Stripe Payment Integration Setup Guide

Complete Stripe Integration Overview

Your Social Media Coach app now has **complete Stripe payment processing** integrated! Here's what's been implemented:

What's Included

1. **Full Stripe Integration**
   - Subscription management (Pro, Enterprise, Lifetime)
   - Trial-to-paid conversion
   - Checkout sessions
   - Customer portal access
   - Webhook processing

2. **Database Integration**
   - Stripe customer/subscription tracking
   - Payment and invoice history
   - Subscription status synchronization

3. **UI Components**
   - Real checkout buttons on pricing page
   - Subscription management in settings
   - Payment success/failure handling
   - Upgrade modals with real payments

4. **API Routes**
   - `/api/stripe/create-checkout-session`
   - `/api/stripe/webhooks`
   - `/api/stripe/customer-portal`
   - `/api/subscription/*` (cancel, reactivate, status)

Environment Variables Setup

Add these variables to your `.env` file:

```
# Stripe Configuration (Required)
STRIPE_SECRET_KEY="sk_test_your_stripe_secret_key"
NEXT_PUBLIC_STRIPE_PUBLISHABLE_KEY="pk_test_your_stripe_publishable_key"
STRIPE_WEBHOOK_SECRET="whsec_your_stripe_webhook_secret"

# Existing variables (keep these)
DATABASE_URL="your_postgresql_database_url"
NEXTAUTH_URL="http://localhost:3000"
NEXTAUTH_SECRET="your_nextauth_secret_key"
ABACUSAI_API_KEY="your_abacusai_api_key"
```

Stripe Account Setup

1. Create Stripe Account

- Go to stripe.com (https://stripe.com) and create an account
- Get your API keys from the dashboard

2. Create Products and Prices

You have two options:

Option A: Run Setup Script (Recommended)

```
cd /home/ubuntu/social_media_coach_app/app
npx tsx scripts/setup-stripe-products.ts
```

Option B: Manual Setup

Create these products in your Stripe dashboard:

Pro Plan
- Product: "Social Media Coach Pro"
- Monthly Price: $19.99/month
- Yearly Price: $199.99/year

Enterprise Plan
- Product: "Social Media Coach Enterprise"
- Monthly Price: $99.00/month
- Yearly Price: $999.00/year

Lifetime Plan
- Product: "Social Media Coach Lifetime"
- One-time Price: $397.00

3. Update Price IDs

After creating products, update `/lib/stripe.ts` with your actual Stripe price IDs:

```
export const STRIPE_CONFIG = {
  prices: {
    pro_monthly: {
      id: 'price_actual_stripe_price_id_here',
      amount: 1999,
      // ...
    },
    // ... update all price IDs
  }
}
```

4. Configure Webhooks

In your Stripe dashboard:
1. Go to Developers > Webhooks
2. Add endpoint: `https://yourdomain.com/api/stripe/webhooks`
3. Select these events:
- `customer.subscription.created`

- `customer.subscription.updated`
- `customer.subscription.deleted`
- `invoice.payment_succeeded`
- `invoice.payment_failed`

4. Copy the webhook secret to your `.env` file

Hosting Recommendations

Best Choice: Vercel + Railway (Recommended)

Why This Combination is Perfect:

1. **Vercel** (Frontend/API)
   - **Free tier** perfect for starting out
   - **Zero configuration** - just connect GitHub
   - **Automatic deployments** on every push
   - **Built for Next.js** - optimized performance
   - **Edge functions** for fast API responses
   - **Custom domains** included
   - **SSL certificates** automatically managed

2. **Railway** (Database)
   - **$5/month** for PostgreSQL database
   - **No setup complexity** - instant database
   - **Automatic backups** and monitoring
   - **Easy scaling** as you grow
   - **Connection pooling** built-in

Total Monthly Cost: $5 (Vercel free + Railway $5)

Deployment Steps

1. Deploy to Vercel

```
# Install Vercel CLI
npm i -g vercel

# Deploy from your project directory
cd /home/ubuntu/social_media_coach_app/app
vercel

# Follow prompts:
# - Link to GitHub (recommended)
# - Set environment variables in Vercel dashboard
# - Deploy!
```

2. Setup Railway Database

```
# Install Railway CLI
npm install -g @railway/cli

# Login and create database
railway login
railway run --service database

# Get connection string and add to Vercel environment variables
```

3. Configure Environment Variables in Vercel

In your Vercel dashboard, add all environment variables from your `.env` file.

Alternative Options

For More Control:
- **DigitalOcean App Platform** ($12/month) - Good balance of control and simplicity
- **AWS Amplify** ($5-15/month) - If you prefer AWS ecosystem

For Enterprise:
- **AWS/GCP/Azure** - Full cloud platforms with extensive services

Payment Flow

Trial to Paid Conversion

1. User signs up → Gets 7-day trial automatically
2. Trial expires → Upgrade modal appears
3. User clicks "Upgrade" → Stripe Checkout opens
4. Payment successful → User gets Pro/Enterprise access
5. Webhooks update subscription status in database

Subscription Management

- Users can manage billing via Stripe Customer Portal
- Cancel/reactivate subscriptions
- Update payment methods
- View billing history
- Download invoices

Testing

Test in Development

1. Use Stripe test keys
2. Use test card numbers (4242 4242 4242 4242)
3. Test webhook locally with Stripe CLI:
   ```bash
   stripe listen --forward-to localhost:3000/api/stripe/webhooks
   ```

Before Going Live

1. Switch to Stripe live keys

2. Update webhook endpoint to production URL

3. Test with real payment amounts

4. Verify all email notifications work

Revenue Tracking

The app now tracks:
- All payments and invoices
- Subscription status changes
- Failed payments and retries
- Cancellations and reactivations
- Trial conversion rates

Security Features

- Webhook signature verification

- Stripe customer ID validation

- Secure session management

- Payment data encryption

- Idempotent webhook processing

Common Issues & Solutions

"Price not found" Error

- Check that price IDs in `/lib/stripe.ts` match your Stripe dashboard

- Ensure you're using the correct environment (test vs live)

Webhook Not Working

- Verify webhook secret is correct

- Check webhook URL is accessible

- Ensure selected events match our handlers

Payment Not Updating User

- Check webhook events are being received

- Verify Stripe customer ID mapping

- Check database connection

Next Steps

Your app is now **production-ready** for collecting payments!

1. **Deploy to Vercel + Railway** ($5/month total)

2. **Set up Stripe account** and configure webhooks

3. **Test with Stripe test mode** first

4. **Switch to live mode** when ready

5. **Start collecting money** from day one!

Congratulations! You now have a fully functional SaaS payment system that can handle:

- Free trials
- Subscription billing
- One-time payments
- Customer management
- Revenue tracking
- Automatic renewals

Your Social Media Coach app is ready to generate revenue!