

HowiGrew.com

Administrator Operation Manual

Comprehensive Guide for System Administration

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System Overview

HowiGrew.com is a comprehensive Learning Management System (LMS) designed for global real estate education, specifically focused on wholesaling methodologies. The platform provides:

- Multi-language support: 6 languages including Mandarin Chinese
- Real-time analytics: Platform statistics and user engagement tracking
- Advanced user management: Role-based access control (Student, Instructor, Admin, Mentor)
- Subscription management: Multiple membership tiers with Stripe integration
- Community features: Forums, webinars, mentorship system
- Course delivery: Video lessons, progress tracking, certificates

Technology Stack

- Frontend: React 18 with TypeScript, Wouter routing, TanStack Query
- Backend: Node.js with Express.js, TypeScript
- Database: PostgreSQL with Drizzle ORM (hosted on Neon Database)
- Payments: Stripe integration for subscriptions and payments
- Authentication: JWT-based with secure session management

- Monitoring: Comprehensive security and performance monitoring

Admin Dashboard Access

Login Requirements

- Admin Role: Must have role: "admin" in the users table
- URL: /admin-dashboard
- Authentication: JWT token required in localStorage as auth_token

Dashboard Sections

1. Overview: Real-time statistics and key metrics
2. User Management: Search, create, edit, and manage users
3. Analytics: Detailed platform analytics and performance metrics
4. Security Audit: Security monitoring and threat assessment
5. Course Management: Create and manage courses (if instructor role)
6. System Metrics: Server performance and resource monitoring

User Management

User Search & Filtering

Access the database search functionality to find users:

Search Criteria:

- Text Search: Name, email, or ID
- Role Filter: All, Student, Instructor, Admin, Mentor
- Membership Filter: All, Basic, Premium, Lifetime
- Status Filter: Active/Inactive users

Commands:

Course Management

Course Structure

Hierarchy:

1. Courses: Top-level learning containers
2. Sections: Grouped lessons within courses
3. Lessons: Individual learning units with video/text content
4. Progress Tracking: Per-user completion tracking

Course Creation & Management

Course Properties:

- Title, description, and thumbnails
- Instructor assignment
- Difficulty level (Beginner, Intermediate, Advanced)
- Pricing and currency
- Language and subtitle support
- Publishing status (Draft, Published, Archived)

Access Control:

- Public/Private visibility
- Membership tier requirements
- Individual lesson access (Free/Premium)

Course Analytics

Track course performance:

- Enrollment numbers
- Completion rates
- Average ratings
- Revenue generated
- User engagement metrics

Payment & Subscription Management

Stripe Integration

Configuration Required:

- STRIPE_SECRET_KEY environment variable
- Webhook endpoints configured in Stripe dashboard

Membership Tiers

1. Basic: Free access to limited content
2. Premium: Monthly/annual subscription with full access
3. Lifetime: One-time payment for permanent access

Promotional Codes

Code Types:

- Course Access: Free access to specific courses
- Membership Upgrade: Free membership tier upgrades
- Discount Codes: Percentage or fixed amount discounts

Management Commands:

Community Management

Forum System

Post Types:

- General discussions
- Course-specific questions
- Success stories
- Q&A sessions

Moderation Features:

- Post approval system
- User reporting
- Content filtering
- Pinned posts

Webinar Management

Webinar Features:

- Scheduled live sessions
- Attendee registration limits
- Automatic reminder systems
- Recording availability

Commands:

Analytics & Monitoring

Platform Statistics

Real-time Metrics:

- Total registered users
- Active enrollments
- Course completion rates
- Revenue analytics
- Global reach (countries served)
- Support availability status

API Access:

GET /api/platform-stats

System Commands

Database Operations

Schema Management:

Security Features

Authentication & Authorization

JWT Token System:

- 24-hour token expiration
- Secure token storage
- Role-based access control
- Session management

Rate Limiting

Protection Levels:

- Authentication endpoints: 5 attempts per 15 minutes
- Admin endpoints: Enhanced rate limiting
- Upload endpoints: File size and type restrictions
- API endpoints: General rate limiting

Data Protection

Security Measures:

- Password hashing with bcrypt (12 rounds)
- SQL injection prevention via parameterized queries
- XSS protection with content security policies
- CORS configuration for secure cross-origin requests

Monitoring & Logging

Security Logging:

- All admin actions logged
- Failed authentication attempts tracked
- Performance monitoring for anomalies
- Memory usage monitoring with automatic cleanup

Troubleshooting

Common Issues

High Memory Usage

Symptoms:

- Server responses slowing down
- Memory usage above 400MB

Resolution:

API Endpoints Reference

Authentication Endpoints

POST /api/auth/register # User registration

POST /api/auth/login # User login

POST /api/auth/logout # User logout

POST /api/auth/verify-email # Email verification

POST /api/auth/forgot-password # Password reset request

POST /api/auth/reset-password # Password reset confirmation

GET /api/auth/me # Get current user info

Admin Endpoints

GET /api/admin/users # List all users

POST /api/admin/users # Create new user

PATCH /api/admin/users/{id} # Update user

DELETE /api/admin/users/{id} # Delete user (soft delete)

GET /api/admin/database # Search database

GET /api/admin/analytics # Platform analytics

GET /api/admin/security-audit # Security report

GET /api/admin/system-metrics # System performance

Course Endpoints

GET /api/courses # List courses

GET /api/courses/{id} # Get course details

POST /api/courses # Create course (instructor+)

PATCH /api/courses/{id} # Update course (instructor+)

DELETE /api/courses/{id} # Delete course (admin)

GET /api/courses/{id}/sections # Get course sections

GET /api/courses/{id}/lessons # Get course lessons

Student Endpoints

GET /api/student/enrollments # User's enrollments

GET /api/student/courses/{id}/content # Course content

GET /api/student/lessons/{id}/progress # Lesson progress

POST /api/student/lessons/{id}/progress # Update progress

Community Endpoints

GET /api/community/posts # Forum posts

POST /api/community/posts # Create post

GET /api/webinars # List webinars

POST /api/webinars # Create webinar (admin)

POST /api/webinars/{id}/register # Register for webinar

Mentorship Endpoints

GET /api/mentors # List mentors

GET /api/mentorship/sessions # User's mentorship sessions

POST /api/mentorship/book # Book mentorship session

POST /api/mentorship/feedback # Submit session feedback

File Upload Endpoints

POST /api/upload/course-image # Upload course images (instructor+)

GET /api/files/{fileName} # Serve uploaded files

System Endpoints

GET /api/status # API health check

GET /api/platform-stats # Public platform statistics

GET /api/metrics # System metrics (admin only)

Environment Variables

Required Configuration

Maintenance Procedures

Daily Tasks

1. Monitor system metrics via `/api/admin/system-metrics`
2. Review security audit via `/api/admin/security-audit`
3. Check error logs for any critical issues
4. Verify backup completion (database backups)

Weekly Tasks

1. Review user analytics and growth metrics
2. Update course content as needed
3. Process mentor applications and verifications
4. Review and approve community posts if moderation enabled

Monthly Tasks

1. Performance optimization review
2. Security patch updates for dependencies
3. Database maintenance and optimization
4. Content strategy review based on analytics

Support & Escalation

Issue Severity Levels

Critical (Immediate Response Required):

- Complete system outage
- Security breach detected
- Payment processing failures
- Data corruption issues

High (Within 4 hours):

- Major feature unavailable
- Performance degradation affecting all users
- Authentication system issues

Medium (Within 24 hours):

- Minor feature issues
- Individual user problems
- Content upload problems

Low (Within 72 hours):

- Enhancement requests
- Documentation updates
- Cosmetic issues

Contact Information

- Technical Issues: admin@howigrew.com
- Security Concerns: security@howigrew.com
- Emergency Contact: [Emergency contact method]

This manual was generated on August 10, 2025. Please ensure you have the most current version before performing administrative tasks.