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| RAZDA Co. | | |
| **Filename: [payment\_webhook.py]** | | |
| **Summary***:*  Handles incoming payment notifications from a payment processor, such as Stripe. It verifies the payload signature for authenticity and processes the payment data to update the system. This file ensures that payments are securely received and correctly reflected in the product catalog or order system. | | |
| ***Processes*** | | |
| * **Webhook Endpoint Setup** | * **Sets up a Flask route /webhook that listens for POST requests from the payment provider.** | |
| * **Signature Verification** | * **Retrieves and validates the Stripe-Signature header to ensure the authenticity of incoming webhook data.** | |
| * **Payment Handling** | * **Uses PaymentProcessor.handle\_webhook() to process and verify the payment details in the payload. If verification fails, the request is aborted.** | |
| **Files it Gets Information From:** | | **Files it Sends too:** |
| * payment\_processing.py: Imports PaymentProcessor, which provides methods for handling and verifying payment data and signatures from the webhook. | * payment\_webhook.log: Logs details about the webhook events, including successful verifications or errors. | |
| * Products/product\_catalog.py: Imports ProductCatalog, which may be used indirectly to update inventory or order information after payment verification (though not shown in this file, it may be relevant if integrated). |  | |
| **Expected input into file:** | | **Expected output from file:** |
| - POST Request Payload: Receives payment event data in JSON format from the payment provider, typically with details on transaction status, amount, customer ID, and other payment metadata.  - Headers: Stripe-Signature header must be present, providing a cryptographic signature to verify the request’s authenticity. | | - 200 OK Response: Returns an HTTP 200 status code if the payment event is successfully processed.  - 400 Error: Returns HTTP 400 status code if the signature verification or payload handling fails, indicating a bad request or unverified source.  - Log Entry in payment\_webhook.log: Records the outcome of each webhook event, noting either successful verification or any errors encountered. |
| **Things that need to be taking place:** | | |
| |  | | --- | | **- Environment Configuration: Ensure the correct payment processor keys or environment variables are loaded for signature verification, potentially using dotenv if needed.** |  |  | | --- | | **- Webhook Security: Strictly validate the Stripe-Signature header to prevent unauthorized requests, only processing data verified as authentic.** |  |  | | --- | | **- Logging: Regularly monitor payment\_webhook.log to check for any errors in processing webhook data and to confirm successful transactions.** |  |  | | --- | | **- Database or Catalog Update (if implemented): If integrated with product or order management, ensure inventory or order records are accurately updated based on successful payment events.** |  |  | | --- | |  | | | |
| Edit log (update each time you make changes to doc or file). | | |
| * Oliver Smith (Razda Admin) Nov 8, 2024: | | |