment confidence for each extracted opinion. | Priority: 1  High priority |
| Search Engine Optimization (SEO) with NLP | As a site administrator, I want the search engine to be optimized based on user behavior and search patterns, so product searches return relevant results more efficiently. | * Analyze and process product-related keywords from user search queries. * Search algorithms should prioritize frequently searched and relevant keywords. * The search results should become more accurate and intuitive over time based on this analysis. | Priority: 1  High priority |
| ****Identification of Hate/Offensive Comments**** | As a site moderator, I want to automatically detect and block offensive or hateful comments, so the platform remains safe and respectful for all users. | * Offensive comments must be flagged or removed automatically based on predefined criteria. * The system should have a high accuracy, precision, and recall in identifying hate speech. * Users should be notified if their comment was flagged. | Priority: 1  High priority |
| ****Voice Search Optimization**** | As a user, I want to search for products using voice commands, so I can easily find what I need without typing. | * The system must accurately transcribe voice input into text. * The transcribed search query should return relevant product results. * Voice search should work across multiple devices (desktop, mobile). | Priority: 1  High priority |
| Text Classification for Product Categorization | As a user, I want products to be categorized correctly based on their descriptions, so I can browse through specific product categories easily. | * Since we are scraping groceries websites from multiple sources, it is essential to categorize these products based on the product title and description. The system should classify products into predefined categories based on their text descriptions. * The classification accuracy should be high, ensuring that products appear in the correct categories. * The user should be able to filter products by category. | Priority: 1  High priority |