Software Requirements Specification
for
Judiciary Information System

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1. Introduction

1.1 Purpose

The Judiciary Information System (JIS) aims to assist the attorney general's office in managing court cases efficiently and providing easy access to past court proceedings for lawyers and judges. The system facilitates case management, scheduling, recording court proceedings, and maintaining case details.

1.2 Problem Definition

The current manual process of handling court cases is cumbersome and lacks efficiency. There is a need for a centralized system to manage court cases, schedule hearings, record proceedings, and maintain case details to enhance productivity and accessibility for lawyers and judges.

1.3 Product Scope

The Judiciary Information System encompasses the following key functionalities:

- Case management: Recording defendant details, crime type, arrest information, hearing dates, and presiding judge details.
- Scheduling: Displaying vacant slots for scheduling hearings and assigning new hearing dates.
- Recording proceedings: Capturing court proceedings summaries and judgment summaries.
- Access to past cases: Browsing through old cases for guidance on judgments.
- User management: Creating and managing login accounts for judges, lawyers, and other users.
- Billing: Charging lawyers for accessing old cases to recover computerization costs.

1.4 Document Conventions

This document follows standard conventions for software requirements specification, including:

- Use of headings and subheadings to organize content.

- Clear and concise language to convey requirements.
- Consistent formatting for readability and clarity.

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2.System Objectives

The Judiciary Information System (JIS) is designed to achieve the following objectives:

- **Efficient Case Management**: Streamlining the process of recording defendant details, crime information, arrest specifics, and other relevant case data to facilitate easy access and management of court cases.
- **Enhanced Scheduling**: Providing a user-friendly interface for scheduling court hearings, displaying available time slots, and automating the process of suggesting suitable hearing dates based on predefined criteria.
- **Comprehensive Recording of Proceedings**: Enabling the accurate and detailed recording of court proceedings summaries and judgment summaries, including support for attachments and legal citations.
- **Accessible Past Cases**: Allowing users to browse past cases, search for specific information using advanced search capabilities, and retrieve relevant case details efficiently.
- **Secure and Reliable System**: Ensuring the security of sensitive data, restricting access to authorized personnel, implementing data encryption, and maintaining system reliability with minimal downtime through regular backups.
- **User-Friendly Interface**: Designing an intuitive and easy-to-use interface for judges, lawyers, and other users, with training sessions conducted to familiarize users with the system.
- **Cost-Effective Billing Mechanism**: Implementing a billing mechanism to recover computerization costs by tracking user interactions and calculating charges for accessing old cases based on predefined rates.
- **Integration with Existing Infrastructure**: Ensuring compatibility with existing IT infrastructure, complying with data privacy and security regulations, and providing seamless integration with other systems if required.

By fulfilling these objectives, the Judiciary Information System aims to modernize and optimize the management of court cases, ultimately improving efficiency, accessibility, and transparency within the judicial system.

3.Functional Requirements

3.1 Case Management

3.1.1 Case Data Entry

- **Defendant Information** : Record the defendant's full name, address, contact details, and any other pertinent identifying information.
- **Crime Details** : Capture comprehensive details regarding the crime, including the type of offense, date, time, and location of the incident, and any related specifics such as witnesses or evidence.
- **Arrest Information** : Document the circumstances of the arrest, including the arresting officer's name, badge number, arresting agency, date, time, and location of the arrest.

3.1.2 Case Identification

- **Unique Case Identification Number (CIN)** : Automatically generate a unique alphanumeric identifier for each court case, ensuring that no two cases have the same identification number.

3.1.3 Hearing Scheduling

- **Vacant Slot Display :** Present a visual representation of the court calendar, indicating available time slots for scheduling hearings based on the availability of judges, courtrooms, and other resources.
- **Automated Scheduling Assistance** : Provide the registrar with automated suggestions for suitable hearing dates and times based on predefined criteria such as case type, urgency, and judicial availability.

3.1.4 Case Status Tracking

- **Real-Time Status Updates**:Maintain an up-to-date record of the status of each case, including the date and outcome of previous hearings, any adjournments, and upcoming scheduled events.
- **Status Notifications**:Notify relevant stakeholders (e.g., judges, lawyers) of any changes in case status or scheduling on their portal.

3.2 Recording Proceedings

3.2.1 Court Proceedings Summary

- **Comprehensive Summary Entry** : Allow the registrar or designated personnel to enter detailed summaries of court proceedings, capturing key points, arguments presented by both parties, rulings, and any other relevant information.

3.2.2 Judgment Summary

- **Structured Judgment Recording** : Facilitate the structured recording of judgments, including the verdict, sentencing decisions, and any orders issued by the court.
- **Legal Citation Support** : Provide functionality for including legal citations, references to relevant case law, and statutory provisions in the judgment summary.

3.3 Access to Past Cases

3.3.1 Case Browsing

- Flexible Browsing Options : Allow users to browse past cases using various criteria such as case number, defendant name, crime type, date range, or keyword search.
- Advanced Filtering : Implement advanced filtering options to refine search results based on specific parameters, such as case status, jurisdiction, or presiding judge.

3.3.2 Search Functionality

- Advanced Search Capabilities : Offer robust search functionality with string matching feature.

3.3.3 Billing Mechanism

- Usage Tracking : Track user interactions with the system, including the number of cases viewed, search queries executed, and other relevant activities.

- Billing Calculation : Calculate charges for accessing old cases based on predefined billing rates, taking into account factors such as user type (e.g., lawyer, judge) etc.

4.Non-Functional Requirements

4.1 Performance

- The system shall handle a large volume of repair requests efficiently.
- Response time for generating reports and scheduling repair work shall be minimal.

4.2 Security

- Access to sensitive data such as repair requests and resource availability shall be restricted to authorized personnel.
- The system shall implement data encryption to ensure security.

4.3 Usability

- The user interface shall be intuitive and easy to use for clerks, supervisors, administrators, and the mayor.
- Training sessions shall be conducted to familiarize users with the software.

4.4 Reliability

- The system shall be reliable with minimal downtime.
- Regular backups shall be performed to prevent data loss.

5.Constraints

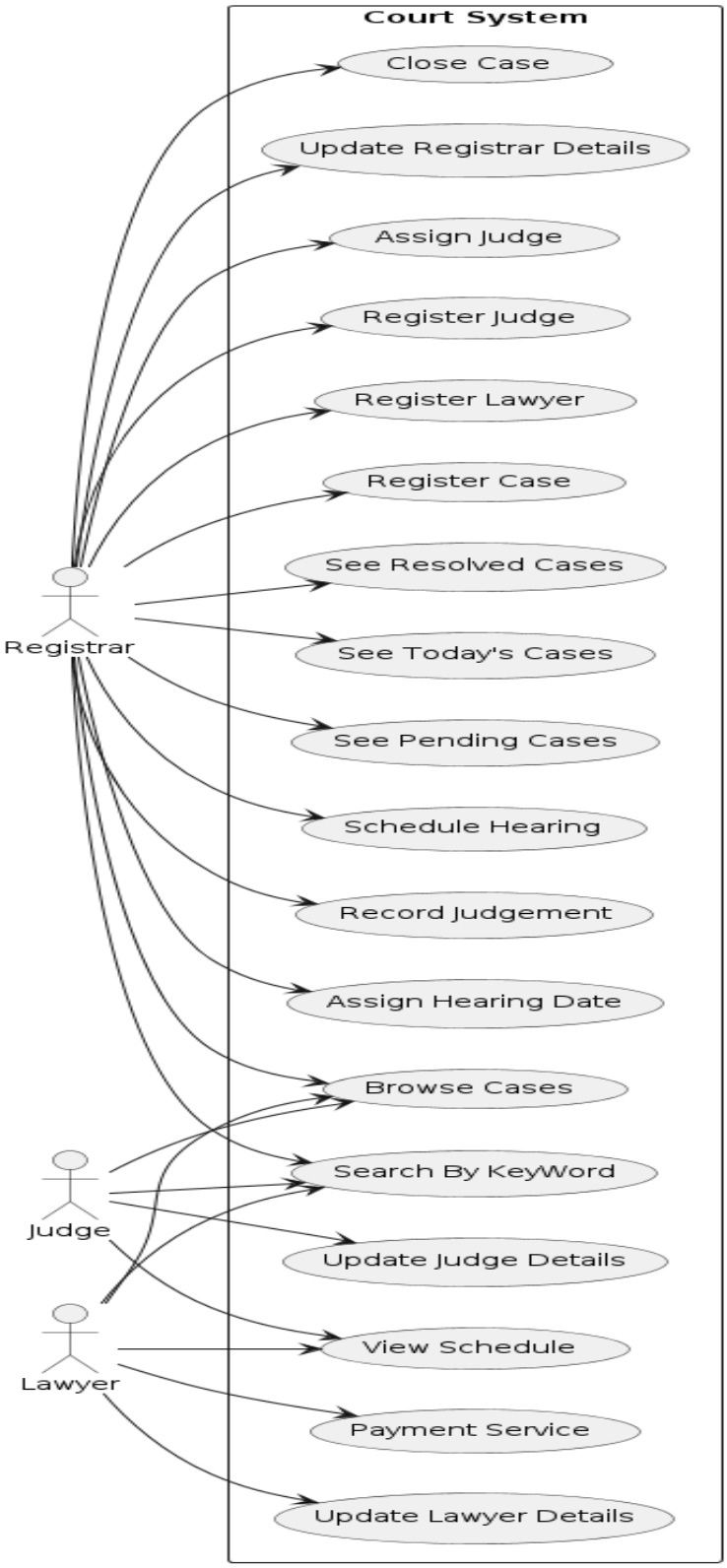
- Development budget and timeframe of 8 week duration.
- Compatibility with existing city corporation IT infrastructure.
- Compliance with data privacy and security regulations.

6.Interfaces

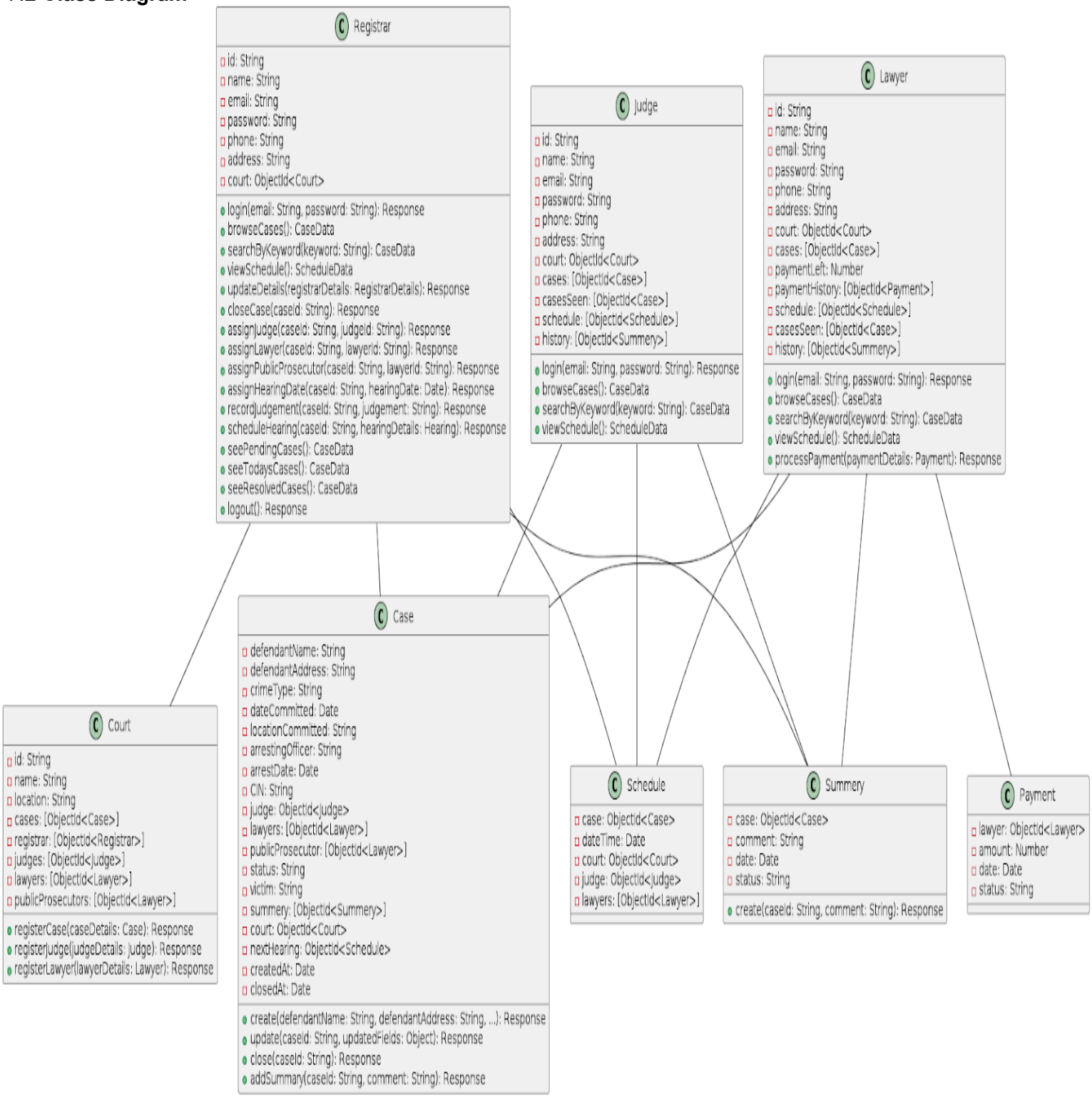
- Graphical User Interface (GUI) accessible through desktop computers.
- Database interface for managing repair requests, resource data, and reporting.

7. Diagrams

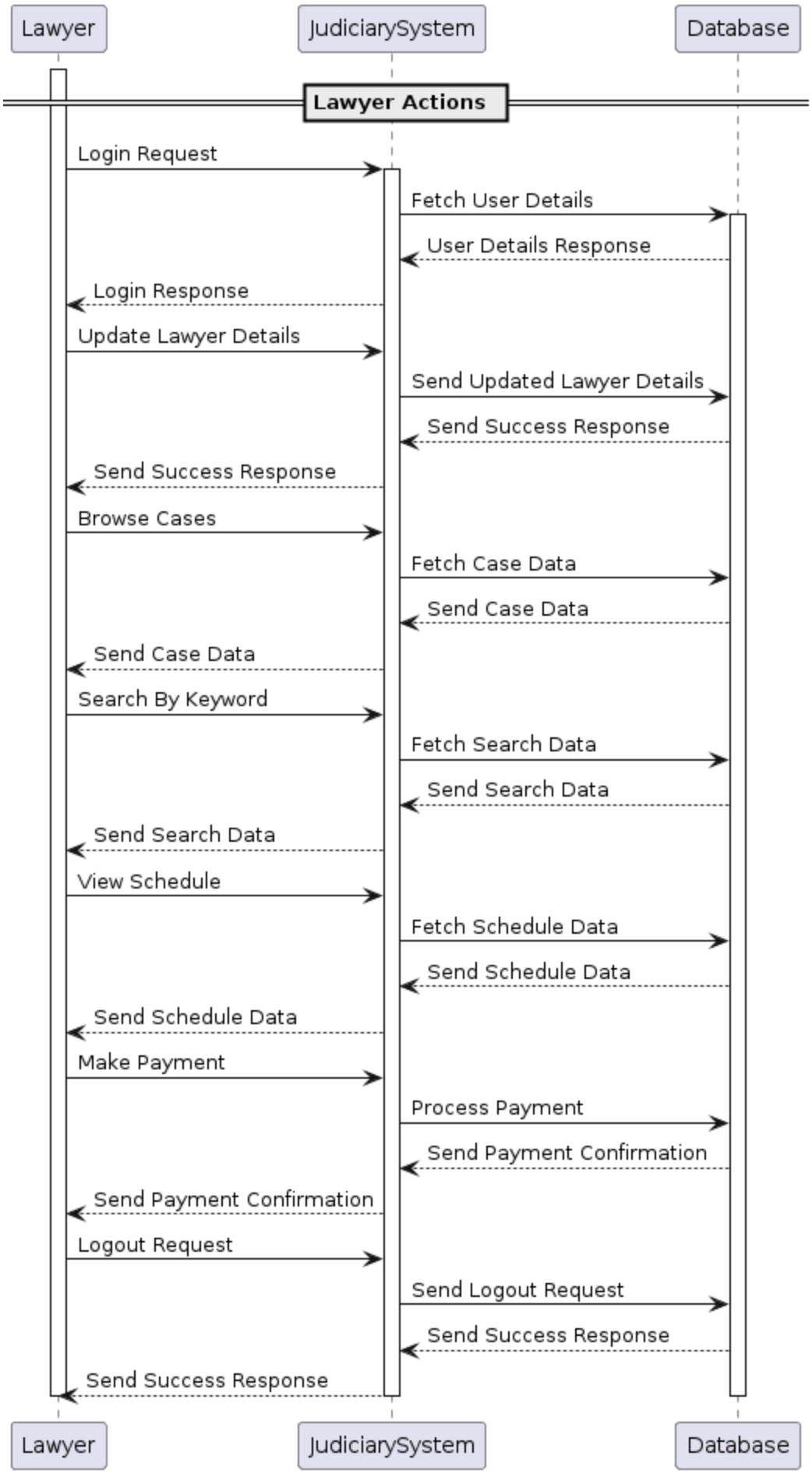
7.1 **Use Case Diagram -**



7.2 **Class Diagram -**



7.3 **Sequence Diagram -**


Lawyer
JudiciarySystem
Database
Lawyer Actions
Login Request
Fetch User Details
User Details Response
Login Response
Update Lawyer Details
Send Updated Lawyer Details
Send Success Response
Send Success Response
Browse Cases
Fetch Case Data
Send Case Data
Send Case Data
Search By Keyword
Fetch Search Data
Send Search Data
Send Search Data
View Schedule
Fetch Schedule Data
Send Schedule Data
Send Schedule Data
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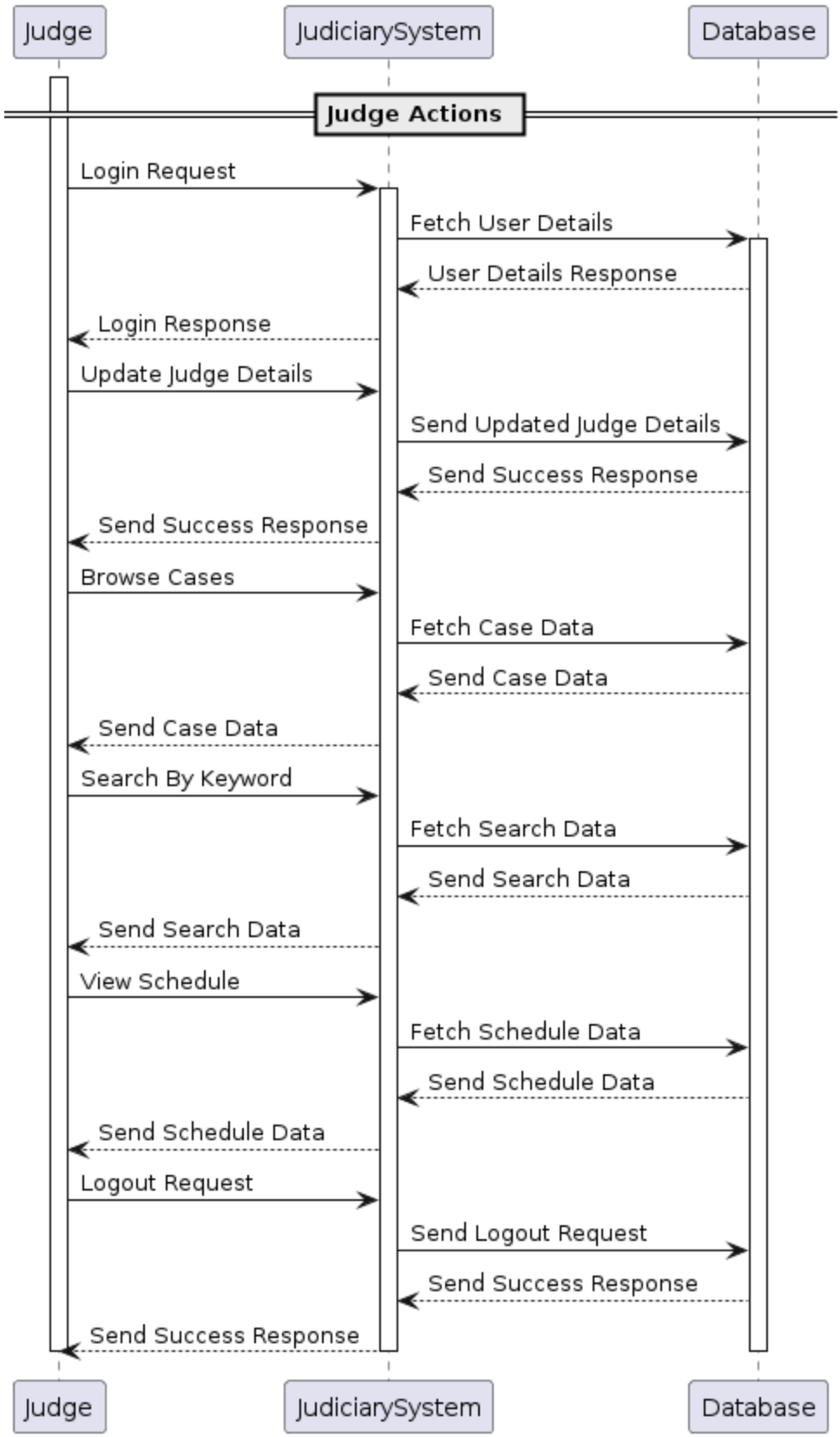
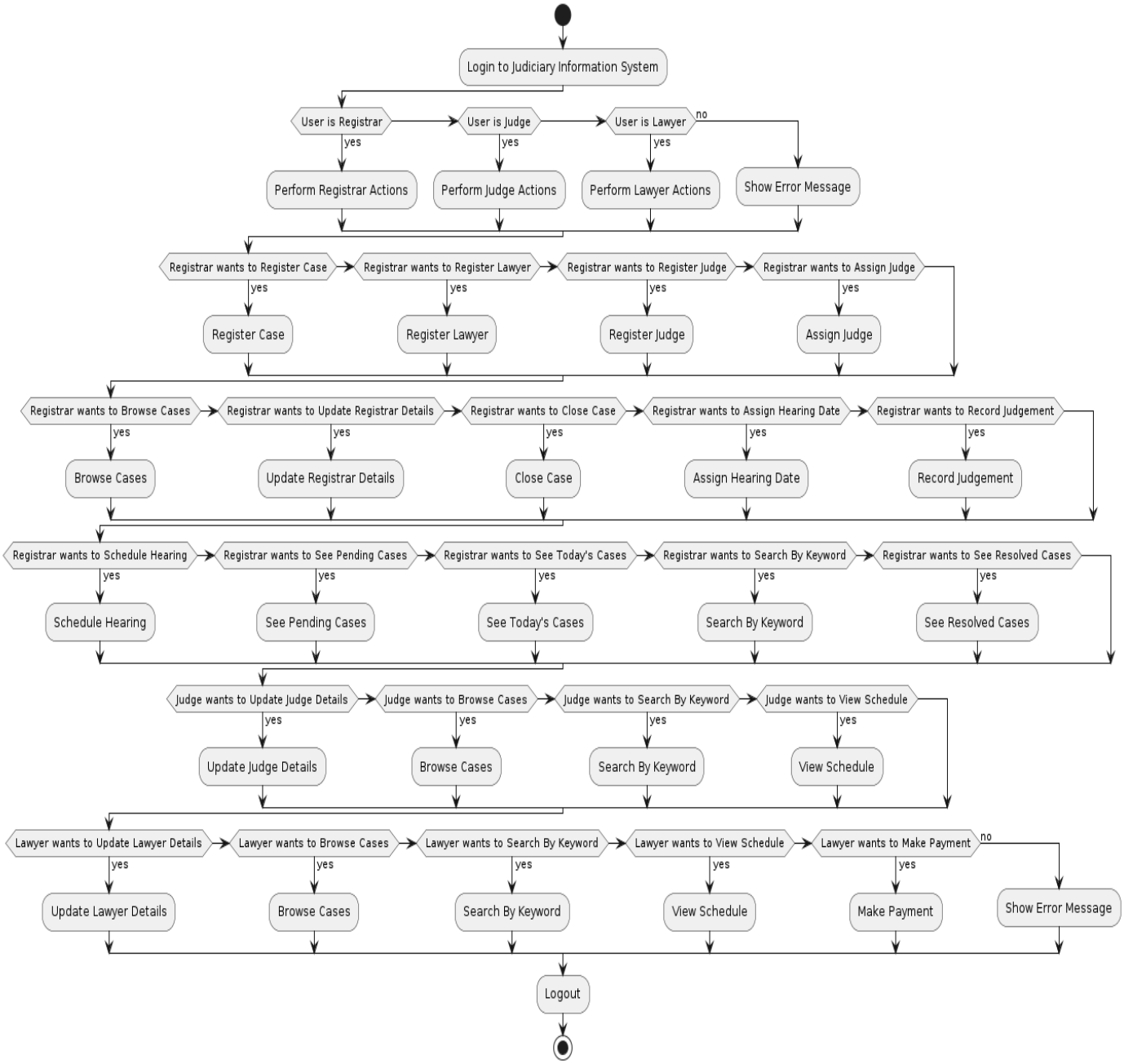
Send Success Response
Send Success Response
Lawyer
JudiciarySystem
Database


Judge
JudiciarySystem
Database
Judge Actions
Login Request
Fetch User Details
User Details Response
Login Response
Update Judge Details
Send Updated Judge Details
Send Success Response
Send Success Response
Browse Cases
Fetch Case Data
Send Case Data
Send Case Data
Search By Keyword
Fetch Search Data
Send Search Data
Send Search Data
View Schedule
Fetch Schedule Data
Send Schedule Data
Send Schedule Data
Logout Request
Send Logout Request
Send Success Response
Send Success Response
Judge
JudiciarySystem
Database

7.4 **Activity Diagram -**



8. Open Issues

- Specific database technology and platform to be used.
- Detailed definition of user roles and permissions.
- Implementation of data security and backup procedures.

9. Assumptions

- The availability of required hardware infrastructure such as computers and printers.
- Availability of internet connectivity for accessing external services if required.

10. Conclusion

JIS aims to enhance the efficiency and effectiveness of case activities undertaken by the various courts. By automating request management, prioritization, scheduling, and reporting processes, the software enables better utilization of resources and facilitates informed decision-making by court officials. This SRS serves as a guide for the development team and stakeholders, ensuring that the final software product meets the needs of the department and contributes to the overall improvement of judiciary infrastructure within the country. **Thank you for your attention to detail and thorough review throughout this process.**

Thank You