Stripe API Overview

Stripe offers a unified payment platform that supports online, in-person, and mobile transactions globally. Its API provides access to a wide range of payment methods, currencies, and features, enabling businesses to manage payments efficiently.

Integration Methods

1. Checkout Integration

- **Description**: A prebuilt, Stripe-hosted payment page that can be customized to match your brand. Documentation+1Documentation+1
- Use Case: Ideal for businesses looking for a quick and secure way to accept payments without building their own checkout flow.
 - Documentation+4Documentation+4Sloboda Studio+4
- **Documentation**: https://docs.stripe.com/payments/checkout
 Documentation+9Documentation+9Documentation+9

2. Elements Integration

- **Description**: A set of prebuilt UI components for building your own custom payment form.
- Use Case: Suitable for businesses that want more control over the checkout experience while still leveraging Stripe's security features.
- **Documentation**: https://docs.stripe.com/payments/elements
 <a href="Documentation+9

3. Payment Intents API

- **Description**: Handles the entire payment flow, including authentication and authorization.
- **Use Case**: Best for businesses that require a customizable and secure payment processing solution. <u>Stripe+9Clear Function+9Clear Function+9</u>
- **Documentation**: https://docs.stripe.com/api/payment_intents
 Documentation+8Documentation+8

4. Stripe Connect

- **Description**: A solution for platforms and marketplaces to facilitate payments between third-party sellers and buyers.
- Use Case: Ideal for businesses that need to onboard and manage multiple sellers or service providers.
- **Documentation**: https://docs.stripe.com/connectDocumentation

■ Supported Payment Methods

Stripe supports a vast array of payment methods, including:

- Cards: Visa, Mastercard, American Express, Discover, JCB, Diners Club.
- **Digital Wallets**: Apple Pay, Google Pay, Microsoft Pay.
- Bank Debits and Transfers: ACH, SEPA Direct Debit, Bacs Direct Debit, BECS Direct Debit.
- Buy Now, Pay Later: Afterpay, Klarna, Affirm.
- **Real-time Payments**: FPX, OXXO, Alipay, WeChat Pay. Clear Function+3DirectPayNet+3Stripe+3
- **Bank Redirects**: iDEAL, Bancontact, EPS, Giropay, Przelewy24. NerdWallet: Finance smarter
- Others: Multibanco, Sofort, Boleto, GrabPay.NerdWallet: Finance smarter

A Security and Compliance

- **PCI DSS Compliance**: Stripe is PCI DSS Level 1 certified, ensuring secure handling of cardholder data.
- **3D Secure 2**: Supports 3D Secure 2 for enhanced authentication, reducing fraud and chargebacks.
- **Tokenization**: Stores payment details securely for recurring transactions.
- Radar: Built-in machine learning-based fraud prevention tools.

Pricing Structure

Stripe employs a transparent pricing model, which includes:

- Online Payments: 2.9% + \$0.30 per successful card charge. <u>DirectPayNet+4Clear Function+4Stripe+4</u>
- In-Person Payments (Stripe Terminal): 2.7% + \$0.05 per successful card charge.
- ACH Direct Debit: 0.8% per transaction, capped at \$5. Wise
- Wire Transfers: \$8 per wire transfer. NerdWallet: Finance smarter
- International Cards: Additional 1% fee. Wise
- Currency Conversion: Additional 1% fee.
- **Dispute Fees**: \$15 per dispute (refunded if the dispute is resolved in your favor). <u>DirectPayNet+2NerdWallet</u>: <u>Finance smarter+2Stripe+2</u>
- Radar for Fraud Teams: \$0.07 per screened transaction. NerdWallet: Finance smarter
- **Billing**: 0.5% on recurring charges. <u>Reddit+3NerdWallet</u>: <u>Finance</u> smarter+3Documentation+3
- Connect: \$2 per active account per month, plus 0.25% + \$0.25 per payout. NerdWallet: Finance smarter
- **Issuing**: \$3.50 per physical card, \$0.10 per virtual card. NerdWallet: Finance smarter

- **Invoicing**: 0.4% per paid invoice. NerdWallet: Finance smarter
- Atlas (Company Incorporation): \$500 one-time fee.
- Identity Verification: \$1.50 per verification. Stripe
- **Revenue Recognition**: 0.25% of volume. <u>Stripe</u>
- Climate Contributions: 3% of order value for portfolio purchases, 5% for individual supplier purchases. Stripe

Advantages

- **Global Reach**: Accept payments in over 135 currencies and support for various local payment methods. <u>Sloboda Studio</u>
- **Unified Platform**: Manage online, in-person, and mobile payments through a single integration.
- Advanced Risk Management: Built-in tools to detect and prevent fraudulent transactions.
- **Customizable Checkout**: Flexible integration options to tailor the payment experience to your brand.
- **Comprehensive Reporting**: Detailed insights into transactions, settlements, and customer behavior.
- **Developer-Friendly**: Extensive documentation and SDKs for various programming languages.

∧□ Limitations

• High Processing Fees:

Stripe's standard rates $(2.9\% + 30\phi)$ can be expensive for businesses with high transaction volumes or low-margin products.

• Account Stability:

Stripe can suspend or terminate accounts without prior notice if they detect a "high-risk" business model (e.g., subscription, adult content, financial services), even if unintentional.

• Limited In-person Features (Outside USA):

Stripe Terminal (for POS payments) is available only in a few countries like the U.S., Canada, Australia, UK, and some European countries — not globally.

• Complexity for Marketplace Use Cases:

While Stripe Connect is powerful, managing split payments, onboarding users (with KYC requirements), and compliance at scale can be complex.

• Payout Schedule:

Payouts typically take 2–7 days depending on country and business type. Not real-time.

• Customer Support:

Some users report that getting personalized support is slow unless you pay for premium support plans.

Developer Resources (important for your RAG project)

1. Stripe API Docs (Overview)

https://docs.stripe.com

2. Stripe Payments Integration

https://docs.stripe.com/payments

3. Stripe Checkout Documentation

https://docs.stripe.com/payments/checkout

4. Stripe Elements (Custom UI Integration)

https://docs.stripe.com/payments/elements

5. Payment Intents API (Advanced Payment Flows)

https://docs.stripe.com/api/payment intents

6. Setup Intents (For saving cards without payment)

https://docs.stripe.com/api/setup intents

7. Stripe Connect (Marketplaces and Platforms)

https://docs.stripe.com/connect

8. Stripe Terminal (In-person payments with card readers)

https://docs.stripe.com/terminal

9. Stripe Webhooks (Events notifications)

https://docs.stripe.com/webhooks

10. Stripe Radar (Fraud prevention)

https://docs.stripe.com/radar

11. Stripe Billing (Subscriptions and recurring payments)

https://docs.stripe.com/billing

12. Stripe Invoicing (Professional invoices)

https://docs.stripe.com/invoicing

13. Stripe Issuing (Create and manage cards)

https://docs.stripe.com/issuing

14. Stripe Identity (Online identity verification)

https://docs.stripe.com/identity

15. Stripe Atlas (Company incorporation in US)

https://stripe.com/atlas

16. Stripe Revenue Recognition (Accounting automation)

https://stripe.com/revenue-recognition

17. Stripe Climate (Carbon Removal Contributions)

https://stripe.com/climate

18. Stripe SDKs (Libraries and APIs for different languages)

o Node.js: https://github.com/stripe/stripe-node

o Python: https://github.com/stripe/stripe-python

o Ruby: https://github.com/stripe/stripe-ruby

o PHP: https://github.com/stripe/stripe-php

Java: https://github.com/stripe/stripe-java

o Go: https://github.com/stripe/stripe-go

19. Postman Collections for Stripe

https://github.com/stripe/postman-stripe-api

- Startups and tech companies wanting to scale globally fast.
- SaaS businesses needing subscriptions, invoicing, and billing.
- Marketplaces and platforms needing to manage multiple sellers.
- Companies needing highly customizable checkout experiences.
- Businesses seeking strong anti-fraud protection via machine learning (Radar).

When Not to Use Stripe

- Very low-margin businesses where 2.9% fees would severely cut profits.
- Businesses in industries deemed "high-risk" by Stripe (like gambling, adult content, certain financial products).
- Companies needing extremely fast payouts (like same-day settlement everywhere).
- Retail-only businesses in regions where Stripe Terminal isn't supported.