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| RAZDA Co. | | |
| **Filename: [product\_options\_manager.py]** | | |
| **Summary***:*  Manages adding, editing, and deleting product options, such as sizes or colors, within Razda Market. This module supports role-based access control to ensure only authorized users can modify product options. It enhances product customization and improves the shopping experience by offering tailored choices to customers. | | |
| ***Processes*** | | |
| * **Adding Product Options:** | **The manage\_product\_options() route allows authorized users to add product options (e.g., size, color) to individual products. Input validation checks ensure each option name and its values are provided before saving.** | |
| * **Editing Product Options:** | **The edit\_product\_option() route permits users with edit permissions to modify existing options. Each option can be updated with new values, enhancing product adaptability over time.** | |
| **Files it Gets Information From:** | | **Files it Sends too:** |
| * **Permissions Management (permissions\_management.py)**: Validates user roles and permissions for managing options. | * **Logs (product\_options\_manager.log)**: Logs each add, edit, or delete action along with any errors for tracking purposes. | |
| * **User Setup (user\_setup.py)**: Retrieves user role information to determine if the user has access to certain actions. | * **Frontend Templates**: manage\_product\_options.html, edit\_product\_option.html display option data for review and editing. | |
| **Expected input into file:** | | **Expected output from file:** |
| * **Product ID, Option Name, Option Values**: Required inputs for creating, updating, or deleting options for specific products. * **User ID, User Role**: Validates role-based access, ensuring only authorized users manage product options. | | * **Confirmation Message**: Provides feedback to users on the success or failure of each option management action. * **Error Messages**: Logs detailed errors in case of failures and surfaces appropriate feedback to the user interface. |
| **Things that need to be taking place:** | | |
| |  | | --- | | **- Role-Based Access Control: Ensures only users with specific roles (admin, market admin) can manage product options.** |  |  | | --- | | **- Data Validation: Confirms required fields (product ID, option name, and values) are present before processing.** |  |  | | --- | | **- Audit Trail: Logs each addition, modification, or deletion of product options to facilitate auditing and tracking.** |  |  | | --- | |  | | | |
| Edit log (update each time you make changes to doc or file). | | |
| | **Possible Enhancements:** | | --- |  |  | | --- | | - **Database Integration**: Move PRODUCT\_OPTIONS from an in-memory dictionary to a database, ensuring persistence and scalability. |  |  | | --- | | - **Bulk Editing**: Allow bulk additions or updates of product options for faster management. |  |  | | --- | | - **Automatic Option Assignment**: Implement rules for auto-assigning options based on product attributes (e.g., assign "size" to clothing items). |  |  | | --- | | - **Audit View for Admins**: Enable admins to view the history of modifications to product options for better oversight. | | | |
| * Oliver Smith (Razda Admin) Nov 8, 2024: | | |