|  |  |  |
| --- | --- | --- |
| RAZDA Co. | | |
| **Filename: [profile\_setup.py]** | | |
| **Summary***:*  The profile\_setup.py script manages user profile functionalities within Razda Market. It provides users with options to view and update profile details, including first name, last name, and email. This script includes input validation, data sanitization, and database interactions, with logging and error handling to ensure data integrity and a user-friendly experience. The setup includes command-line interface options, enabling streamlined management of user profiles. | | |
| ***Processes*** | | |
| * **Environment and Logging Setup:** | **Loads environment variables for secure access to database credentials, ensuring sensitive information is kept outside of the source code. Configures logging in profile\_setup.log to track key events, such as profile updates or view attempts, providing a structured log of actions and errors.** | |
| * **Database Connection:** | **Defines get\_db\_connection() to establish secure and reusable connections to the MySQL database. If the connection fails, the function logs an error and exits gracefully, ensuring that database issues are managed cleanly.** | |
| * **Profile Viewing:** | **Contains view\_profile() to retrieve and display user profile data based on user ID. Fetches essential fields (e.g., username, email, first/last names) and logs successful and unsuccessful view attempts, maintaining accountability.** | |
| * **Profile updating:** | **Includes update\_profile() to modify user information in the database. Accepts specified fields for update, validates input, and commits changes to the database. Logs any updates or errors, providing a traceable record for each modification request.** | |
| **Files it Gets Information From:** | | **Files it Sends too:** |
| * **.env file**: Loads database credentials (DB\_HOST, DB\_USER, DB\_PASSWORD, DB\_NAME) from a secure environment file. Environment variables enhance security by preventing credential exposure in source code. | | * **Log file (profile\_setup.log)**: Logs profile view and update actions, including both successful and unsuccessful attempts, errors, and key interactions with the database. Logs help in tracking user actions and identifying issues in profile management. |
| **Expected input into file:** | | **Expected output from file:** |
| * **User ID**: Required for viewing or updating a user profile. When updating, additional inputs may include **first name**, **last name**, or **email**, which undergo validation and sanitization before being committed to the database. | | * **User Profile Data Display**: On successful profile view, displays user profile data on the console. **Database Record Update**: When updating, modifies specified fields in the user’s database record and confirms the update, logging details in profile\_setup.log. |
| **Things that need to be taking place:** | | |
| |  | | --- | | **1. Environment Variable Security: Ensure all necessary environment variables (DB\_HOST, DB\_USER, DB\_PASSWORD, DB\_NAME) are present and securely stored. Test loading to confirm no credentials are missing and .env is secure from unauthorized access.** |  |  | | --- | | **2. Database Connection Stability: Verify get\_db\_connection() connects reliably and closes cleanly, releasing resources after each use. Connection logs should clearly indicate success or failure, aiding troubleshooting.** |  |  | | --- | | **3. Logging Verification: Confirm profile\_setup.log records all profile views, updates, and validation errors. Logging should detail each action, including timestamps and user IDs, ensuring accountability.** |  |  | | --- | | **4. Profile Viewing Functionality: Test view\_profile() for valid and invalid user\_id inputs, confirming that the user’s profile displays correctly or that appropriate errors are shown and logged.** |  |  | | --- | | **5. Profile Updating:** |  |  | | --- | |  | | | |
| Edit log (update each time you make changes to doc or file). | | |
| * Oliver Smith (Razda Admin) Nov 8, 2024: | | |