Project Report

Flask Stripe Subscription Checkout

Introduction

The Flask Stripe Subscription Checkout project is a web application developed using the Flask framework and the Stripe API. It allows users to subscribe to a service by completing a checkout session powered by Stripe's subscription billing system.

Objective

The primary objective of this project is to demonstrate the integration of Stripe's subscription billing into a Flask web application, providing users with a seamless checkout experience for subscribing to a service.

Features

- Subscription Checkout: Users can initiate a checkout session to subscribe to a service.
- Stripe Integration: The application integrates with the Stripe API to handle subscription payments securely.
- Success and Cancel Pages: Upon completion or cancellation of the checkout session, users are redirected to corresponding success or cancel pages.

Implementation Details

The project is implemented in Python using the Flask web framework and the Stripe API. Key components and implementation details include:

1. Flask Application
   Initialization: The Flask application is initialized, specifying the static folder for HTML files.
   Routes: The /create-checkout-session route handles the creation of a checkout session using Stripe's API.
   Checkout Session: The checkout session is created with specific line items (in this case, a subscription price) and success/cancel URLs.
2. Stripe Integration
   API Key: The Stripe API key is configured to authenticate requests to the Stripe API.
   Checkout Session Creation: A checkout session is created using Stripe's checkout.Session.create() method, specifying subscription details and URLs.
3. Success and Cancel Pages
   Success Page: After successful subscription checkout, users are redirected to a success page (success.html).
   Cancel Page: If the user cancels the checkout process, they are redirected to a cancel page (cancel.html).

Usage

To use the Flask Stripe Subscription Checkout application, follow these steps:

1. Ensure you have Python and Flask installed on your system.
2. Set up a Stripe account and obtain your API keys.
3. Replace the YOUR_DOMAIN variable with your actual domain in the Flask application.
4. Run the Flask application using python app.py.
5. Access the application in your web browser and initiate a subscription checkout.

Conclusion

The Flask Stripe Subscription Checkout project demonstrates the seamless integration of Stripe's subscription billing into a Flask web application. By following the provided usage instructions, users can easily set up and deploy this solution for subscription-based services.