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| RAZDA Co. | |
| **Filename: [alert\_manager.py]** | |
| **Summary***:*  This file manages the alert system for Razda Market, providing functions to view, create, update, and delete alerts. It also includes functionality to display alert statistics, allowing administrators to monitor and categorize alerts based on severity levels. The alert\_manager.py file serves as a central hub for alert management, ensuring that critical issues are logged and accessible for review and action. | |
| ***Processes*** | |
| **Alert Viewing:** | **Lists alerts filtered by type, severity, or date range to help admins focus on relevant issues.** |
| **Alert Creation:** | **Allows admins to create new alerts, specifying type, severity, and message details.** |
| **Alert Severity Management:** | **Updates the severity of an existing alert to reflect changes in issue urgency.** |
| **Alert Deletion:** | **Deletes alerts that are no longer needed, keeping the alert database manageable.** |
| **Alert Statistics:** | **Generates statistics about alerts, showing counts by severity level for quick assessment.** |
| **Files it Gets Information From:** | **Files it Sends too:** |
| * **Database Configuration** (MySQL): Retrieves and modifies data in the alerts table using direct SQL commands. | * **Logs**: alert\_manager.log for recording all alert management actions and errors. |
| * **Environment Variables**: DB\_HOST, DB\_USER, DB\_PASSWORD, DB\_NAME from .env for database connection details. | * **Console Output**: Displays alert lists, creation confirmations, and statistics summaries. |
| **Expected input into file:** | **Expected output from file:** |
| Environmental Variables: Used to establish database connections.  ‘’’python  DB\_HOST, DB\_USER,  DB\_PASSWORD, DB\_NAME  ‘’’  User Input(CLI):  ‘’’python  args = parser.parse\_args()  alert\_type, severity, message, alert\_id  ‘’’ | Console Output: Tables of alerts confirmation messages for actions, and statistics.  ‘’’python  print(tabulate(table, headers, tablefmt=”grid”))  ‘’’  Log Entries: Records each alert management action taken  ‘’’python  Logging.info(Viewed alert statistics”)  ‘’’ |
| **Things that need to be taking place:** | |
| |  | | --- | | **● Database Connection Validation: Ensures the MySQL database is reachable before executing queries.** |  |  | | --- | | **● Error Handling and Logging: Logs connection issues, invalid inputs, and all actions for traceability.** |  |  | | --- | | **● Command-Line Argument Parsing: Argument parser is used to determine which action to perform, providing flexibility for command-line usage.** |  |  | | --- | |  | | |
| Edit log (update each time you make changes to doc or file). | |
| * Oliver Smith (Razda Admin) Nov 8, 2024: Initial creation of alert viewing, creation, and statistics functions. | |