Automatic E-Commerce System –Technical Scope

System Overview

A fully automated e-commerce system that:

- 1. Crawls/scrapes the web for affiliate programs and content
- 2. Processes data into digital products (e-books, PDFs, etc.)
- 3. Manages affiliate/reseller program integration
- 4. Automates marketing across multiple channels
- 5. Handles transactions and tracking

***** Core Components

1. Data Collection Layer

- Web crawlers with configurable parameters (start URL, depth, breadth/depth first)
- Content scrapers with filtering capabilities
- Support for structured, semi-structured, and unstructured data
- Seed URL management system
- Bloom filters for efficient crawling

2. Processing Layer

- NLP models for content analysis and classification
- Text summarization for product creation
- Content transformation pipelines

- Affiliate program profitability analysis
- Automated product generation (PDFs, eBooks, blog posts)

3. API Layer

- API Creator / Connector / Integrator / Manager systems
- Integration with 14,000–15,000 public APIs
- Marketing automation (Twitter, WordPress, social media)
- Auto-posting and response systems
- Email marketing & autoresponder integration

4. E-Commerce Layer

- Product catalog management
- Shopping cart and payment processing
- Transaction tracking
- Affiliate program tracking
- Customer management

5. Administration Layer

- System configuration and management
- Marketing performance analytics
- Content management
- User management and authentication



Backend: Python (primary), PHP (alternative)

Frontend: JavaScript

Database: MongoDB (primary) with SQL support

Search: Custom search APIs

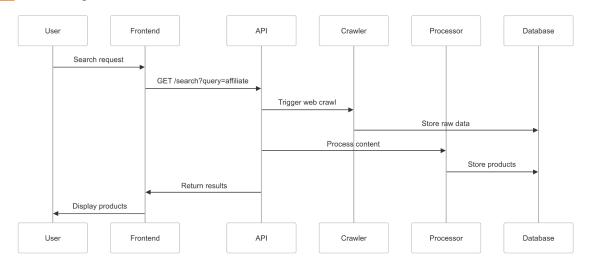
• Authentication: Multi-tiered (basic to financial-grade)

Key Requirements

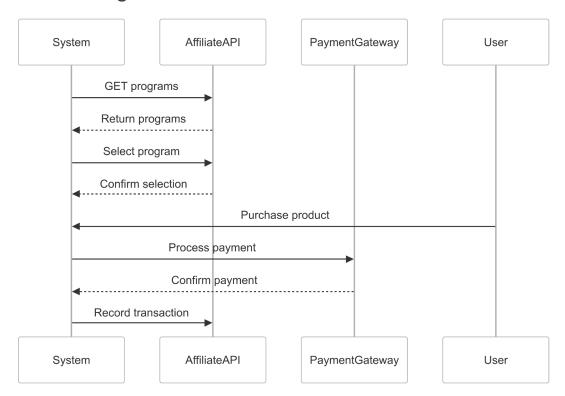
- Maximum automation using AI/ML where applicable
- Support for B2C business model
- Integration with major affiliate programs (ClickBank, WarriorPlus, JVZoo)
- Automated marketing across multiple channels
- Comprehensive tracking and analytics

E-Commerce System Sequence Diagrams

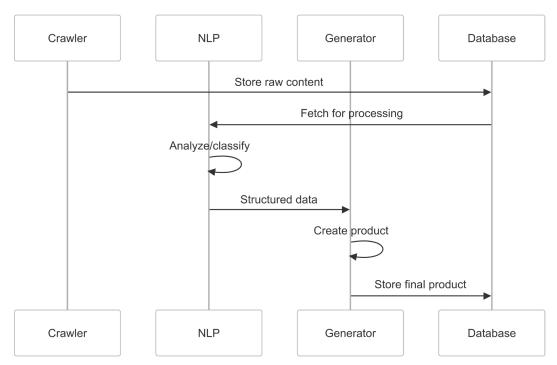
Main System Flow



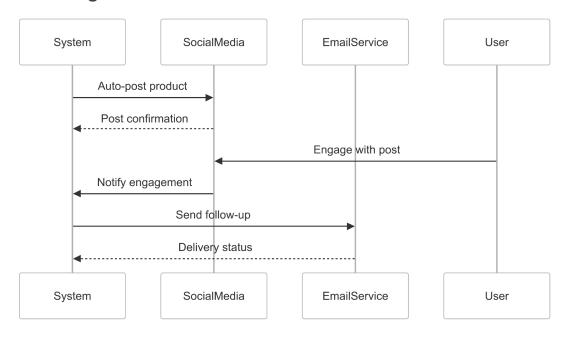
Affiliate Integration Flow



Content Processing Flow



Marketing Automation Flow



🧱 Key Components Summary

- 1. **User Interactions**: Search, purchase, engagement
- 2. System Processes: Crawling, processing, generation
- 3. External Services: Affiliate APIs, payment gateways
- 4. Marketing Channels: Social media, email