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| RAZDA Co. | | |
| **Filename: [product\_categories.py]** | | |
| **Summary***:*  Organizes products into categories and subcategories to improve navigation and product discoverability. This module enables listing, adding, modifying, and deleting categories and supports a flexible hierarchy for category organization. | | |
| ***Processes*** | | |
| * **List Categories:** | **Retrieves a list of all product categories, displaying each category's ID and name. This provides a structured view of all available categories on the platform, improving navigation and product classification.** | |
| * **Add Category:** | **Adds a new category to the database, which allows for the dynamic expansion of product classifications on the site. This operation supports adjustments to meet evolving product offerings.** | |
| **Files it Gets Information From:** | | **Files it Sends too:** |
| * **Database**: Interacts with the product\_categories table to manage categories. | * **Logs (product\_categories.log)**: Logs all category operations, including successful additions, errors, and retrievals. | |
| * **.env**: Retrieves database credentials for secure database access. |  | |
| **Expected input into file:** | | **Expected output from file:** |
| * **Category Information**: Required when adding a new category, including the category name. * **Category ID (for retrieval)**: Used for displaying specific category data when needed for additional operations like adding or removing products. | | * **Category Details**: Provides a list of all categories, including ID and name, for display or further manipulation on the platform. |
| **Things that need to be taking place:** | | |
| |  | | --- | | **- Secure Database Access: Ensures safe and secure database operations for adding, listing, and organizing categories.** |  |  | | --- | | **- Dynamic Site Structure: Allows for flexible modifications, making it easy to add, remove, or restructure categories over time.** |  |  | | --- | |  | | | |
| Edit log (update each time you make changes to doc or file). | | |
| | **Possible Enhancements:** | | --- |  |  | | --- | | - **Category Hierarchy**: Introduce a subcategory functionality to allow categories to have nested structures, enhancing organization. |  |  | | --- | | - **Batch Category Operations**: Allow bulk additions and deletions for more efficient category management. |  |  | | --- | | - **Dynamic Sorting and Filtering**: Enable sorting and filtering options for categories based on popularity, creation date, or custom order. |  |  | | --- | | - **Automated Category Assignment**: Automatically assign products to specific categories or subcategories based on predefined rules or attributes. | | | |
| * Oliver Smith (Razda Admin) Nov 8, 2024: | | |