

# **Judicature MVP Development Plan**

## **Comprehensive Legal Technology Platform for India**

Based on your product requirements and regulatory analysis, here's a detailed MVP plan that prioritizes compliance, user value, and rapid market entry while navigating BCI Rule 36 restrictions and DPDP Act requirements.

## **Executive Summary**

Judicature will be built as a three-phase MVP targeting clients, lawyers, and legal researchers with core focus on:

- Compliance-first design respecting BCI advertising restrictions
- DPDP-compliant data handling with explicit consent mechanisms
- NJDG integration for comprehensive judgment access
- Al-powered legal assistance with clear disclaimers
- **Secure communication** with end-to-end encryption

#### **MVP Phase Structure**

## Phase 1 (Weeks 1-8): Foundation & Core Features

Timeline: 2 months | Budget: ₹15-25 lakhs | Team: 4-6 developers

#### **Core Features:**

- Multi-role authentication system (Client/Lawyer/Admin)
- Lawyer verification and neutral directory
- Basic case intake and management
- Secure messaging with E2E encryption
- NJDG search integration MVP
- Al legal assistant with disclaimers
- DPDP consent management

## Phase 2 (Weeks 9-16): Enhanced Workflows

Timeline: 2 months | Budget: ₹20-30 lakhs | Team: 6-8 developers

#### **Enhanced Features:**

- Advanced case document workflows
- Court hearing management
- Payment processing integration
- Mobile web optimization
- Analytics dashboard MVP
- Advanced search filters

## Phase 3 (Weeks 17-24): Scale & Intelligence

Timeline: 2 months | Budget: ₹25-35 lakhs | Team: 8-10 developers

#### **Advanced Features:**

- Predictive case analytics
- Native mobile apps (iOS/Android)
- Enterprise lawyer dashboard
- API marketplace for integrations
- Advanced Al legal research

#### **Core Features Breakdown**

## 1. Authentication & User Management

Compliance Focus: DPDP consent capture, KYC verification

## Features:

- Multi-factor authentication (Email/SMS OTP)
- Role-based access control (Client/Lawyer/Researcher/Admin)
- KYC document verification workflow
- DPDP-compliant consent management
- Profile management with audit trails

#### **Technical Stack:**

- JWT tokens with refresh mechanism
- Aadhaar/PAN verification APIs
- Document OCR for KYC automation

• Audit logging for all profile changes

## 2. Lawyer Discovery & Matching

**Compliance Focus:** BCI Rule 36 - No advertising/promotional content

#### Features:

- Neutral lawyer directory (no rankings/promotions)
- Practice area filtering without "specialization claims"
- Location-based matching
- Availability status
- Verification badges only
- Experience display (years, not expertise claims)

## **Technical Implementation:**

- Geospatial search using PostGIS
- Tag-based filtering system
- Verification workflow with manual review
- Compliance monitoring for promotional content

## 3. Secure Communication Hub

**Compliance Focus:** Attorney-client privilege protection

#### Features:

- End-to-end encrypted messaging
- File sharing with virus scanning
- Video/voice call integration
- Message retention policies
- Export functionality with client consent
- Read receipts and typing indicators

## **Technical Stack:**

- Signal Protocol for E2E encryption
- WebRTC for video calls
- AWS S3/Azure Blob for file storage
- Message queuing with Redis

## 4. Case Management System

#### Features:

- Case intake wizard with guided forms
- · Matter lifecycle tracking
- Task management and deadlines
- · Court hearing calendar
- Document repository with version control
- Time tracking and billing (optional)
- Status updates and notifications

#### **Database Schema:**

```
Cases: id, client_id, lawyer_id, case_type, status, court_jurisdiction
Tasks: id, case_id, title, due_date, status, assigned_to
Documents: id, case_id, filename, file_path, uploaded_by, timestamp
Hearings: id, case_id, court_name, hearing_date, status, notes
```

## 5. NJDG Integration & Judgment Search

#### Features:

- Real-time judgment search across all Indian courts
- Advanced filtering (court, date, party names, citation)
- Bookmark and save functionality
- Citation tracking and cross-references
- PDF download and sharing
- · Search history and analytics

#### **Technical Implementation:**

- NJDG API integration with rate limiting
- · Elasticsearch for judgment indexing
- OCR processing for scanned judgments
- Metadata extraction and tagging
- Full-text search with relevance scoring

## 6. Al Legal Assistant

Compliance Focus: Clear disclaimers - "Not legal advice"

#### Features:

Multi-language query processing (Hindi/English)

- · Case law similarity matching
- Confidence scoring for responses
- Citation of relevant judgments
- Escalation to human lawyers
- Query history and analytics

#### **Technical Stack:**

- Large Language Model (GPT-4/Claude) with legal training
- Vector database for judgment embeddings
- RAG (Retrieval Augmented Generation) architecture
- Confidence threshold for response quality

## 7. DPDP Compliance Module

#### Features:

- Granular consent collection
- Data subject rights (DSR) portal
- · Consent withdrawal mechanisms
- Data breach notification system
- Privacy policy management
- Cross-border transfer controls

## **Dashboard Designs**

## **Client Dashboard**

#### **Main Sections:**

• My Cases: Active matters, status updates, next steps

• Find Lawyers: Neutral directory with filters

Messages: Secure chat with lawyers

• Documents: Case files and shared documents

• Al Assistant: Legal Q&A with disclaimers

• Court Calendar: Upcoming hearings and deadlines

• Legal Research: NJDG judgment search

## **Key Metrics:**

- · Active cases count
- · Pending actions

- Upcoming hearings
- Message notifications

## **Lawyer Dashboard**

#### **Main Sections:**

- Case Pipeline: New inquiries, active matters
- Client Communications: Secure messaging hub
- Calendar Management: Court dates, client meetings
- Document Center: Case files, templates, forms
- Research Tools: NJDG search, case analytics
- Practice Analytics: Time tracking, earnings (optional)
- Compliance Center: DPDP requests, audit logs

## **Key Metrics:**

- Active cases
- Response time to clients
- Upcoming deadlines
- Revenue tracking (optional)

## **Admin Dashboard**

#### **Main Sections:**

- User Management: KYC approvals, account status
- Compliance Monitor: BCI violations, DPDP requests
- Platform Analytics: User engagement, feature usage
- Content Moderation: Profile reviews, flag handling
- System Health: API status, performance metrics
- Audit Trails: All platform activities log

## **Key Metrics:**

- User growth (clients/lawyers)
- Platform usage statistics
- Compliance incident tracking
- System uptime and performance

## **Backend Architecture**

#### **Microservices Structure**

```
    Auth Service (User management, JWT, MFA)
    Profile Service (KYC, verification, compliance)
    Matching Service (Lawyer discovery, filtering)
    Communication Service (Messaging, calls, encryption)
    Case Service (Matter management, workflows)
    Document Service (File storage, version control)
    Search Service (NJDG integration, judgment search)
    AI Service (Legal assistant, NLP processing)
    Compliance Service (DPDP, consent, audit)
    Analytics Service (Usage tracking, insights)
    Notification Service (Email, SMS, push)
    Payment Service (Billing, transactions)
```

## **Database Design**

Primary Database: PostgreSQL with read replicas

```
-- Core user tables
users (id, email, phone, role, created at, updated at)
user profiles (user id, name, address, kyc status, verification docs)
lawyer_profiles (user_id, bar_enrollment, practice_areas, experience_years)
-- Case management
cases (id, client_id, lawyer_id, type, status, court, created_at)
case_documents (id, case_id, filename, file_path, uploaded_by, timestamp)
case_activities (id, case_id, activity_type, description, timestamp)
-- Communication
conversations (id, case_id, participants, encryption_key)
messages (id, conversation_id, sender_id, content_encrypted, timestamp)
-- NJDG integration
judgments (id, court, case_number, parties, date, citation, file_url)
judgment_metadata (judgment_id, keywords, practice_areas, indexed_content)
-- Compliance
consent records (user id, purpose, granted at, withdrawn at, policy version)
audit_logs (id, user_id, action, resource, timestamp, ip_address)
```

## **Additional Storage:**

- Redis: Caching, session management, message queues
- Elasticsearch: Judgment search, full-text indexing
- AWS S3/Azure Blob: Document storage, file versioning
- MinIO: On-premise object storage for sensitive documents

#### **API Architecture**

## **RESTful APIs with GraphQL for complex queries**

```
/api/v1/auth/* - Authentication endpoints
/api/v1/users/* - User management
/api/v1/lawyers/* - Lawyer operations
/api/v1/cases/* - Case management
/api/v1/messages/* - Communication
/api/v1/search/* - NJDG and judgment search
/api/v1/ai/* - Legal assistant
/api/v1/compliance/* - DPDP operations
```

## **Step-by-Step Implementation Plan**

## **Weeks 1-2: Project Setup & Infrastructure**

#### **Deliverables:**

- Development environment setup (Docker, Kubernetes)
- CI/CD pipeline (GitHub Actions/GitLab CI)
- Cloud infrastructure (AWS/Azure/GCP)
- Database design and initial schemas
- Basic authentication service

#### **Team Tasks:**

- DevOps: Infrastructure setup, monitoring
- Backend: Auth service, database setup
- Frontend: Project structure, UI component library
- Compliance: DPDP policy drafting

## Weeks 3-4: User Management & Profiles

#### Deliverables:

- Multi-role registration and login
- KYC document upload and verification
- Basic profile management
- Email/SMS verification
- Admin panel for user approval

#### **Technical Focus:**

- JWT token management
- File upload handling

- OCR integration for documents
- Role-based access control

# Weeks 5-6: Lawyer Directory & Matching

## **Deliverables:**

- Neutral lawyer discovery interface
- Practice area filtering
- Location-based search
- Lawyer profile verification workflow
- BCI compliance monitoring

## **Key Considerations:**

- No promotional rankings or paid placements
- Verification badges only
- Compliance flagging system

# Weeks 7-8: Communication & Basic Case Management

#### **Deliverables:**

- End-to-end encrypted messaging
- File sharing capabilities
- Basic case intake forms
- · Case status tracking
- Document upload and management

## **Security Focus:**

- Signal Protocol implementation
- Message encryption at rest
- Audit logging for all communications

## Weeks 9-12: NJDG Integration & Al Assistant

#### **Deliverables:**

- NJDG judgment search interface
- Metadata extraction and indexing
- · Al legal assistant with disclaimers
- · Confidence scoring system
- · Citation tracking

## **Technical Challenges:**

- NJDG API rate limiting
- Large language model integration
- Vector similarity search
- Response quality assurance

## Weeks 13-16: Enhanced Features & Mobile

#### **Deliverables:**

- Advanced case workflows
- Court hearing management
- Mobile web optimization
- Payment processing integration
- Analytics dashboard

# Weeks 17-20: Advanced Analytics & Mobile Apps

## **Deliverables:**

- Predictive case analytics
- Native mobile applications
- Enterprise features
- API documentation
- Third-party integrations

# Weeks 21-24: Testing, Security & Launch

#### **Deliverables:**

- · Comprehensive security testing
- Penetration testing
- Performance optimization
- User acceptance testing
- · Soft launch with beta users

# **Compliance Framework**

## **BCI Rule 36 Compliance**

#### **Restrictions:**

- No lawyer advertising or promotional content
- No paid rankings or featured listings
- No direct solicitation features
- No success rate or win/loss statistics

## Implementation:

- Content moderation system
- Automated flag detection
- Manual review workflows
- Compliance training for lawyers

## **DPDP Act 2023 Compliance**

## **Requirements:**

- Explicit consent for data collection
- Data localization within India
- Data subject rights portal
- Breach notification procedures
- Data Protection Officer appointment

## **Technical Implementation:**

- Granular consent management
- Automated DSR fulfillment
- Incident response procedures
- Regular compliance audits

## **Technology Stack**

## **Backend**

• Framework: Node.js with Express/NestJS or Python with FastAPI

• Database: PostgreSQL with Redis caching

• Search: Elasticsearch/OpenSearch

• Queue: Redis/RabbitMQ

• Storage: AWS S3/Azure Blob Storage

#### **Frontend**

• Web: React with TypeScript or Next.js

• Mobile: React Native or Flutter

• Ul Library: Material-Ul or Ant Design

• State Management: Redux Toolkit/Zustand

## Infrastructure

• Cloud: AWS/Azure/GCP with Indian data centers

• Containers: Docker with Kubernetes orchestration

Monitoring: Prometheus, Grafana, ELK Stack

• Security: WAF, DDoS protection, SSL/TLS

# **Agent Prompt Pack for Judicature Features**

```
# Judicature MVP - Feature Development Prompts
## Global Guidelines
**CRITICAL COMPLIANCE RULES:**
- BCI Rule 36: NO advertising/promotional content for lawyers
- DPDP Act: Explicit consent required for all data collection
- Security: All communications must be end-to-end encrypted
- Disclaimers: AI responses must clearly state "This is not legal advice"
## 1. Authentication System
### Prompt:
Build a secure multi-role authentication system for a legal tech platform with the follow
**Features:**
- Support for Client, Lawyer, and Admin roles
- Email and phone number registration
- Multi-factor authentication (OTP via SMS/Email)
- JWT token management with refresh tokens
- Password reset functionality
- Session management and logout
**Compliance Requirements:**
- DPDP Act compliant consent capture during registration
- Audit logging for all authentication events
- Rate limiting for login attempts
- Strong password policies
**Technical Specs:**
- Node.js/Express or Python/FastAPI backend
- PostgreSQL database
- Redis for session management
```

```
- JWT tokens with 15-minute access + 7-day refresh- bcrypt for password hashing**Database Schema:**
```

users (id, email, phone, password\_hash, role, email\_verified, phone\_verified, created\_at) user\_sessions (id, user\_id, refresh\_token, expires\_at, device\_info) auth\_logs (id, user\_id, action, ip\_address, user\_agent, timestamp)

```
**Deliverables:**
- REST API endpoints for auth operations
- Input validation and sanitization
- Error handling with appropriate status codes
- API documentation with examples
## 2. Lawyer Profile Management
### Prompt:
Create a lawyer profile system that complies with Bar Council of India regulations while
**BCI Rule 36 Compliance:**
- NO promotional language or claims of expertise
- NO advertising or solicitation features
- NO rankings or "top lawyer" listings
- Only factual information: education, experience years, practice areas
**Features:**
- Bar Council enrollment verification
- Document upload for credentials
- Practice area selection (from predefined list)
- Court jurisdiction selection
- Experience years (number only, no claims)
- Contact information and availability status
**Verification Workflow:**
- Manual review of all lawyer registrations
- Bar Council enrollment number validation
- Document verification by admin team
- Approval/rejection with feedback
**Technical Requirements:**
- File upload with virus scanning
- OCR processing for document verification
- Automated compliance checking for promotional content

    Profile status tracking (pending/verified/rejected)

**Database Schema:**
```

lawyer\_profiles ( user\_id, bar\_enrollment\_number, bar\_state, experience\_years, education, practice\_areas[], court\_jurisdictions[], verification\_status, verification\_documents[], verified\_at, verified\_by )

```
**Content Moderation:**
- Keyword filtering for promotional terms
- Manual review queue for flagged content
- Automatic rejection of advertising language
排 3. Secure Communication System
### Prompt:
Build an end-to-end encrypted messaging system for attorney-client communications with f\iota
**Security Requirements:**
- End-to-end encryption using Signal Protocol or similar
- Perfect forward secrecy for all messages
- No server-side message storage in plaintext
- Secure file sharing with encryption
- Message deletion and retention policies
**Features:**
- Real-time messaging with WebSocket
- File attachment support (documents, images)
- Message status indicators (sent, delivered, read)
- Conversation threads linked to cases
- Message search within conversations
- Export functionality with client consent
**Technical Implementation:**
- WebSocket connection for real-time communication
- Message encryption before database storage
- Key exchange and rotation mechanisms
- Secure file upload and sharing
- Message indexing for search (encrypted metadata only)
**Database Schema:**
```

conversations (id, case\_id, participants[], encryption\_key\_id, created\_at) messages (id, conversation\_id, sender\_id, encrypted\_content, metadata, timestamp) message\_keys (id, conversation\_id, key\_data, created\_at, rotated\_at)

```
**Client-Side Requirements:**

- Message encryption/decryption in browser

- Key management and storage

- Offline message queue

- File encryption before upload
```

```
### 4. Case Management System
### Prompt:
Develop a comprehensive case management system for legal professionals with client access
**Core Features:**
- Case creation with intake form wizard
- Matter lifecycle tracking (stages: consultation, active, closed)
- Task management with deadlines and reminders
- Document repository with version control
- Court hearing calendar integration
- Client status updates and notifications
- Time tracking (optional for billing)
**User Roles:**
- Lawyers: Full case management access
- Clients: View-only access to their cases
- Staff: Limited access based on assignments
**Workflow Management:**
- Customizable case stages and milestones
- Automated status updates based on actions
- Deadline tracking with escalation
- Template documents for common case types
**Technical Requirements:**
- RESTful API for case operations
- File storage with access control
- Calendar integration (Google Calendar, Outlook)
- Email notifications for updates
- Search functionality across cases and documents
**Database Schema:**
```

cases (id, client\_id, lawyer\_id, case\_number, type, status, court, created\_at)
case\_stages (id, case\_id, stage\_name, completed\_at, notes)
case\_documents (id, case\_id, filename, file\_path, uploaded\_by, version, timestamp)
case\_tasks (id, case\_id, title, description, due\_date, assigned\_to, status)
case\_hearings (id, case\_id, court\_name, hearing\_date, hearing\_type, notes)

```
## 5. NJDG Integration & Judgment Search

### Frompt:
Create a comprehensive judgment search system integrated with India's National Judicial [

**Features:**
- Search across Supreme Court, High Courts, and District Courts
- Advanced filtering (court, date range, party names, citation)
- Full-text search within judgment content
```

- Bookmark and save functionality for users
- Citation analysis and cross-references
- Download and sharing capabilities
- Search history and analytics

## \*\*Technical Implementation:\*\*

- NJDG API integration with proper authentication
- Elasticsearch/OpenSearch for indexing and search
- OCR processing for scanned judgment PDFs
- Metadata extraction and tagging
- Relevance scoring and ranking algorithms

#### \*\*Search Capabilities:\*\*

- Boolean search with AND/OR/NOT operators
- Phrase searching with quotes
- Wildcard and fuzzy search
- Filter by court level, jurisdiction, date ranges
- Sort by relevance, date, court hierarchy

Confidence scoring for response reliabilityIntegration with judgment database for citations

- Escalation to human lawyers for complex queries

- Query categorization and routing

\*\*Database Schema:\*\*

judgments (id, court\_id, case\_number, parties, judge\_names, date, citation)
judgment\_content (judgment\_id, full\_text, summary, keywords[])
judgment\_metadata (judgment\_id, practice\_areas[], legal\_topics[], precedent\_value)
user\_bookmarks (user\_id, judgment\_id, notes, created\_at)

```
**API Endpoints:**
- `/api/search/judgments` - Main search endpoint
- `/api/judgments/:id` - Get specific judgment
- `/api/bookmarks` - User bookmark management
- `/api/search/suggestions` - Search suggestions and autocomplete
排 6. AI Legal Assistant
### Prompt:
Build an AI-powered legal assistant that provides preliminary legal guidance while mainta
**CRITICAL DISCLAIMERS:**
- Every response must include: "This is preliminary guidance only and does not constitute
- Must recommend consulting with a qualified lawyer for specific legal matters
- Cannot provide definitive legal opinions or case outcomes
- Must cite sources for all legal information provided
**Features:**
- Natural language processing for legal queries
- Multi-language support (English, Hindi, regional languages)
- Case law similarity matching
```

```
**Technical Architecture:**
  - Large Language Model (GPT-4, Claude, or fine-tuned model)
  - RAG (Retrieval Augmented Generation) with legal document corpus
  - Vector database for judgment embeddings
  - Confidence threshold system
  - Response validation and filtering
  **Response Format:**
  - Clear disclaimer at the beginning
  - Main response with confidence score
  - Relevant case law citations
  - Recommendation to consult lawyer
  - Option to connect with verified lawyers
  **Implementation:**
class LegalAssistant:
def process_query(self, query, user_context):
# 1. Query validation and sanitization
# 2. Intent classification
#3. Retrieve relevant case law
# 4. Generate response with LLM
# 5. Confidence scoring
# 6. Add mandatory disclaimers
```

```
**Database Schema:**
```

ai\_conversations (id, user\_id, session\_id, created\_at)
ai\_queries (id, conversation\_id, user\_query, ai\_response, confidence\_score, timestamp)
query\_citations (query\_id, judgment\_id, relevance\_score)

# 7. Citation formatting return formatted\_response

```
### 7. DPDP Compliance Module

### Prompt:
Implement a comprehensive data protection system compliant with India's Digital Personal

**Core Requirements:**
- Explicit and informed consent collection
- Granular purpose-based consent management
- Data subject rights (DSR) portal
- Consent withdrawal mechanisms
- Data breach notification system
- Cross-border data transfer controls
```

```
**Consent Management:**
- Purpose-based consent categories
- Clear, plain language explanations
- Opt-in only (no pre-checked boxes)
- Consent versioning and audit trail
- Easy withdrawal process
- Parental consent for minors
**Data Subject Rights:**
- Right to access personal data
- Right to correction/rectification
- Right to data portability
- Right to erasure/deletion
- Right to grievance redressal
**Technical Implementation:**
- Consent capture with timestamp and IP logging
- Automated DSR fulfillment workflows
- Data inventory and mapping
- Encryption for all personal data
- Access controls and audit logging
**Database Schema:**
```

consent\_records (user\_id, purpose\_category, consent\_given, timestamp, ip\_address, policy\_version)

dsr\_requests (id, user\_id, request\_type, status, requested\_at, fulfilled\_at, response\_data) data\_processing\_log (id, user\_id, processing\_purpose, data\_types[], timestamp, legal\_basis)

```
**API Endpoints:**
- `/api/consent/grant` - Record user consent
- `/api/consent/withdraw` - Process consent withdrawal
- `/api/dsr/request` - Submit data subject request
- `/api/dsr/status/:id` - Check request status
- `/api/privacy/export` - Export user data
## 8. Payment Processing System
### Prompt:
Create a secure payment system for legal consultations and services with Indian compliand
**Compliance Requirements:**
- RBI guidelines for payment aggregators
- PCI DSS compliance for card data
- Indian tax regulations (GST)
- Anti-money laundering (AML) checks
- Know Your Customer (KYC) verification
**Features:**
- Multiple payment methods (cards, UPI, net banking, wallets)
- Subscription management for lawyers
```

- Transaction fees and commission calculation
- Refund and dispute management
- Invoice generation with GST
- Payout management for lawyers

\*\*Technical Integration:\*\*
- Payment gateway integration (Razorpay, Stripe, PayU)
- Webhook handling for payment status
- Encrypted storage of payment metadata
- Audit trail for all financial transactions

\*\*Security Measures:\*\*
- No storage of card details (tokenization only)
- Secure API endpoints with rate limiting
- Transaction monitoring for fraud detection
- Regular security audits

\*\*Database Schema:\*\*

transactions (id, user\_id, amount, currency, status, payment\_method, gateway\_transaction\_id) subscriptions (id, lawyer\_id, plan\_type, amount, billing\_cycle, status, next\_billing\_date) payouts (id, lawyer\_id, amount, status, processed\_at, bank\_details\_id) invoices (id, transaction\_id, invoice\_number, gst\_amount, download\_url)

```
排 9. Analytics Dashboard
### Prompt:
Build comprehensive analytics dashboards for different user roles with privacy-compliant
**Client Analytics:**
- Case progress tracking
- Communication statistics
- Document access logs
- AI assistant usage
- Lawyer interaction metrics
**Lawyer Analytics:**
- Case load and pipeline
- Client response times
- Revenue tracking (optional)
- Time utilization reports
- Client satisfaction scores
**Platform Analytics (Admin):**
- User acquisition and retention
- Feature adoption rates
- Platform performance metrics
- Compliance incident tracking
- Revenue and financial metrics
**Technical Requirements:**
```

```
- Real-time data processing with Apache Kafka/Redis Streams
  - Time-series database (InfluxDB/TimescaleDB) for metrics
  - Dashboard framework (Grafana, custom React dashboards)
  - Data anonymization for privacy compliance
  - Export functionality for reports
  **Privacy Considerations:**
  - Aggregate data only (no individual user tracking)
  - Consent-based analytics collection
  - Data retention policies
  - Opt-out mechanisms for users
  **Implementation:**
// Analytics event tracking
const trackEvent = (eventType, userId, metadata) ⇒ {
// Anonymize sensitive data
// Validate consent preferences
// Store in time-series database
// Trigger real-time dashboard updates
}
 排 10. Mobile Application
  ### Prompt:
  Develop native mobile applications (iOS/Android) for Judicature with all core platform fe
  **Core Features:**
  - Secure login with biometric authentication
  - Push notifications for case updates
  - Mobile-optimized messaging interface
  - Document camera for file uploads
  - Offline mode for viewing saved content
  - Location-based lawyer discovery
  - Voice-to-text for AI assistant queries
 **Technical Stack Options:**
  - React Native with TypeScript
  - Flutter with Dart

    Native development (Swift/iOS, Kotlin/Android)

  **Security Requirements:**
  - Certificate pinning for API calls
  - Local data encryption using device keystore
  - Secure storage for authentication tokens
  - App integrity verification
  - Remote wipe capabilities for lost devices
  **Mobile-Specific Features:**
  - Fingerprint/Face ID authentication
  - Camera integration for document scanning
```

- GPS location for nearby lawyers
- Push notification handling
- Background sync for messages
- App shortcuts and widgets

#### \*\*API Considerations:\*\*

- RESTful APIs with mobile-optimized responses
- GraphQL for efficient data fetching
- Offline-first architecture with sync
- Image compression and optimization
- Pagination for large data sets

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#### ## Development Guidelines

## ### Code Quality Standards:

- TypeScript/ESLint configuration
- Unit test coverage >80%
- Integration tests for critical paths
- Security vulnerability scanning
- Performance monitoring and optimization

#### ### Documentation Requirements:

- API documentation with examples
- Database schema documentation
- Deployment and configuration guides
- Security architecture documentation
- Compliance audit trail documentation

#### ### Testing Strategy:

- Unit tests for business logic
- Integration tests for APIs
- End-to-end tests for user workflows
- Security penetration testing
- Performance and load testing

## 相样 Deployment Pipeline:

- CI/CD with automated testing
- Staging environment for user testing
- Blue-green deployment for zero downtime
- Database migration scripts
- Infrastructure as code (Terraform/CloudFormation)

This comprehensive MVP plan provides you with a complete roadmap for building Judicature, including detailed technical specifications, compliance requirements, and ready-to-use prompts for development teams. The phased approach ensures you can launch quickly while building towards a comprehensive legal technology platform that serves all stakeholders in the Indian legal ecosystem.