# Law Firm Management System - Requirements & Feature Breakdown

## 1. USER TYPES & ROLES

### Primary Users

* **Owner/Managing Partner** - Full system access
* **Lawyers** - Case management, calendar, assigned tasks
* **Assistants/Secretaries** - Administrative support, document management
* **Clients** - View their case updates only

### Role Hierarchy

1. **Owner** - Complete admin access
2. **Senior Lawyer** - Manage assigned cases + limited admin
3. **Junior Lawyer** - Handle assigned cases
4. **Assistant** - Administrative tasks, document upload
5. **Secretary** - Scheduling, basic case updates
6. **Client** - Read-only access to their cases

## 2. USER STORIES

### Owner/Managing Partner Stories

* As an owner, I want to create and assign cases to team members
* As an owner, I want to view all team calendars and schedules
* As an owner, I want to manage user roles and permissions
* As an owner, I want to assign tasks to team members
* As an owner, I want to see overall firm performance and case status

### Lawyer Stories

* As a lawyer, I want to manage my assigned cases
* As a lawyer, I want to update case proceedings after court dates
* As a lawyer, I want to set reminders for important dates
* As a lawyer, I want to view my calendar and tasks
* As a lawyer, I want to upload case documents

### Assistant/Secretary Stories

* As an assistant, I want to schedule court dates
* As an assistant, I want to send reminders to relevant parties
* As an assistant, I want to upload and organize documents
* As an assistant, I want to update case information

### Client Stories

* As a client, I want to view updates on my case
* As a client, I want to see upcoming court dates
* As a client, I want to download case documents shared with me

## 3. FUNCTIONAL REQUIREMENTS

### Core System Features

**User Authentication & Authorization**

* + Multi-role login system
  + Role-based access control (RBAC)
  + Password recovery
  + Session management

**Case Management**

* + Create, update, delete cases
  + Case status tracking (Active, Pending, Closed, Archived)
  + Case categorization (Civil, Criminal, Corporate, etc.)
  + Case assignment to lawyers
  + Case history and timeline

**Document Management**

* + Upload, organize, and version control documents
  + Document categories (Pleadings, Evidence, Contracts, etc.)
  + Search and filter documents
  + Download and share documents
  + Document security and access control

**Calendar & Scheduling**

* + Individual and team calendars
  + Court date scheduling
  + Appointment management
  + Calendar integration with cases
  + Conflict detection

**Notification System**

* + Court date reminders
  + Task deadlines
  + Case update notifications
  + Email and in-app notifications
  + Customizable reminder settings

**Task Management**

* + Create and assign tasks
  + Task priority levels
  + Deadline tracking
  + Task completion status
  + Task comments and updates

**Client Portal**

* + Client login and dashboard
  + Case status viewing
  + Document access
  + Communication with legal team

**Website Integration**

* + API for displaying active cases on public website
  + Secure data transmission
  + Filtered case information for public view

## 4. NON-FUNCTIONAL REQUIREMENTS

### Security

* Data encryption at rest and in transit
* Regular security audits
* Compliance with legal data protection standards
* Secure file storage
* Audit trails for all actions

### Performance

* Page load times under 3 seconds
* Support for 100+ concurrent users
* Database optimization for large case volumes
* Efficient search functionality

### Usability

* Intuitive user interface
* Mobile-responsive design
* Accessible design (WCAG compliance)
* Minimal training required

### Reliability

* 99.5% uptime
* Daily automated backups
* Disaster recovery plan
* Error handling and logging

## 5. FEATURE IMPLEMENTATION ROADMAP

### Phase 1: Foundation (Prerequisites for everything else)

**Priority: Critical - Must complete before other phases**

#### Feature 1.1: User Authentication System

* **Prerequisites**: None
* **Duration**: 2-3 weeks
* **Tasks**:
  + Database schema for users and roles
  + Login/logout functionality
  + Password hashing and security
  + Session management
* **Post-requisites**: Required for all other features

#### Feature 1.2: Role-Based Access Control (RBAC)

* **Prerequisites**: User Authentication (1.1)
* **Duration**: 2 weeks
* **Tasks**:
  + Define permission matrix
  + Implement role checking middleware
  + Create admin interface for role management
* **Post-requisites**: Required for secure feature access

#### Feature 1.3: Basic User Management

* **Prerequisites**: Authentication (1.1), RBAC (1.2)
* **Duration**: 1 week
* **Tasks**:
  + User creation by owner
  + User profile management
  + Role assignment interface

### Phase 2: Core Case Management (Essential business logic)

**Priority: High - Core business functionality**

#### Feature 2.1: Case CRUD Operations

* **Prerequisites**: User Management (1.3)
* **Duration**: 2-3 weeks
* **Tasks**:
  + Case creation form
  + Case listing and search
  + Case editing and updates
  + Case status management
* **Post-requisites**: Required for all case-related features

#### Feature 2.2: Case Assignment System

* **Prerequisites**: Case CRUD (2.1)
* **Duration**: 1 week
* **Tasks**:
  + Assign cases to lawyers
  + Team member selection interface
  + Assignment history tracking

#### Feature 2.3: Basic Document Management

* **Prerequisites**: Case CRUD (2.1)
* **Duration**: 2 weeks
* **Tasks**:
  + File upload functionality
  + Document categorization
  + Basic document listing per case
* **Post-requisites**: Required for advanced document features

### Phase 3: Scheduling & Calendar (Time management)

**Priority: High - Critical for law firm operations**

#### Feature 3.1: Individual Calendar System

* **Prerequisites**: User Management (1.3)
* **Duration**: 2 weeks
* **Tasks**:
  + Personal calendar interface
  + Event creation and editing
  + Calendar view (month/week/day)

#### Feature 3.2: Court Date Management

* **Prerequisites**: Case CRUD (2.1), Individual Calendar (3.1)
* **Duration**: 2 weeks
* **Tasks**:
  + Court date scheduling
  + Link court dates to cases
  + Court date conflict detection

#### Feature 3.3: Team Calendar View

* **Prerequisites**: Individual Calendar (3.1), RBAC (1.2)
* **Duration**: 1 week
* **Tasks**:
  + Master calendar for owner view
  + Team member schedule visibility
  + Calendar permission management

### Phase 4: Task & Workflow Management (Productivity)

**Priority: Medium-High - Important for team coordination**

#### Feature 4.1: Basic Task System

* **Prerequisites**: User Management (1.3), Case CRUD (2.1)
* **Duration**: 2 weeks
* **Tasks**:
  + Task creation and assignment
  + Task status tracking
  + Due date management

#### Feature 4.2: Task Integration with Cases

* **Prerequisites**: Basic Task System (4.1)
* **Duration**: 1 week
* **Tasks**:
  + Link tasks to specific cases
  + Case-based task views
  + Task progress reporting

### Phase 5: Notification System (Communication)

**Priority: Medium-High - Essential for reminders**

#### Feature 5.1: Basic Notification System

* **Prerequisites**: User Management (1.3)
* **Duration**: 2 weeks
* **Tasks**:
  + In-app notification system
  + Email notification setup
  + Notification preferences

#### Feature 5.2: Court Date Reminders

* **Prerequisites**: Court Date Management (3.2), Basic Notifications (5.1)
* **Duration**: 1 week
* **Tasks**:
  + Automated court date reminders
  + Customizable reminder timing
  + Multi-channel notifications (email, SMS, in-app)

#### Feature 5.3: Document Update Reminders

* **Prerequisites**: Document Management (2.3), Basic Notifications (5.1)
* **Duration**: 1 week
* **Tasks**:
  + Post-court date document update reminders
  + Document deadline notifications

### Phase 6: Client Portal (External access)

**Priority: Medium - Important for client satisfaction**

#### Feature 6.1: Client Authentication

* **Prerequisites**: User Authentication (1.1), RBAC (1.2)
* **Duration**: 1 week
* **Tasks**:
  + Separate client login system
  + Client-specific permissions
  + Secure client data access

#### Feature 6.2: Client Case View

* **Prerequisites**: Client Authentication (6.1), Case CRUD (2.1)
* **Duration**: 2 weeks
* **Tasks**:
  + Client dashboard
  + Case status display for clients
  + Client-specific case filtering

#### Feature 6.3: Client Document Access

* **Prerequisites**: Client Case View (6.2), Document Management (2.3)
* **Duration**: 1 week
* **Tasks**:
  + Client document viewing permissions
  + Secure document download for clients
  + Document sharing controls

### Phase 7: Website Integration (Public interface)

**Priority: Medium - For public case display**

#### Feature 7.1: Public API Development

* **Prerequisites**: Case CRUD (2.1), RBAC (1.2)
* **Duration**: 2 weeks
* **Tasks**:
  + REST API for case data
  + API security and authentication
  + Data filtering for public consumption

#### Feature 7.2: Website Integration

* **Prerequisites**: Public API (7.1)
* **Duration**: 1 week
* **Tasks**:
  + API integration with existing website
  + Active case display formatting
  + Real-time data synchronization

### Phase 8: Advanced Features (Enhancement)

**Priority: Low-Medium - Nice to have features**

#### Feature 8.1: Advanced Document Management

* **Prerequisites**: Basic Document Management (2.3)
* **Duration**: 2 weeks
* **Tasks**:
  + Document versioning
  + Advanced search capabilities
  + Document templates

#### Feature 8.2: Reporting and Analytics

* **Prerequisites**: All core features completed
* **Duration**: 2-3 weeks
* **Tasks**:
  + Case progress reports
  + Team productivity analytics
  + Financial reporting integration

#### Feature 8.3: Advanced Calendar Features

* **Prerequisites**: Team Calendar View (3.3)
* **Duration**: 1 week
* **Tasks**:
  + Calendar synchronization with external calendars
  + Recurring appointment management
  + Calendar export functionality

## 6. TECHNICAL CONSIDERATIONS

### Platform Architecture

* Multi-tenant SaaS architecture with complete data isolation
* Scalable infrastructure to support hundreds of law firms
* Tenant-aware database design with row-level security
* API design with tenant context and rate limiting

### Database Design

* Platform management tables (super admin level)
* Law firm management tables (organization level)
* User management tables with multi-level hierarchy
* Case management schema with firm isolation
* Document storage strategy with tenant separation
* Calendar and event tables with firm boundaries
* Notification and task tables with proper scoping
* Audit trail tables across all levels
* Billing and subscription tables

### Security Implementation

* Multi-level JWT tokens (platform, firm, user)
* Role-based middleware with tenant awareness
* File upload security with firm isolation
* API rate limiting per law firm
* Data encryption and cross-tenant security
* Comprehensive audit trails across all levels

### Integration Points

* Payment processing (Stripe/PayPal/etc.)
* Email service with tenant branding
* File storage with firm-level isolation
* Calendar services per law firm
* Law firm website APIs
* SMS service for notifications
* Analytics and monitoring platforms

## 7. KEY TECHNICAL CONSIDERATIONS

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