Software Requirements Specification

for

LawBridge: a centralized legal services eMarketplace

Version 1.0 approved

Prepared by Adil, Anna, Chinmay, Gowri, Sephin, Sravan

ENIGMA-X

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Revision History

| Name | Date | Reason For Changes | Version |
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1. Introduction

1.1 Purpose

This Software Requirement Specification (SRS) serves as a detailed guide of the software. It outlines all the functional and nonfunctional requirements of the system in a straightforward manner. In this document, we will define the software solutions objectives, features, and scope, as well as highlight the design and implementation constraints. Essentially, this document serves as a roadmap for the development team to create the software with clarity and precision.

1.2 Document Conventions

The document is written using Google Docs and has the font type 'Times' for the heading and 'Arial' for the description. The font size that has been used in the document is 11 and the line spacing is 0.24 Standard IEEE template is the template used to organize the appearance of the document and its flow.

1.3 Intended Audience and Reading Suggestions

This guide is intended for programmers, end users, testers, and writers of documentation. Developers concentrate on "Functional" and "Technical Requirements"," testers on "Functional" and "Testing Requirements," and documentation writers on "User Documentation."

1.4 Product Scope

The project aims to design and develop a comprehensive eMarketplace platform that connects legal service providers with clients across India. The platform will address the challenges of access, transparency, quality, and accessibility in the legal service sector.

1.5 References

- React
- Next.js
- Tailwind CSS
- Django
- MySQL
- Hardhat

2. Overall Description

2.1 Product Perspective

This guide is intended for programmers, end users, testers, and writers of documentation. Developers concentrate on "Functional" and "Technical Requirements"," testers on "Functional"

The LawBridge platform is a standalone product developed to address the challenges in accessing legal services in India. It serves as a centralized eMarketplace connecting legal service providers and clients. LawBridge is not a replacement for existing systems but rather introduces a novel solution to the unorganized legal service sector in India. It provides a comprehensive platform for legal practitioners and clients to interact, ensuring transparency, accessibility, and efficiency.

The LawBridge platform interfaces with external entities such as legal service providers, clients, courts, and bar associations. It does not serve as a component of a larger system but functions independently to streamline legal services.

2.2 Product Functions

- Service Provider Search and Listings
- Incentivization Mechanism for Service Providers
- Document Management with Blockchain Integration
- Al-Powered Chatbot Assistance
- Communication Between Clients and Service Providers

- Community and Forum Engagement
- Legal Information Repository Access
- Legal Document Generation

2.3 User Classes and Characteristics

1. Legal Service Providers

- Characteristics:
 - Hold valid bar licenses.
 - Offer legal services in various fields.
 - Seek to expand their client base.
- Privileges:
 - Access to client inquiries and cases.
 - Ability to view and download client-uploaded documents securely.
 - Participation in the incentivization program.

2. Clients

- Characteristics:
 - Seek legal assistance or services.
 - Varying levels of legal knowledge and expertise.
 - Require diverse legal solutions.
- Privileges:
 - Search for legal service providers based on criteria.
 - Engage in direct communication with service providers.
 - Access and upload documents securely.

3. Administrators

- Characteristics:
 - Platform management and oversight.
 - Technical proficiency for system maintenance.
- Privileges:
 - User management, including role assignments.
 - Content moderation and community oversight.
 - System configuration and maintenance.

4. Guest Users

- Characteristics:
 - Visitors exploring the platform without registration.

- Privileges:
 - Limited access to public information and site navigation.

5. Legal Experts and Advisors

- Characteristics:
 - Industry experts or advisors providing guidance.
- Privileges:
 - Offer specialized advice or insights in specific legal domains.

2.4 Operating Environment

The software will operate in the following environment:

- -Hardware Platform:
 - Modern web browsers (Google Chrome, Mozilla Firefox, Apple Safari, Microsoft Edge).
 - Mobile devices (iOS and Android) for on-the-go access.

-Operating Systems:

- Windows (version 10 and above).
- MacOS (latest two versions).
- iOS (latest two versions).
- Android (latest two versions).

- Software Components:

- Web server (e.g., Apache, Nginx).
- Database management system (e.g., MySQL, PostgreSQL).
- Backend framework (e.g., Django, Node.js).
- Blockchain technology (Solidity, Hardhat).
- Frontend framework (e.g., React, Vue.js).

- Third-Party Integrations:

- Payment gateways for secure transactions.
- APIs for integration with legal entities, courts, and bar associations.
- Chatbot platform and NLP for the Al-powered chatbot.

- Internet Connectivity:
 - Stable internet connection for real-time interaction and data exchange.
- Security Measures:
 - - SSL encryption for secure data transmission.
 - - Firewall and intrusion detection systems for protection against cyber threats.
 - Regular security updates and patches to safeguard against vulnerabilities.
- Compliance and Regulations:
 - Adherence to legal and regulatory requirements for data privacy and user protection.
- Scalability Considerations:
 - Design considerations for potential future scalability, including cloud deployment options.
- Localization:
 - Support for multiple languages and localization for different regions (English as primary language).

The software will be designed to operate seamlessly in the described environment, providing a reliable and secure platform for legal service providers and clients.

2.5 Design and Implementation Constraints

- 1. **Blockchain Integration**: The system will need to be compatible with specific blockchain technologies (Solidity, Hardhat) to ensure secure and transparent record-keeping. This constraint may limit the options for blockchain platforms and tools.
- 2. **Regulatory Compliance**: The system must adhere to legal and regulatory requirements governing the provision of legal services in India. This may impose constraints on certain features, data handling, and user interactions.

- 3. **Security Considerations**: Robust security measures, including SSL encryption, firewall configurations, and intrusion detection systems, will be mandatory. Compliance with industry-standard security practices may limit certain design choices.
- 4. **Technology Stack**: The choice of technologies, including web server, database management system, backend, frontend, and blockchain platforms, may be constrained by compatibility, performance requirements, and the need for specific features.
- 5. **Data Privacy and Protection**: Strict adherence to data privacy laws and user data protection will be a primary constraint. This may impact data storage, retrieval, and processing mechanisms.
- 6. **User Authentication and Authorization**: The system will need to implement robust user authentication and authorization mechanisms, which may constrain the options for user management and access control.
- 7. **Integration with External Systems**: The system will need to integrate with external entities such as legal entities, courts, and bar associations. This may be subject to specific integration protocols and APIs.
- 8. **Scalability and Performance**: The design must account for potential future scalability requirements. This may impose constraints on the choice of technologies and architectural decisions.
- 9. **User Experience and Interface Guidelines**: The system's user interface and experience should adhere to industry standards and best practices to ensure usability and accessibility.
- 10. **Budget and Resource Allocation**: Adequate budget allocation for development, marketing, and ongoing maintenance will be necessary for the project's sustained success. This may constrain resource allocation for other purposes.
- 11. **Parallel Operations**: The system may need to support parallel operations, especially during high-demand periods. This may impact design choices related to concurrency and resource management.
- 12. **Language and Localization Requirements**: The system should support multiple languages and localization for different regions, with English as the primary language.

These constraints will guide the development process and shape design decisions to ensure the successful implementation of the legal service platform.

2.6 User Documentation

- 1. **User Manuals**: Comprehensive guides for both clients and legal service providers explaining how to use the platform, register, search for services, engage with providers, and utilize various features.
- 2. **On-line Help**: Contextual help within the platform to provide immediate assistance to users while navigating through different sections and functionalities.
- 3. **Tutorials**: Step-by-step tutorials or video guides demonstrating key tasks and functionalities, helping users become proficient in using the platform.
- 4. **FAQ Section**: A Frequently Asked Questions section addressing common queries and providing solutions to potential issues users may encounter.
- 5. **Legal Information Guides**: Detailed guides providing legal information, FAQs, and resources to educate users about various legal topics.
- 6. **Blockchain Integration Guide**: Specific documentation on how blockchain technology is utilized for security and transparency, along with its benefits.
- 7. **Community Forum Guide**: Instructions on how to participate in discussions, post queries, and share insights within the community and forum section.
- 8. **Feedback and Ratings Guide**: Guidelines on how users can provide feedback and ratings for legal service providers, as well as how providers can understand and utilize these ratings.
- 9. **Privacy Policy and Terms of Service**: Clear and concise documents outlining the privacy policy and terms of service to inform users about their rights and responsibilities.
- 10. **LawBridge Glossary**: A glossary defining relevant terms and acronyms used within the platform for easy reference.

Delivery Formats/Standards:

 All user documentation will be provided in digital formats, accessible through the LawBridge platform.

- Documents will be available in standard formats such as PDFs and web pages for easy viewing and printing.
- Video tutorials will be provided in commonly used formats compatible with popular media players.
- Online help will be integrated directly into the platform, providing real-time assistance.
- The documentation will be designed to be accessible on various devices including desktops, tablets, and mobile phones.

This user documentation will serve as a valuable resource to ensure users can effectively navigate and utilize the LawBridge platform to its full potential.

2.7 Assumptions and Dependencies

Assumptions:

- 1. Legal providers actively register and possess valid bar licenses.
- 2. Reliable bar license verification system is available.
- 3. Seamless integration with courts and bar associations is achievable.
- 4. Trust-building efforts will encourage client adoption.
- 5. Blockchain implementation for data security is effective.

Dependencies:

- 1. Integration with legal entities like courts and associations.
- 2. Active participation and registration of legal service providers.
- 3. Availability of a robust license verification system.
- 4. Building client trust for platform adoption.
- 5. Secure payment gateway integration.
- 6. Successful NLP and chatbot platform integration.
- 7. Effective blockchain implementation using Solidity and Hardhat.
- 8. Compatibility and successful implementation of Next JS, Django Rest Framework, and MySQL.

3. External Interface Requirements

3.1 User Interfaces

1. Registration Page:

- Allows users to create accounts as clients or legal service providers.
- Provides fields for personal information, contact details, and role selection.

2. Profile Dashboard:

- Users can customize and manage their profiles.
- Includes options for adding details, preferences, and uploading necessary documents.

3. Search and Filter Page:

- Enables clients to search for legal service providers based on various criteria like practice areas, location, experience, and ratings.

4. Provider Listing Page:

- Displays a list of legal service providers based on search criteria.
- Provides detailed profiles with information on expertise, ratings, and experience.

5. Map Feature:

- Allows users to view legal service providers on a map, based on their location.

6. Incentivization Dashboard:

- Legal service providers can track their performance, earned incentives, and rewards.

7. Document Management Page:

- Users can securely upload, store, and retrieve legal documents using blockchain technology.

8. Chat and Communication Interface:

- Clients can initiate secure chats or contact legal service providers for inquiries or service requests.

9. Community Forum Page:

- Users can engage in discussions, post queries, and share insights in the community and forum section.

10. Legal Information Repository:

- Provides a repository of legal information, including IPC sections, guides, FAQs, and legal issue listings.

11. Document Generation Page:

- Enables users to generate legal documents using templates provided by the platform.

These interfaces collectively ensure a seamless and user-friendly experience for both clients and legal service providers. For detailed design specifications, refer to the separate User Interface Specification document.

3.2 Hardware Interfaces

Since the application must run over the internet, all the hardware required to connect to the internet will be hardware interface for the system. As for e.g. Modem, WAN – LAN, Ethernet Cross-Cable.

The web application supports modern browsers with zero configuration.

- Chrome 64+
- Edge 79+
- Firefox 67+
- Opera 51+
- Safari 12+

3.3 Software Interfaces

Blockchain Integration:

Hardhat version 2.17.4 shall be used to develop, interact and interface with smart contracts to store sensitive legal documents on the Ethereum blockchain. The system uses Sepolia testnet for testing and ethereum mainnet for final production of the system. All the transactions between blockchain nodes shall be conducted in ethereum cryptocurrency coins.

Database Interface (MySQL):

Object-Relational-Mapping (ORM) provided by the backend framework Django Rest Framework (DRF) version 3.9.3 shall be used to interact with the MySQL database for efficient and secure data operations. The mysqlclient driver may be employed to facilitate database connectivity.

Internationalization:

React-i18next version 13.2.2 shall be integrated into the frontend to provide multiple language support. The application's default language will be in English which may be modified later with the help of the library along with other packages such as i18next-http-backend version 2.2.2 and i8next-browser-languagedetector version 7.1.0

Map interfaces:

The system shall use NextJS version 13.5 frontend framework integrated with third-party libraries such as React-Leaflet version 4.2.1 and React-Map-GL version 7.1.6 for viewing and interacting with maps in the application.

Payment Gateway Integration (Paytm):

The system shall provide a secure and convenient payment processing system achieved through the integration of the Paytm payment gateway using the Paytm API. The Paytm API offers a robust set of features for handling payments, including processing payments, handling refunds, and managing transaction status.

3.4 Communications Interfaces

The system currently operates over the HTTP protocol to facilitate data exchange between the client and the server. The communication interface adheres to industry standards and best practices for web applications.

Future HTTPS Protocol Transition: It is essential to note that, as part of ongoing security enhancements and compliance with industry best practices, the web application is considering a transition from the HTTP protocol to the more secure HTTPS protocol. This transition is in line with broader internet security trends and aims to provide improved data security and privacy for our users.

4. System Features

1. **Choose Your Role**: Register as a client in need of legal services or as a legal service provider, whether you're an individual practitioner or part of a law firm. Service providers are required to complete verification using their bar council license and other relevant details. Enjoy the flexibility to tailor profiles and preferences to your needs.

2. Service Provider Listings and Location-Based Services:

- Users can search for legal service providers based on practice areas, location, years of experience, and ratings.
 - Users have access to a map feature to find legal service providers near their location.

3. Incentivization Mechanism with Algorithmic Evaluation:

- Legal service providers can earn incentives, bonuses, or rewards based on an algorithm that considers factors such as years of experience, number of cases appeared, and cases won, in addition to user ratings.

4. Document Management:

- Users can securely upload and store legal documents using blockchain technology.
- Users can access and retrieve stored documents.
- Legal service providers can access user-uploaded documents securely for case-related purposes, ensuring data privacy and confidentiality.

5. Comprehensive Chatbot Assistance:

- An Al-powered chatbot provides comprehensive assistance, clearing clients' queries, addressing legal issues, and resolving doubts related to legal matters and platform usage.

6. Chat or Contact Service Providers:

- Clients can initiate chat or contact legal service providers directly through the platform for inquiries, consultations, or service requests.

7. Community and Forum:

- Users can engage in discussions, post queries, and share insights in the community and forum section. Service providers have the opportunity to actively engage in discussions, share insights, and post relevant information within the community and forum section. This feature fosters collaboration and knowledge-sharing among legal service providers, enhancing their professional network and expertise.

8. Legal Information Repository:

- The platform offers legal information resources, including IPC sections, guides, FAQs, and legal issue listings.

9. Document Generation:

- Users can generate legal documents using templates provided by the platform.

The added 4th point emphasizes that legal service providers can access user-uploaded documents securely for case-related purposes, ensuring data privacy and confidentiality.

4.1 System Feature 1

System Feature 1: Role Selection and Registration

4.1.1 Description and Priority

- High Priority
- This feature allows users to choose their role as a client in need of legal services or as a legal service provider. Service providers must complete verification using their bar council license. Users can customize profiles and preferences.

4.1.2 Stimulus/Response Sequences

- Stimulus: User opens the platform for the first time.

Response: Platform prompts the user to choose between "Client" and "Service Provider" roles.

- Stimulus: User selects "Service Provider" role.

Response: Platform guides the user through the verification process.

- Stimulus: User selects "Client" role.

Response: Platform directs the user to complete client registration.

4.1.3 Functional Requirements

- REQ-1: The platform must allow users to choose between "Client" and "Service Provider" roles upon initial login.
- REQ-2: If the user selects the "Service Provider" role, the platform must guide them through the verification process, including bar council license validation.
- REQ-3: If the user selects the "Client" role, the platform must direct them to complete client registration.

4.2 System Feature 2

System Feature 2: Service Provider Listings and Location-Based Services

4.2.1 Description and Priority

- High Priority
- This feature enables users to search for legal service providers based on practice areas, location, years of experience, and ratings. It also provides access to a map feature to find legal service providers near their location.

4.2.2 Stimulus/Response Sequences

- Stimulus: User enters search criteria for legal service providers.

Response: Platform displays a list of providers matching the criteria.

- Stimulus: User enables location services.

Response: Platform displays legal service providers in proximity on the map.

4.2.3 Functional Requirements

- REQ-1: The platform must allow users to search for legal service providers based on practice areas, location, experience, and ratings.
- REQ-2: The platform must provide a map feature that displays legal service providers near the user's location.
- REQ-3: The platform must present search results in a clear and organized manner, including relevant information about each provider.

4.3 System Feature 3

System Feature 3: Incentivization Mechanism with Algorithmic Evaluation

4.3.1 Description and Priority

- High Priority
- This feature allows legal service providers to earn incentives, bonuses, or rewards based on an algorithm that considers factors such as years of experience, number of cases appeared, cases won, and user ratings.

4.3.2 Stimulus/Response Sequences

- Stimulus: Legal service provider completes a case.

Response: Platform evaluates the performance and updates the provider's incentives.

- Stimulus: User rates a legal service provider.

Response: Platform incorporates the user rating into the provider's overall performance evaluation.

4.3.3 Functional Requirements

- REQ-1: The platform must have an algorithm that calculates incentives for legal service providers based on specified criteria.
- REQ-2: The algorithm must consider factors such as years of experience, number of cases appeared, cases won, and user ratings in the calculation.
- REQ-3: The platform must update the provider's incentives after each completed case or user rating.

4.4 System Feature 4

System Feature 4: Document Management

4.4.1 Description and Priority

- High Priority
- This feature allows users to securely upload and store legal documents using blockchain technology. It also enables users to access and retrieve stored documents. Legal service providers can securely access user-uploaded documents for case-related purposes, ensuring data privacy and confidentiality.

4.4.2 Stimulus/Response Sequences

- Stimulus: User initiates document upload.

Response: Platform prompts user to select the document and initiates the upload process.

- Stimulus: User requests to access a stored document.

Response: Platform retrieves and displays the requested document for the user.

- Stimulus: Legal service provider requests access to user-uploaded document for a specific case. Response: Platform verifies authorization and grants access to the requested document.

4.4.3 Functional Requirements

- REQ-1: The platform must allow users to securely upload and store legal documents using blockchain technology.
- REQ-2: Users must be able to access and retrieve their stored documents at any time.
- REQ-3: Legal service providers must be able to securely access user-uploaded documents for case-related purposes after obtaining proper authorization.

4.5 System Feature 5

System Feature 5: Comprehensive Chatbot Assistance

4.5.1 Description and Priority

- Medium Priority
- This feature provides users with comprehensive assistance through an Al-powered chatbot. The chatbot addresses queries, resolves doubts related to legal matters, and guides users on platform usage.

4.5.2 Stimulus/Response Sequences

- Stimulus: User initiates a chatbot interaction.

Response: Chatbot provides a greeting and prompts the user to ask a question or state their concern.

- Stimulus: User asks a legal question.

Response: Chatbot analyzes the query and provides a relevant response based on available information and resources.

4.5.3 Functional Requirements

- REQ-1: The platform must have an Al-powered chatbot for providing assistance to users.
- REQ-2: The chatbot must be able to understand and respond to a wide range of legal queries and concerns.
- REQ-3: The chatbot must guide users on platform usage, including features and functionalities.

4.6 System Feature 6

System Feature 6: Chat or Contact Service Providers

4.6.1 Description and Priority

- High Priority
- This feature allows clients to initiate direct communication with legal service providers through the platform. It facilitates inquiries, consultations, and service requests.

4.6.2 Stimulus/Response Sequences

- Stimulus: Client selects a legal service provider to contact.

Response: Platform provides options for initiating communication, such as chat, call, or email.

Stimulus: Client sends a message or initiates a call to a legal service provider.
 Response: Platform establishes the communication channel between the client and the selected provider.

4.6.3 Functional Requirements

- REQ-1: The platform must provide a communication interface for clients to contact legal service providers.
- REQ-2: Clients must be able to choose from multiple communication options, including chat, call, or email.
- REQ-3: The platform must facilitate secure and direct communication between clients and legal service providers.

4.7 System Feature 7

System Feature 7: Community and Forum

4.7.1 Description and Priority

- Medium Priority
- This feature enables users to engage in discussions, post queries, and share insights in the community and forum section. It fosters a sense of community and knowledge-sharing among platform users.

4.7.2 Stimulus/Response Sequences

- Stimulus: User navigates to the community and forum section.

 Response: Platform displays a list of ongoing discussions, recent posts, and options to participate.
- Stimulus: User posts a question or initiates a discussion.

 Response: Platform publishes the post in the community section for other users to engage with.

4.7.3 Functional Requirements

- REQ-1: The platform must have a dedicated section for community discussions and forums.
- REQ-2: Users must be able to view and participate in ongoing discussions and posts.
- REQ-3: Users must have the ability to post questions, share insights, and engage with other users in the community section.

4.8 System Feature 8

System Feature 8: Legal Information Repository

4.8.1 Description and Priority

- Medium Priority
- This feature provides users with access to legal information resources, including IPC sections, guides, FAQs, and legal issue listings. It serves as a knowledge base for legal matters.

4.8.2 Stimulus/Response Sequences

- Stimulus: User navigates to the legal information repository.

 Response: Platform displays categories of legal information resources and options for browsing.
- Stimulus: User selects a specific legal topic or query.
 Response: Platform provides relevant information, including IPC sections, guides, FAQs, and listings related to the selected topic.

4.8.3 Functional Requirements

- REQ-1: The platform must have a dedicated legal information repository section.
- REQ-2: Users must be able to browse and search for legal information resources.

- REQ-3: The platform must provide comprehensive and accurate legal information on various topics.

4.9 System Feature 9

System Feature 9: Document Generation

- 4.9.1 Description and Priority
- Medium Priority
- This feature allows users to generate legal documents using templates provided by the platform. It streamlines the process of creating essential legal documents.
- 4.9.2 Stimulus/Response Sequences
- Stimulus: User selects the document generation feature.
 Response: Platform displays available document templates and options for customization.
- Stimulus: User chooses a specific document template and provides necessary details. Response: Platform generates the document based on the provided information.
- 4.9.3 Functional Requirements
- REQ-1: The platform must provide a document generation feature with a range of templates.
- REQ-2: Users must be able to customize document templates with relevant information.
- REQ-3: The platform must generate accurate and legally compliant documents based on user input.

5. Other Nonfunctional Requirements

5.1 Performance Requirements

- **Response Time**: The platform should respond to user actions within 2 seconds to provide a seamless user experience.
- Concurrent User Handling: The system must support a m
- minimum of 1000 concurrent users to ensure scalability during peak usage times.
- **Data Retrieval**:Data retrieval for user profiles and legal provider listings should take no more than 3 seconds to maintain responsiveness.
- Search Speed: Search results for legal service providers based on user criteria should be generated in under 3 seconds for efficient browsing.

- **Transaction Processing**: Payment transactions must be processed in real-time with no delays to ensure smooth financial interactions.
- **Document Upload and Retrieval**: Uploading and retrieving legal documents should take no more than 10 seconds to facilitate efficient document management.
- **System Uptime**: The platform should maintain at least 99.9% uptime to ensure uninterrupted access for users.
- **Security Overheads**: Security measures (e.g., encryption, authentication) should introduce no more than 5% overhead on system performance.
- **Scalability**: The platform should be designed to handle a 50% increase in user base over the next year without significant performance degradation.
- **Server Load Balancing**: Load balancing should distribute server loads evenly to prevent overloading and ensure consistent performance.
- Database Query Optimization: Database queries must be optimized to execute within 1 second to support responsive data retrieval.
- **Real-time Communication**:Real-time communication channels should have a latency of less than 200 milliseconds for instant interactions.

These performance requirements aim to provide users with a fast, reliable, and efficient platform for accessing legal services. They guide development decisions to meet user expectations for responsiveness and system reliability.

5.2 Safety Requirements

- **Identity Verification**: Verify legal service providers for qualification.
- Data Security: Implement robust encryption for user data protection
- Access Control: Restrict unauthorized access to sensitive functions and data.
- Blockchain Security: Ensure tamper-proof legal records on blockchain.
- Regulatory Compliance: Adhere to local legal requirements for services.
- **User Education**: Provide clear safety guidelines for users.
- Secure Communication: Use encrypted channels for user interactions.
- **Dispute Resolution**: Establish transparent conflict resolution procedures.
- Security Audits: Conduct regular assessments to address vulnerabilities.
- Legal Standards Compliance: Ensure industry-specific legal adherence and certifications.
- **Emergency Response Protocol**: Define procedures for critical incidents and emergencies.
- Prevent Malicious Activity: Detect and thwart malicious activities for user safeties

5.2 Security Requirements

- **Data Encryption**: Encrypt sensitive user data in transit and at rest (AES-256).
- Authentication: Implement secure password policies and multi-factor authentication.
- Access Control: Apply role-based access control (RBAC) for user permissions.
- **Secure APIs**: Ensure APIs are protected with OAuth 2.0 authentication.
- Security Audits and Monitoring: Conduct regular security audits and continuous monitoring.
- Data Backup and Recovery: Establish automated, secure data backup processes.
- Incident Response Plan: Define clear steps for handling security incidents.
- Regulatory Compliance: Adhere to relevant data protection laws and regulations.
- Security Certifications: Obtain necessary security certifications for compliance.
- **Vulnerability Management**:Identify and mitigate security vulnerabilities.
- Privacy Policy and Consent: Communicate privacy policy and obtain user consent.

These requirements ensure robust security and privacy measures for the platform.

5.3 Software Quality Attributes

- **Data Encryption**:Encrypt sensitive data during transmission and storage.
- User Authentication:Implement strong user verification methods.
- Access Control: Enforce role-based access restrictions.
- Secure Payment Transactions: Integrate secure payment gateway protocols.
- **Secure APIs**:Ensure API security with proper authentication.
- Security Audits and Monitoring: Conduct regular security audits and monitoring.
- Data Backup and Recovery: Establish automated, secure data backup processes.
- Incident Response Plan: Define clear steps for security incidents.
- Regulatory Compliance: Adhere to data protection and privacy regulations.
- Security Certifications: Obtain and maintain necessary security certifications.
- Vulnerability Management: Identify, assess, and mitigate security vulnerabilities.
- Privacy Policy and Consent: Communicate privacy policy and obtain user consent.

5.4 Business Rules

- **Provider Eligibility**:Only verified legal professionals with a valid bar license can register as service providers.
- Client Registration: Any individual seeking legal services can create an account.
- Access to Profiles: Clients can view provider profiles, including expertise and ratings.
- Provider Selection: Clients choose providers based on their needs.
- Incentivization: Providers earn rewards based on performance.
- Feedback and Ratings: Clients give feedback for transparency and quality.
- **Legal Entity Integration**: Seamless integration with legal institutions.
- Bar License Verification: Providers undergo rigorous verification.
- **Data Security:**Stringent measures to protect user information.
- Regulatory Compliance: Adherence to legal requirements.
- **Dispute Resolution**:Transparent mechanism for conflict resolution.
- User Education: Provide resources for effective platform use.

These rules guide platform interactions, ensuring a regulated environment for legal services.

6. Other Requirements

- Database Requirements: The platform must employ a secure and scalable database system to manage user data, documents, and platform activities.
- Internationalization Requirements: The platform should be designed to accommodate multiple languages and cultural considerations to cater to a diverse user base.
- Legal Requirements: The platform must comply with all relevant legal and regulatory requirements for providing legal services in India.
- Reuse Objectives: The development process should aim to maximize code reusability for future enhancements and scalability.

Appendices:

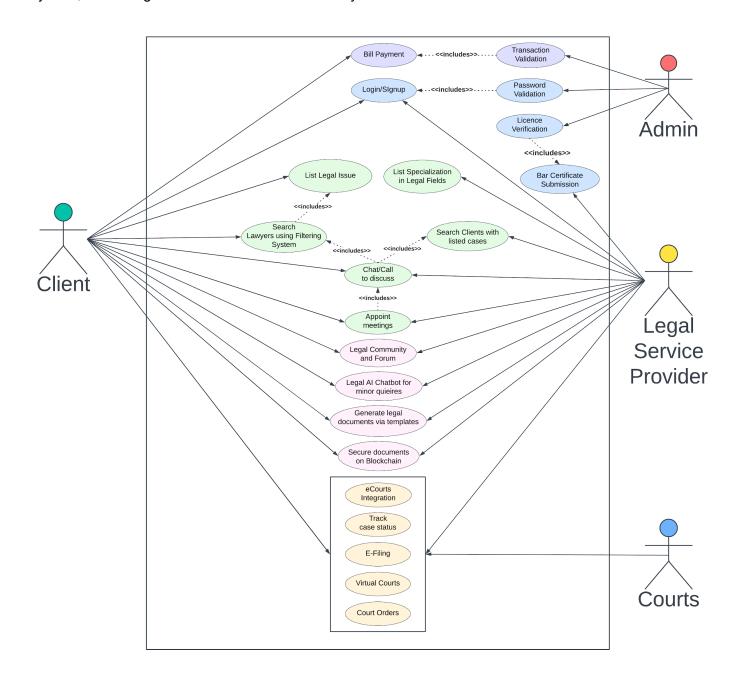
Appendix A: Glossary

- SRS: Software Requirements Specification

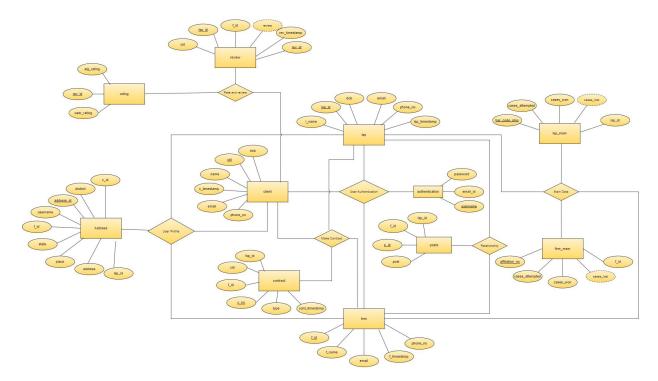
- IPC: Indian Penal Code

Appendix B: Analysis Models

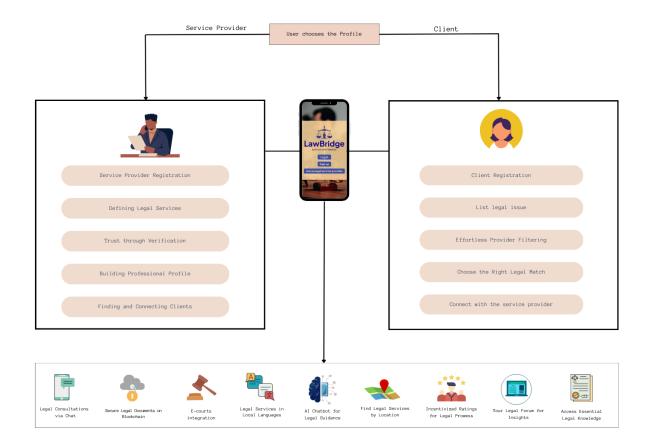
-Use Case Diagram: A visual representation describing the high-level functions and scope of a system, illustrating the interactions between the system and its actors



-ER Diagram: A graphical representation explaining the relationship among the entities present in the database.



-Flowchart: A visual representation of application logic and process flow to illustrate the functioning of the system.



Appendix C: To Be Determined List

TBD-1: User Authentication Mechanism

TBD-2: Data Backup and Recovery Procedures

TBD-3: User Interface Design Guidelines

TBD-4: Marketing and User Acquisition Strategy