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| RAZDA Co. | | |
| **Filename: [pricing\_manager.py]** | | |
| **Summary***:*  Manages product pricing, including setting, adjusting, and retrieving prices for individual products and all products within the marketplace. Interfaces with the database for price modifications and retrievals. | | |
| ***Processes*** | | |
| * **Get Price:** | * **Retrieves the current price for a specified product (get\_price)** | |
| * **Set Price:** | * **Updates a product’s price to a specified new value (set\_price).** | |
| * **Adjust Price:** | * **Adjusts a product’s price based on percentage or fixed-value adjustments (adjust\_price).** | |
| * **Get All Prices:** | * **Retrieves the prices for all products, allowing for comprehensive price analysis or list display (get\_all\_prices).** | |
| **Files it Gets Information From:** | | **Files it Sends too:** |
| * - **Database**: Queries and updates the products table, ensuring accurate pricing information for each product. | * - **Logs (pricing\_manager.log)**: Logs all pricing actions, including successful and failed price updates, adjustments, and retrievals. | |
| * - **.env**: Accesses database credentials from environment variables for secure connectivity. | * **All Product Prices**: Retrieves prices for all products in the marketplace, providing a full inventory view. | |
| **Expected input into file:** | | **Expected output from file:** |
| * **Product ID**: Used in all product-specific functions to retrieve or modify prices for a specific product. * **New Price / Adjustment**: Required for setting or adjusting product prices accurately. | | * **Product Price**: Retrieves, updates, or adjusts product prices, allowing for real-time price management. * **All Product Prices**: Retrieves prices for all products in the marketplace, providing a full inventory view. |
| **Things that need to be taking place:** | | |
| |  | | --- | | **- Accurate Database Operations: Ensures that prices are correctly updated, retrieved, and adjusted within the products table.** |  |  | | --- | | **- Error Management: Effectively handles database connectivity issues, failed updates, and adjustment errors with rollback on update failures.** |  |  | | --- | | **- Flexible Adjustments: Allows for both percentage-based and fixed-price adjustments, adapting to various pricing strategies.** |  |  | | --- | | **- Secure Configuration: Uses environment variables for database credentials to enhance security.** |  |  | | --- | |  | | | |
| Edit log (update each time you make changes to doc or file). | | |
| | **Possible Enhancements:** | | --- |  |  | | --- | | - **Automated Discounting**: Adds functionality to apply seasonal or category-based discounts across multiple products at once. |  |  | | --- | | - **Pricing History Tracking**: Logs each price change to maintain a history of pricing adjustments for auditing and trend analysis. |  |  | | --- | | - **Bulk Price Adjustments**: Adds batch update capabilities for adjusting prices across multiple products in a single transaction. |  |  | | --- | | - **Dynamic Pricing Feature**: Incorporates dynamic pricing based on inventory, demand, or other market conditions. | | | |
| * Oliver Smith (Razda Admin) Nov 8, 2024: | | |