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| RAZDA Co. | | |
| **Filename: [customer\_communications.py]** | | |
| **Summary***:*  Manages customer communications, including creating and responding to support tickets, escalating issues, tracking ticket history, and sending predefined notifications to enhance customer support and satisfaction. | | |
| ***Processes*** | | |
| * **Database Connection:** | **Establishes a database connection (connect\_db) to Razda’s MySQL database for fetching and storing customer support interactions. Logs connection status.** | |
| * **Support Ticket Creation:** | **Creates a support ticket with user details, message, and priority level. Notifies admins of new tickets (create\_support\_ticket). Logs ticket creation and admin notification.** | |
| * **Ticket Response and Closure:** | **Allows for responding to and closing specific support tickets (respond\_to\_ticket). Logs responses, updates the ticket status, and notifies users when their ticket has been addressed.** | |
| * **Ticket Escalation:** | **Escalates tickets by adjusting priority level and status to indicate urgency. Alerts admins on escalated issues (escalate\_ticket).** | |
| * **Ticket History Retrieval:** | **Retrieves and organizes a history of user tickets, including subjects, messages, responses, and timestamps (get\_ticket\_history). Enables user behavior insights.** | |
| * **Sending Predefined Messages:** | **Sends predefined messages to users for common notifications (e.g., order updates). Customizable message templates with optional additional information. Uses send\_notification to manage notifications.** | |
| **Files it Gets Information From:** | | **Files it Sends too:** |
| * **notification\_manager.py**: Utilizes send\_notification to alert admins of new or escalated tickets and notify users when tickets are updated. | * **notification\_manager.py**: Sends data to notify users and admins, particularly for support ticket statuses, responses, and escalations. | |
| * **support\_tickets** (Database Table): Reads and writes ticket data in the MySQL database for tracking, updating, and retrieving user support interactions. |  | |
| **Expected input into file:** | | **Expected output from file:** |
| * **User and Ticket Data**: User IDs, ticket messages, subjects, and priority levels to create, update, and retrieve support tickets. | | * **Updated Support Ticket Records**: Updates the database with new, responded, or escalated tickets and logs each operation. |
| * **Database Connection Parameters**: Environment configurations for connecting to MySQL. | | * **User and Admin Notifications**: Sends notifications for new, escalated, or resolved tickets and provides updates on predefined message statuses. |
| * **Notification Templates**: Predefined message templates for common customer communications (e.g., order updates, issue resolutions). | |  |
| **Things that need to be taking place:** | | |
| |  | | --- | | **- Reliable Database Access: Consistent connection to the MySQL database for ticket management, with error handling to handle disconnections or failures.** |  |  | | --- | | **- Accurate Support Tracking and Logging: Log all ticket creation, responses, escalations, and notification dispatches to ensure transparency and reliable support tracking.** |  |  | | --- | | **- Flexible Predefined Message Templates: Customizable message templates to manage common user inquiries and updates, with the option to add specific details as needed.** |  |  | | --- | | **- Automated Notifications: Notifications triggered for new tickets, escalations, and responses to keep admins informed and users updated on their requests.** |  |  | | --- | |  | | | |
| Edit log (update each time you make changes to doc or file). | | |
| | **Possible Enhancements:** | | --- |  |  | | --- | | - **Automated Follow-Up Reminders**: Set automatic reminders for unresolved tickets to re-engage users or prompt admins to follow up on pending issues. |  |  | | --- | | - **Customizable SLA-Based Escalations**: Enable SLA-based ticket escalation, with customizable thresholds for automatic priority adjustments based on ticket age or inactivity. |  |  | | --- | | - **Enhanced User Dashboard Integration**: Display ticket statuses and responses on the user dashboard, allowing users to track the progress of their support requests directly. |  |  | | --- | | - **Sentiment Analysis on Messages**: Integrate basic sentiment analysis to identify high-stress or urgent requests, proactively escalating tickets with negative sentiment. | | | |
| * Oliver Smith (Razda Admin) Nov 8, 2024: | | |