



Lawyer Hub

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Section: 6

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Lawyer Hub

Description:

The Lawyer Hub Website is a software solution aimed at modernizing the process of managing court case data for government advocates. It provides a digital platform for maintaining court case diaries, storing client information, tracking hearing schedules, and facilitating seamless communication between advocates and their clients. Through this web application, government advocates can efficiently manage their caseload, access case-related documents, and stay organized in their legal proceedings.

Objective:

The primary objective of the Lawyer Hub is to:

- **Digitize court case management:** By offering a centralized platform for maintaining court case diaries in a digital manner, the website aims to streamline the process of managing legal cases for government advocates.
- **Enhance data organization:** The website provides structured forms for recording case details, client

information, and hearing schedules, thereby improving data organization and accessibility for advocates.

- **Facilitate communication:** By enabling advocates to upload case-related documents and share updates with clients, the website promotes effective communication and collaboration between advocates and their clients.
- **Improve efficiency and productivity:** With features such as search, filter, and update functionalities, the website empowers advocates to efficiently manage their caseload, track hearing dates, and prioritize tasks effectively.
- **Ensure data security and privacy:** The website implements secure log-in functionality, data encryption, and access controls to safeguard sensitive case information and ensure compliance with privacy regulations.

Functional Requirements:

1. Homepage:

- Display a brief overview of the website's purpose and features.
- Provide a navigation menu to access different sections of the website.

2. Log-In:

- Allow registered users to securely log in.

- Validate username/email and password.
- Provide error messages for incorrect login credentials.

3. Registration:

- Provide a registration form with fields for:
 - Name
 - Designation
 - Chamber details (address, phone)
 - Membership number
 - Graduation
 - Phone
 - Email
 - Password
 - Date of birth
 - Address
 - Blood group
- Validate required fields and proper data formats.
- Ensure unique email/username validation.
- Implement captcha or other security measures to prevent spam or unauthorized access.
- Require acceptance of terms and conditions.

4. User Profile:

- Display advocate's information.
- Allow editing of advocate's information.

- Update chamber details.
- Provide change password functionality.
- Option to upload profile picture.

5. Cases:

- Display a list of cases with details including:
 - Case number
 - Client name
 - Court name
 - Court number
 - Relevant act
- View hearing dates for each case.
- Upload files (PDF or Docs) for each case.
- Mark cases as complete.
- Delete and update case entries.
- Search and filter cases.

6. Hearing Schedule:

- Display a calendar or list view of upcoming hearing dates.
- Link each date with respective case number and details.

7. Clients :

- Display a list of clients with:
 - Names
 - Phone numbers

- Addresses
- References
- Brief case description
 - Edit/update client information.
 - Search and filter clients.

8. Add Clients:

- Provide a form to add new clients with fields for:
 - Names
 - Phone numbers
 - Addresses
 - References
 - Case description
 - File upload
- Validate required fields and proper data formats.
- Upload relevant files/documents for each client.
- Display confirmation message upon successful addition.

9. Log out:

- Securely log out the user from the website.

10. Feedback:

- Provide information about the purpose and scope of the website.

- Include background information about the developers or the organization behind the website.

Non-Functional Requirements:

1. Security:

- Ensure data encryption for sensitive information.
- Implement secure password storage mechanisms (e.g., hashing).
- Provide protection against common web vulnerabilities (e.g., SQL injection, XSS).

2. Performance:

- Ensure fast load times for all pages.
- Optimize database queries to handle large volumes of data efficiently.

3. Usability:

- Provide a user-friendly interface with intuitive navigation.
- Ensure forms are easy to fill with clear instructions and validations.

4. Reliability:

- Ensure high availability with minimal downtime.
- Implement regular data backups to prevent data loss.

5. Scalability:

- Design the system to handle an increasing number of users and data entries without performance degradation.

6. Compatibility:

- Ensure compatibility with major web browsers (Chrome, Firefox, Safari, Edge).
- Provide a responsive design for use on various devices (desktop, tablet, mobile).

7. Maintainability:

- Ensure the codebase is well-documented.
- Implement modular design for ease of updates and maintenance.

8. Accessibility:

- Adhere to accessibility standards (e.g., WCAG) to ensure the website is usable by people with disabilities.

9. Auditability:

- Implement logging for critical actions (e.g., log-in attempts, data modifications) for audit purposes.

10. Localization:

- Provide support for multiple languages if the user base is international.

These functional and non-functional requirements will help in developing a comprehensive, secure, and user-friendly Lawyer Hub web application for managing court case data digitally.

System Architecture:

- Description of the overall architecture of the website.
- Illustration of the interaction between different components and subsystems.

User Interface Design:

- Design mockups or wireframes of the website's user interface for each page.
- Explanation of the layout, navigation, and visual elements.

Implementation:

- Description of the implementation process, including software development methodologies, technologies used, and coding practices.

- Discussion of any challenges faced during implementation and their solutions.

Testing and Quality Assurance:

- Overview of the testing strategies employed to ensure the functionality, usability, and security of the website.
- Presentation of test results and any issues identified and resolved.

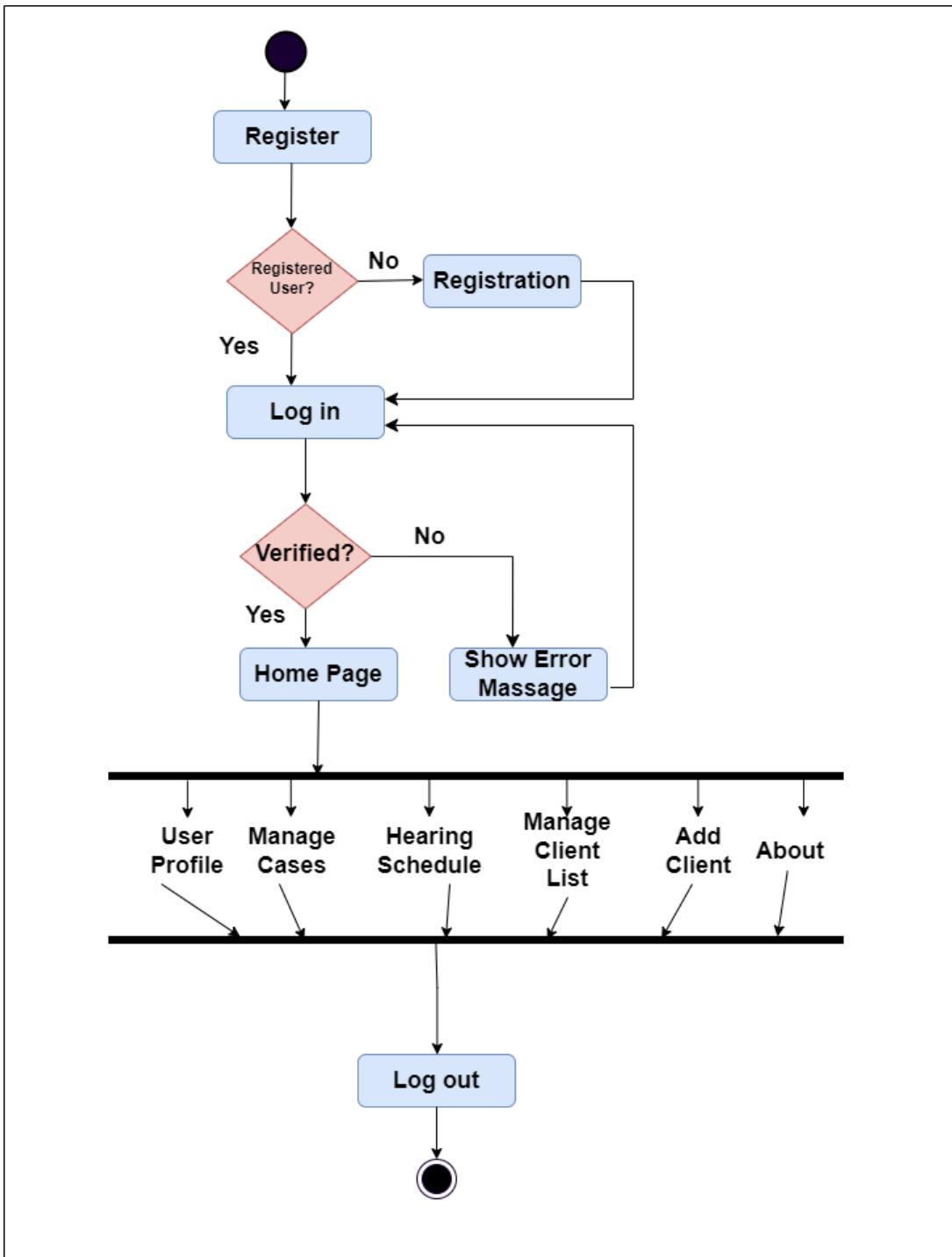
Diagram

- Develop Use Case Diagram, Activity Diagram, Class Diagram, Component Diagram, Sequence Diagram, Data flow diagram and Deployment Diagram to illustrate the system's functionalities, workflow, class relationships, and component architecture, aiding in system understanding and design visualization.

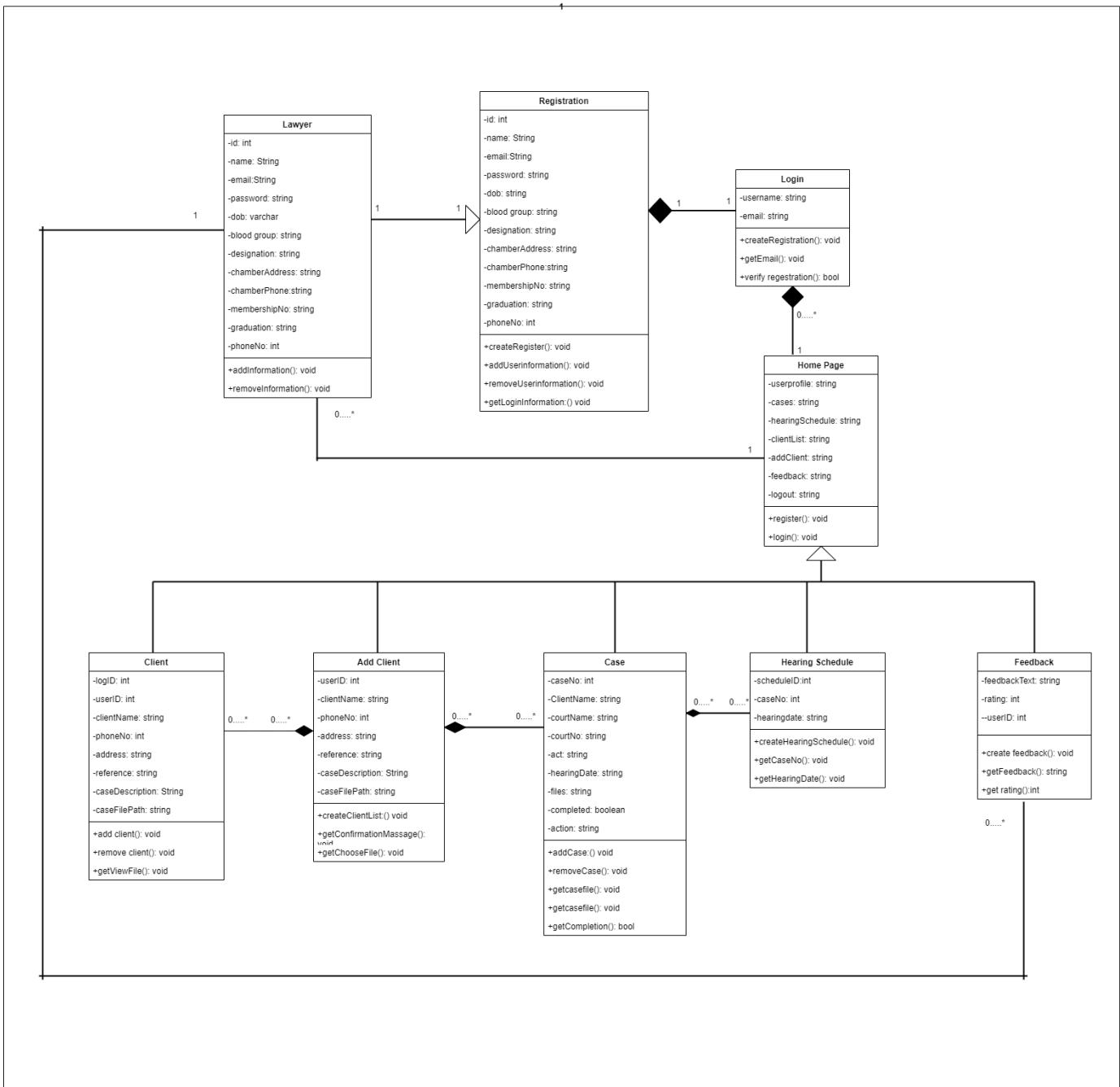
Use Case Diagram



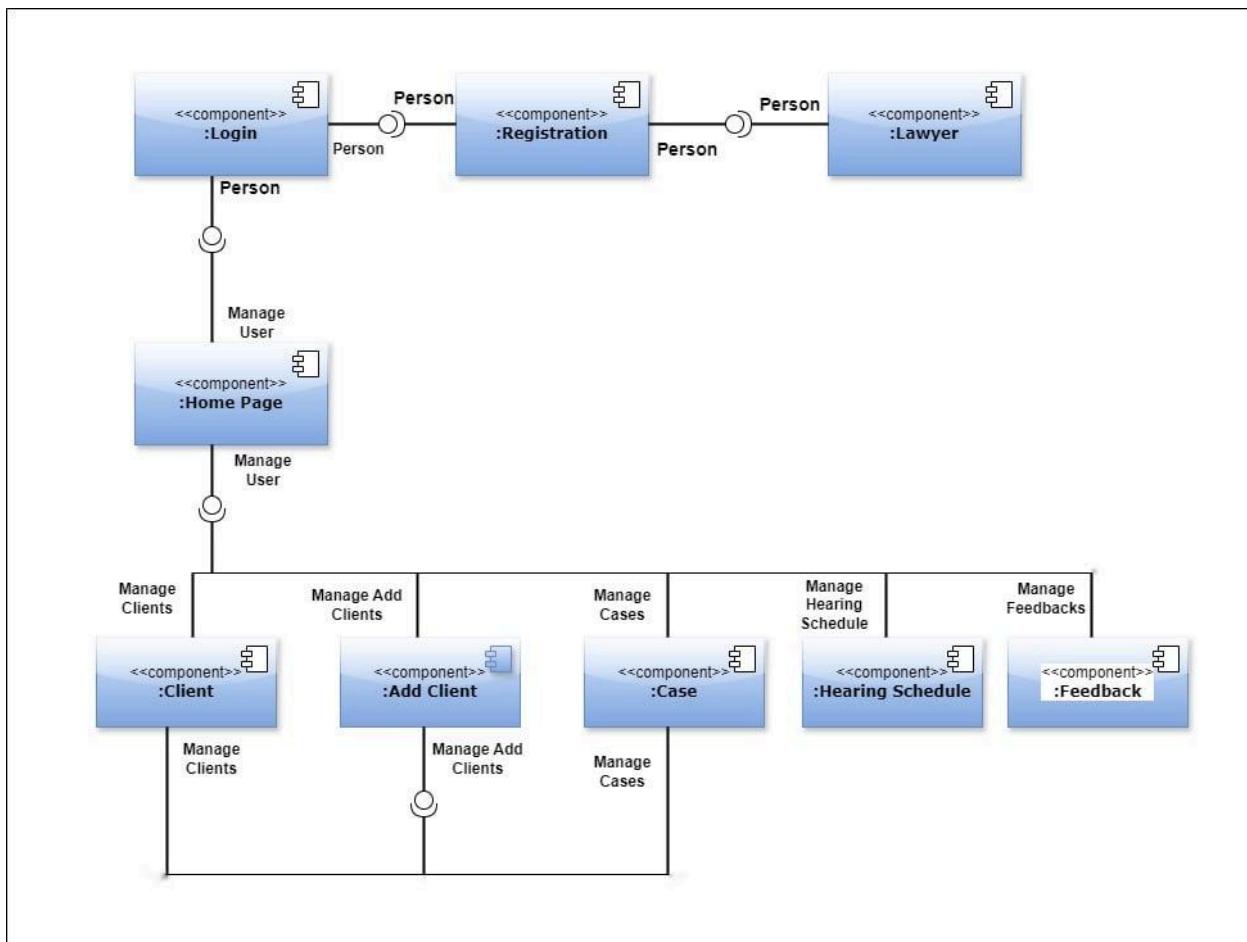
Activity Diagram



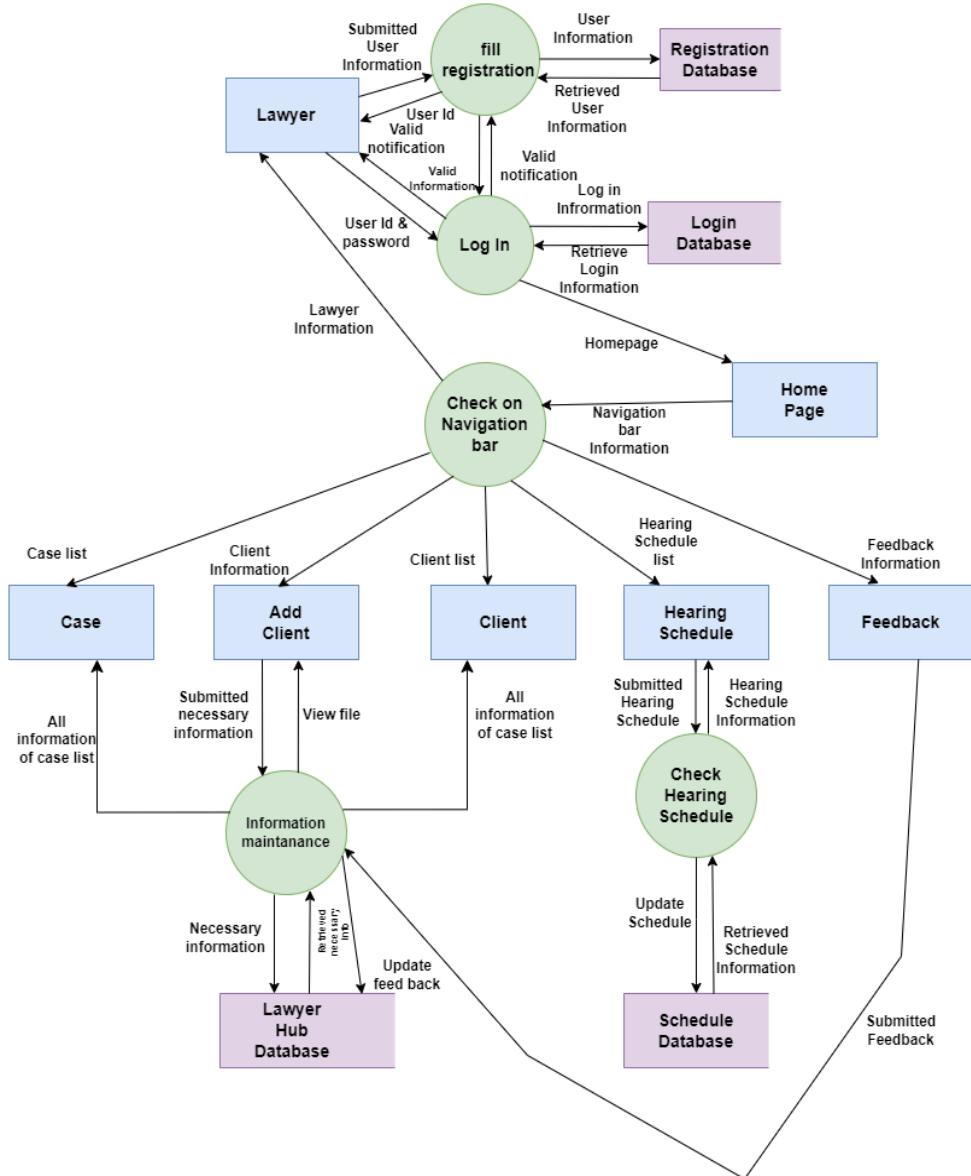
Class Diagram



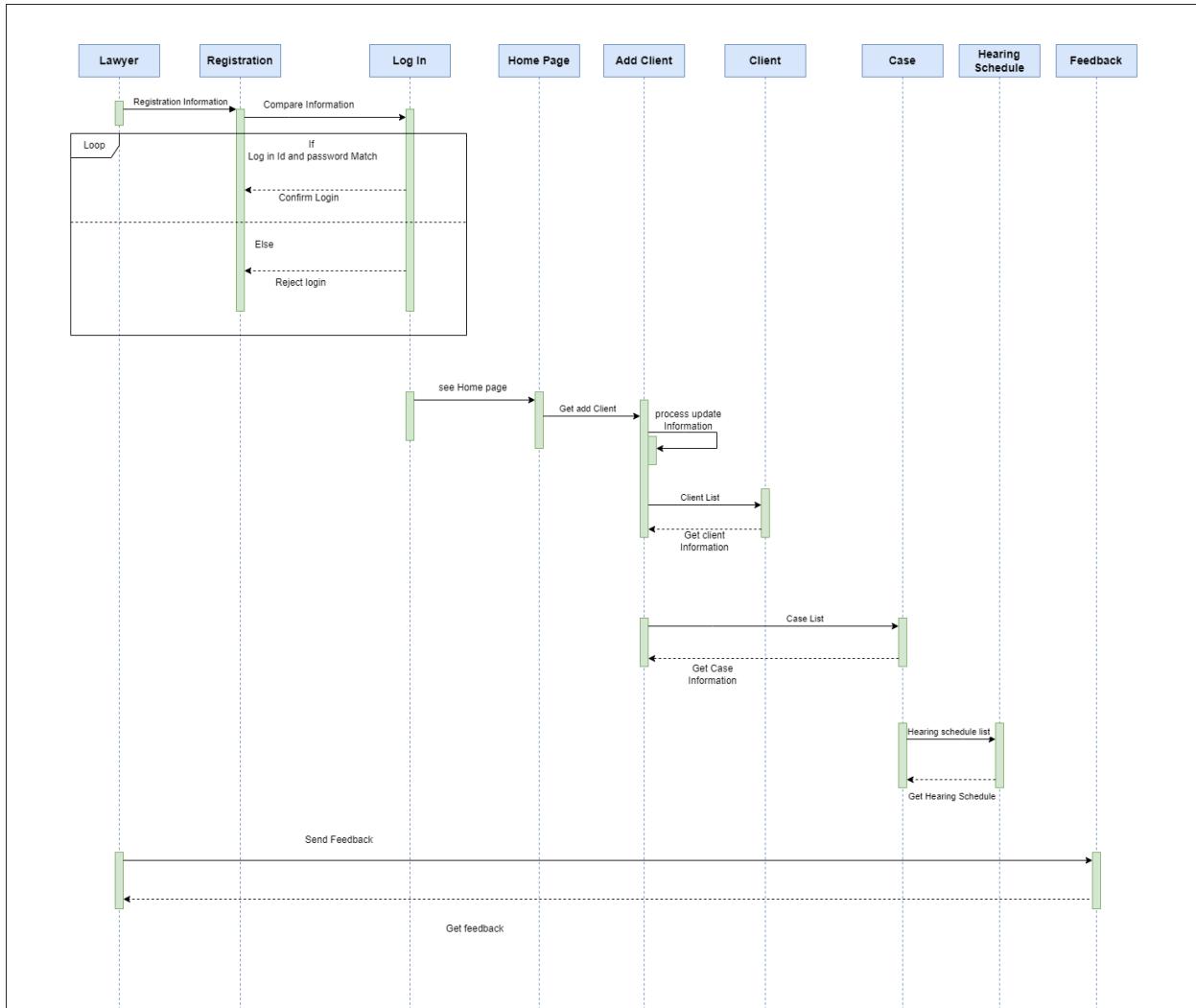
Component Diagram



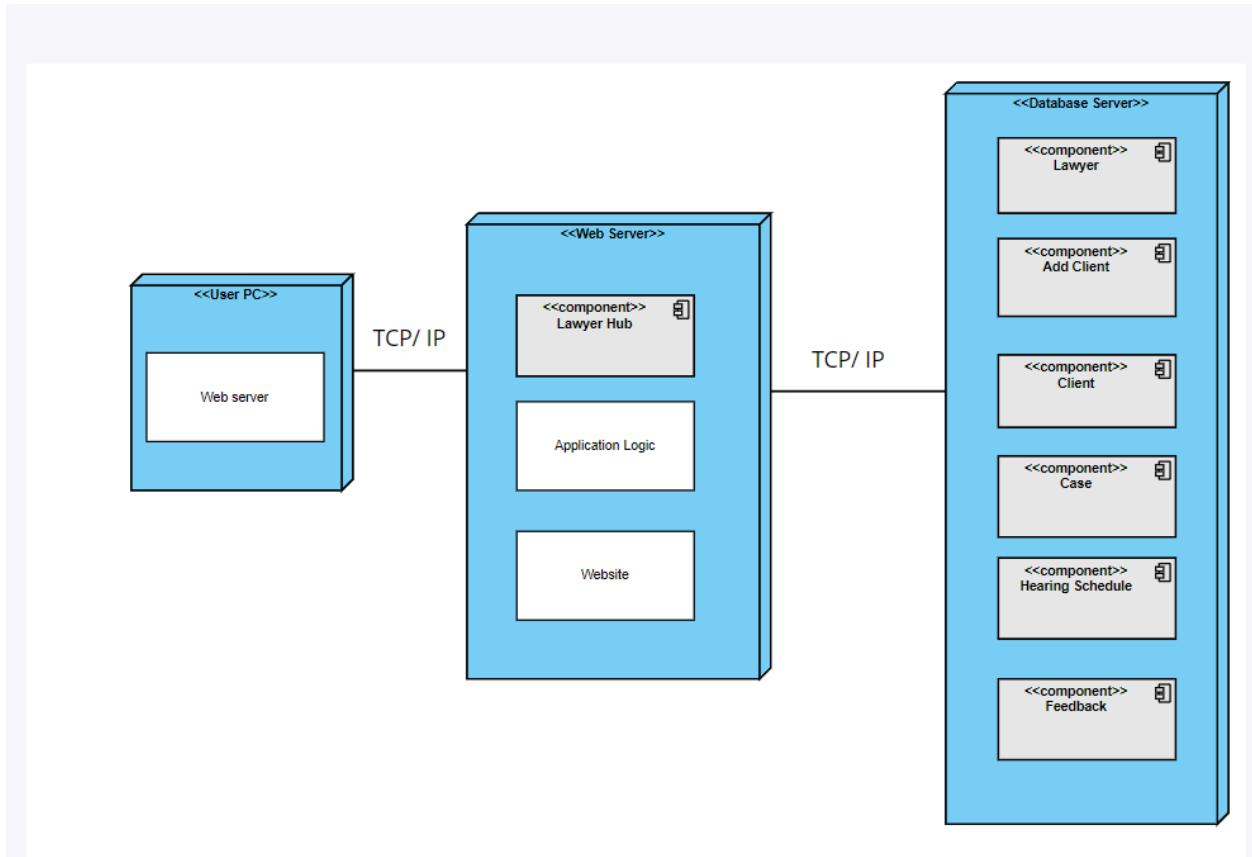
Data Flow Diagram



Sequence Diagram



Deployment Diagram



Group Responsibilities

Project Management

- **Project Manager:** Oversee the entire development process, ensure milestones are met, manage timelines and budgets, and facilitate communication between teams.

Development Team

- Front-End Developers: Responsible for developing the user interface and user experience, ensuring the platform is responsive and user-friendly.
- Back-End Developers: Handle the server-side logic, database management, and integration of front-end elements with the back-end.
- Full-Stack Developers: Provide support across both front-end and back-end as needed.
- Database Administrators: Design, implement, and maintain the database ensuring data integrity and security.

Design Team

- UI/UX Designers: Create wireframes, prototypes, and design layouts ensuring a seamless user experience.
- Graphic Designers: Develop visual content such as icons, logos, and other graphical elements.

System Designer

System Architecture Design:

- Design the overall architecture of the Lawyer Hub application, including front-end, back-end, database, and integrations.
- Ensure the system is scalable, secure, and performs efficiently.

Technical Specifications:

- Create detailed technical specifications and design documents that outline the system's structure, components, and interfaces.
- Define the technology stack and development frameworks to be used.

Integration Planning:

- Plan for integration with external systems and services, such as email services, payment gateways, and third-party APIs.
- Ensure smooth data flow between different modules and external systems.

Prototype Development:

- Develop prototypes or proof-of-concept versions of critical system components to validate design choices and receive early feedback.
- Work closely with front-end and back-end developers to ensure the implementation aligns with the designed architecture.

- Coordinate with UI/UX designers to integrate their designs into the system architecture effectively.

System Security:

- Design security measures to protect user data and prevent unauthorized access, including encryption, authentication, and authorization mechanisms.
- Conduct security assessments and integrate security best practices into the system design.

Documentation:

- Create and maintain comprehensive design documentation for future reference and to assist in system maintenance and updates.
- Ensure all design documents are updated to reflect changes made during development.

System Analyst

1. Requirements Gathering:

- Work with stakeholders to gather and document detailed requirements for the Lawyer Hub application.
- Conduct interviews, surveys, and workshops to understand the needs and expectations of end users.

2. Requirement Analysis:

- Analyze and prioritize requirements to ensure the most critical features are developed first.
- Create use cases, user stories, and functional specifications based on gathered requirements.

3. Feasibility Study:

- Conduct feasibility studies to evaluate the technical and financial viability of the project.
- Provide insights into potential risks and challenges and suggest mitigation strategies.

4. System Modeling:

- Develop models and diagrams (e.g., all UML diagrams, process models) to represent the system's functionality and data flow.
- Use modeling tools to visualize system components and their interactions.

5. Gap Analysis:

- Identify gaps between current systems (if any) and the proposed Lawyer Hub system.
- Provide recommendations for bridging these gaps through new functionalities or enhancements.

6. Specification Documentation:

- Document detailed functional and non-functional requirements for the development team.
- Ensure that all specifications are clear, concise, and testable.

7. Quality Assurance:

- Collaborate with QA engineers to develop test plans and cases that ensure all requirements are met.
- Participate in testing phases to verify that the system meets the specified requirements and provides a satisfactory user experience.

8. Stakeholder Communication:

- Act as a liaison between stakeholders and the development team to ensure clear communication and understanding of requirements.
- Provide regular updates to stakeholders on project progress and any changes to requirements.

Development Timeline

Phase 1: Planning and Design (1 month)

- Week 1: Requirements gathering and analysis
- Week 2: Wireframing and UI/UX design
- Week 3-4: Design approval and finalization

Phase 2: Development (2 months)

- Month 1:
 - Set up development environment
 - Develop user authentication and registration modules
 - Develop user profile management and case management modules
- Month 2:
 - Integrate all modules and conduct internal testing
 - Develop hearing schedule, clients list, and add clients modules

Phase 3: Testing (1 month)

- Week 1-2: Conduct unit and integration testing
- Week 3: Conduct user acceptance testing (UAT)

- Week 4: Bug fixing and final adjustments

Phase 4: Deployment (1 month)

- Week 1: Set up production environment
- Week 2: Deploy application to production
- Week 3-4: Monitor deployment and provide initial support

Development and Deployment Cost Estimation

Personnel Costs:

1. Project Manager:

- \$10,000/month x 5 months = \$50,000

2. Front-End Developers (2):

- \$7,000/month x 5 months x 2 = \$70,000

3. Back-End Developers (2):

- \$8,000/month x 5 months x 2 = \$80,000

4. Full-Stack Developers (1):

- \$9,000/month x 5 months = \$45,000

5. Database Administrators (1):

- \$8,000/month x 5 months = \$40,000

6. UI/UX Designers (1):

- \$7,000/month x 2 months = \$14,000

7. Graphic Designers (1):

- \$6,000/month x 1 month = \$6,000

8. QA Engineers (2):

- \$6,000/month x 1 month x 2 = \$12,000

9. DevOps Engineers (1):

- \$9,000/month x 1 month = \$9,000

10. Technical Support (2):

- \$5,000/month x 1 month x 2 = \$10,000
- 11. **Documentation Specialists (1):**
- \$5,000/month x 2 months = \$10,000

Total Personnel Costs: \$346,000

Software and Tools:

- Development tools and licenses: \$10,000
- Testing tools and services: \$5,000
- Design tools and resources: \$3,000

Total Software and Tools Costs: \$18,000

Deployment Costs:

1. Infrastructure:

- Cloud hosting services: \$500/month x 12 months = \$6,000
- Domain registration and SSL certificates: \$500/year

2. Total Infrastructure Costs: \$6,500

3. Maintenance and Support:

- Ongoing maintenance and support (6 months post-deployment): \$10,000

4. Total Maintenance and Support Costs: \$10,000

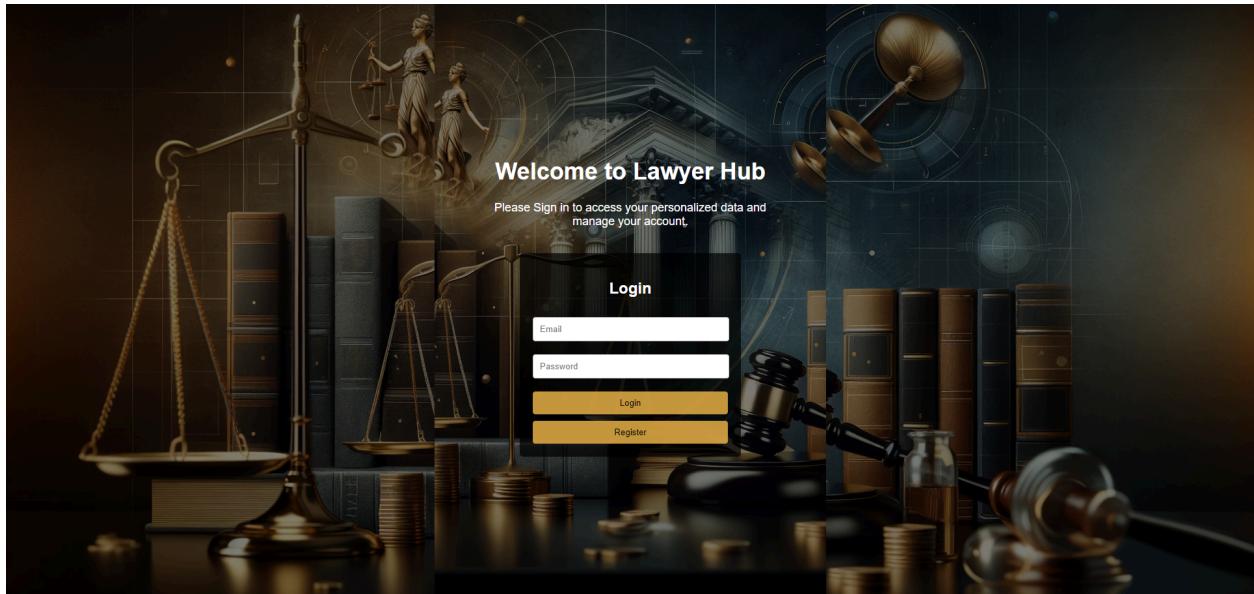
Grand Total Cost Estimation

- **Total Personnel Costs:** \$346,000
- **Total Software and Tools Costs:** \$18,000
- **Total Deployment Costs:** \$6,500
- **Total Maintenance and Support Costs:** \$10,000

Grand Total: \$380,500

Here is the visualization of our project and its DataBase

login



Registration

A screenshot of the Lawyer Hub registration page. The page has a "Register" title at the top. It contains two columns of input fields. The left column includes fields for Name, Email, Password, Date of Birth (with a date picker), Blood Group (with a dropdown menu labeled "Select Blood Group"), and Phone. The right column includes fields for Designation, Chamber Address, Chamber Phone, Membership No, Graduation Year, and another Phone field. A large yellow "Register" button is located at the bottom right of the form.

Home page

Home User Profile Cases Hearing Schedule Clients List Add Clients Feedback Log out

Lawyer_Hub

This is a platform for managing your legal cases and clients.

Where lawyers can securely store, access, and manage their case files, client details, schedules, billing information, and more.

User Profile

Home User Profile Cases Hearing Schedule Clients List Add Clients Feedback Log out

User Profile

Name: Tithi paul
Email: tithi@gmail.com
Date of Birth: 2001-01-01
Blood Group: O+
Designation: Adv.
Chamber Address: Rampura
Chamber Phone: 01234567
Membership No: 01
Graduation Year: 2022
Phone: 01912345678

Edit Profile

Edit Profile

Edit Profile

Name:

Email:

Date of Birth:

Blood Group:

Designation:

Chamber Address:

Chamber Phone:

Graduation Year:

Phone:

Save Changes

Cases

Home User Profile Cases Hearing Schedule Clients List Add Clients Feedback Log out

Cases List

Case No	Client Name	Court Name	Court No	Act	Hearing Dates	Files	Completed	Action
1	Jara				2024-05-30	View	No	Edit Delete
2	Ali				2024-05-31	View	No	Edit Delete

Edit

Home User Profile Cases Hearing Schedule Clients List Add Clients Feedback Log out

Edit Case

Client Name: Jara
Court Name:
Court No.:
Act:
Hearing Dates: 2024-05-30
Completed:
Case File: Choose File | No file chosen
Update Case

Hearing Schedule

Home User Profile Cases Hearing Schedule Clients List Add Clients Feedback Log out

Hearing Schedule

Case No	Client Name	Hearing Dates	Action
1	Jara	2024-05-30	<button>Set Hearing Date</button>
2	Ali	2024-05-31	<button>Set Hearing Date</button>

Set

Set Hearing Date



Client List

Add client

The screenshot shows a dark-themed web application for managing clients. At the top, a navigation bar includes links for Home, User Profile, Cases, Hearing Schedule, Clients List, Add Clients, Feedback, and Log out. The main content area is titled "Add New Client". It contains several input fields: "Client Name:" (with a red asterisk), "Phone:", "Address:", and "Reference:". Below these is a "Case Description:" field with a dropdown menu showing "Choose File" and "No file chosen". A large "Add Client" button is at the bottom of the form. The background features a decorative banner with gold-colored scales of justice, books, globes, and other legal symbols.

Feed Back

The screenshot shows a dark-themed web application for providing feedback. The top navigation bar is identical to the one in the previous screenshot. The main content area is titled "Feedback". It includes a brief explanatory text: "This is a platform for any feedback or inquiries you need." followed by a "Your Feedback:" label and a large, empty text input field. At the bottom of the input field is a yellow "Submit Feedback" button. The background features a decorative banner with gold-colored scales of justice, books, globes, and other legal symbols.

Lawyer Hub Database

Add client

The screenshot shows the 'addclients' table in the 'lawyer_hub' database. The table has columns: LogID, UserID, ClientName, Phone, Address, Reference, CaseDescription, CaseFilePath, and Timestamp. There are three rows of data:

LogID	UserID	ClientName	Phone	Address	Reference	CaseDescription	CaseFilePath	Timestamp
1	1	Jara	0199224563	1/A Magbazar Rd	Ismail	Theft	uploaded_files/Theft-Case.pdf	2024-05-16 04:44:17
2	1	Ali	0199224565	41/1 East Rampura	Ismail	Suspicious Death	uploaded_files/suspicious-death-case.pdf	2024-05-16 04:46:08
3	1	Alam	01715602645	Banabree	Ismail	Murder	uploaded_files/Murder Case.pdf	2024-05-28 13:22:22

Cases

The screenshot shows the 'cases' table in the 'lawyer_hub' database. The table has columns: CaseNo, UserID, ClientName, CaseDescription, CourtName, CourtNo, Act, HearingDates, CaseFilePath, and Completed. There are six rows of data:

CaseNo	UserID	ClientName	CaseDescription	CourtName	CourtNo	Act	HearingDates	CaseFilePath	Completed
1	1	Jara	Theft			2024-05-30		uploaded_files/Theft-Case.pdf	0
2	1	Ali	Suspicious Death			2024-05-31		uploaded_files/suspicious-death-case.pdf	0
3	1	Alam	Murder			2024-06-21		uploaded_files/Murder Case.pdf	0
5	1	Mina	NULL					/uploads/Quiz-11.pdf	0
7	1	Liza	NULL					/uploads/Mini project - Spring 2024.pdf	0
8	1	xyz	NULL	rds	2	13	2024-05-16	/uploads/CSE347-Lab3_Tlithi Paul (2021-2-60-057).p...	1

Clients

The screenshot shows the MySQL Workbench interface for the 'clients' table. The table has columns: ClientID, UserID, ClientName, Phone, Address, Reference, CaseDescription, and CaseFilePath. The data includes rows for Jara, Ali, Alam, Mina, Liza, and xyz.

ClientID	UserID	ClientName	Phone	Address	Reference	CaseDescription	CaseFilePath
1	1	Jara	0199224563	1/A Magbazar Rd	Ismail	Theft	uploaded_files/Theft-Case.pdf
2	1	Ali	0199224565	41/1 East Rampura	Ismail	Suspicious Death	uploaded_files/suspicious-death-case.pdf
3	1	Alam	01715602645	Banasree	Ismail	Murder	uploaded_files/Murder Case.pdf
11	1	Mina	0199224568	21 Aftabnagar	Ismail	abc	/uploads/Quiz-11.pdf
13	1	Liza	01911111111	Magbazar	Ismail	gfc	/uploads/Mini project - Spring 2024.pdf
14	1	xyz	0123456789	41/1 East Rampura	Ismail	asd	/uploads/CSE347/Lab3/Tithi Paul (2021-2-60-057).pdf

User Information

The screenshot shows the MySQL Workbench interface for the 'users_information' table. The table has columns: id, name, email, password, dob, blood_group, designation, chamber_address, chamber_phone, and membership_no. The data includes rows for Tithi paul and Ismail Mahmud.

id	name	email	password	dob	blood_group	designation	chamber_address	chamber_phone	membership_no
1	Tithi paul	tithi@gmail.com	\$2y\$10\$lgVUo7jTU7T8M4ormPaHkuZtk9tXGCDlPPRGSWmMizu...	2001-01-01	O+	Adv.	Rampura	01234567	01
2	Ismail Mahmud	ismail@gmail.com	\$2y\$10\$CW8EBZfjNKG6e8gW1SO7beeCc87rhE6yapG0r3Dc...	2000-01-10	B+	Adv.	Shantinagar	01234567	02

Feedback

The screenshot shows a MySQL database interface with the following details:

- Server:** 127.0.0.1
- Database:** lawyer_hub
- Table:** feedback

The table structure is as follows:

	FeedbackID	UserID	FeedbackText	CreatedAt
<input type="checkbox"/>	1	1	Add client isn't show in the Hearing Schedule and ...	2024-05-28 22:06:56
<input type="checkbox"/>	2	1	it is one of the best website for lawyer	2024-05-30 11:24:54
<input type="checkbox"/>	3	1	the site is good	2024-05-30 14:42:44

Below the table, there are buttons for **Edit**, **Copy**, and **Delete** for each row. There are also global buttons for **Check all**, **With selected:**, **Edit**, **Copy**, **Delete**, and **Export**.

Query results operations:

- Print
- Copy to clipboard
- Export
- Display chart
- Create view

Bookmark this SQL query:

Label: Let every user access this bookmark

Bookmark this SQL query

Conclusion:

The proposed Lawyer Hub Website offers a comprehensive solution to the challenges faced by government advocates in managing court case data. By providing a user-friendly interface, robust security measures, and essential functionalities for case and client management, the website aims to enhance efficiency and productivity in legal operations.

