Building a Payments Site with Stripe using Ruby on Rails

Global digital currencies such as Bitcoin are disrupting online commerce and the landscape of digital payments is going to undergo a lot of change in the next decade. This reflects a popular use of the internet: to pass bits back and forth that represent transactions in exchange for goods and services. Buying things on the internet and getting billed for subscriptions is ubiquitous in our day to day lives. Yet, building a site that accepts traditional payment methods can be a daunting task. 

Dealing with redirects, logins, and checkouts with PayPal API can be a huge pain— but fear not! I will walk through the basic structure of an ecommerce site and then implement an application with Stripe subscription billing and an application with the Hello World of payments: Stripe Checkout for Rails.

Why Ruby on Rails and Stripe: Stripe API is easy to use, well documented, has clear cut pricing, integrates easily into Rails applications, and is arguably the most straightforward way to learn how to handle online payments. Ruby on Rails is a database agnostic, robust, opinionated web development framework with a large community behind it and many resources in which to learn and contribute.

How ecommerce sites work

Membership sites that restrict access to content (media, Software as a Service, etc.)
Revenue model is the same: subscription based services, usually paid monthly
Basic functionality:
  • Content/web functionality to deliver
  • Landing pages to convert visitors to paying customers
  • User management to register/remove users
  • Access control to limit site wide access
  • Authorization management to restrict access to content or services based on role or other characteristics
  • Account management to maintain records/subscription status
  • Recurring billing system for periodic payment transactions

Subscription Billing with Stripe API
  • Use meta tag to set the Stripe Public API Key
  • Access external javascript libraries to submit data to Stripe

Simple Payments with Stripe Checkout
  • Embedded payment form that works for desktop, mobile, tablet
  • Entire purchase experience handled by Stripe

Subscription Billing
  • User Management
    • Device gate for authentication
    • Cancel on why gate for deauthorize

Simple Payment Form
  • Check out form
    • Form fields
      • Card details
      • Amount
      • Billing address

Future of electronic payments
  • Mobile: 1.5 billion global smartphone users predicted by 2017
  • Underserved merchants want alternative way to pay: SaaS based companies and industries in developing markets
  • Decentralized cryptocurrencies gaining traction

Learning more:
  • Ruby on Rails Tutorial by Michael Hartl
  • Mastering Modern Payments: Using Stripe with Rails by Pete Keen
  • Daniel Kehoe’s RailsApps Project
  • Software as a Disserver by Giles Bowkett

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