

# Design and Implementation of Lawyer – Client Communication Application

Rutuja Ghogare, Rutuja Vanjari, Neha Pote, Aditi Rajarshi, Rama Gaikwad

Department of Computer Engineering, Anantrao Pawar College of Engineering and Research, Pune

\*\*\*

**Abstract** -Crime is on the rise in our country, and most people are unaware of the criminal laws codified in the Indian Penal Code (IPC) (Indian Penal Code). As a result, it is important to educate citizens on all of the laws against crime enacted by our constitution so that people can come forward to file a complaint. This project is being carried out specifically for this purpose. The project online law system is a software system that incorporates all of the IPC's rules, allowing people to come and look up the laws for the crimes they are interested in. According to certain keywords, the laws are divided into different parts. There is also a search function where the user can enter his question and find or search for what he needs. There is also a feature that allows users to contact lawyers. Users may ask questions and record cases using an inquiry form, which is then submitted to the appropriate court authority. This project provides information about all of the local courts that deal with specific crimes.

**Key Words:** Android, xampp, lawyer.

## INTRODUCTION

In our country, crime is on the rise, and the vast majority of citizens are unaware of the criminal laws codified in the Indian Penal Code (IPC) (Indian Penal Code). As a result, it is important to inform citizens on all of the anti-crime legislation passed by our constitution so that they can file a lawsuit. This project is being carried out with this goal in mind. Those in charge of operating justice systems in many parts of the world are increasingly shifting to digitization and technical solutions in order to improve the consistency and accessibility of justice. Concepts relating to both system design itself ("system design principles") and designing and managing the process by which systems are designed and implemented ("design management principles") are becoming increasingly recognized among those working on e-justice initiatives, just as they have in other areas where information systems (IS) have been created and implemented. A specialized e-justice literature has also focused attention on the impact of law and technology problems that are uniquely important to both deciding what it means to have a successful outcome and improving the possibility of making positive decisions about the design and execution of justice sector initiatives in

particular. The aim of this project is to clarify and elaborate system design and design management concepts in a way that will help an interdisciplinary legal audience better understand how these principles will influence a system's ability to enhance access to justice. We address many e-justice programs in the EU and Canada. To highlight our arguments, we use working national and transnational e-justice systems in the EU, as well as a comparison of Canadian experiences with centralized case management systems.

## LITERATURE SURVEY

**1) Paper Name:** Exploration on the application of distance education in the law teaching in Institutions of Higher Learning

**Authors:** Rongxia Zhang, Weisheng Wang

**Description:** Distance education's teaching paradigm is a product of advanced science and technology, as well as the idea of teaching in contemporary society. However, due to the practicality of teaching in law majors, the distance education teaching mode cannot be entirely applied to law professional teaching. As a result, we must investigate an appropriate teaching model for law major distance education.

**2) Paper Name:** "Gamification" and Legal Education A Game Based Application for Teaching University Law Students

**Authors:** Dr Vassiliki Bouki, Dr Daphne Economou

**Description:** The aim of this paper is to present a game-based application created for the School of Law at the University of Westminster in London. The programme is designed for use in the classroom and is based on a hypothetical scenario. The paper addresses the challenges of developing game-based applications for law education and offers some design suggestions. The implementation was carried out using the e-learning authoring software 'Articulate Storyline.' The app is available as an offline app for iPads through the 'Articulate Mobile Player,' and it can be used on any internet-connected device.

**3) Paper Name:** Study of Russian Law Trends related to Energy Efficiency and Saving based on Renewable Energy Sources

**Authors:** Shestakova A.L., Kirpichnikova I.M

**Description:** The problems of renewable energy production are examined in this article. It examines international renewable energy growth policies and compares them to Russian policies. The paper shows a lack of progress in the Russian legal and regulatory system, which defines the study's relevance. The theoretical and methodological foundation for this study is established by Russian and foreign scientific articles, as well as laws related to renewable energy application.

**4) Paper Name:** Application for digital signature and generation of certificates using the Bouncy Castle API considering digital signature law in El Salvador

**Authors:** Alvaro Hernan Zavala Ruballo

**Description:** Given that El Salvador's digital signature law was passed just over two years ago, granting it the same legal authority as a handwritten signature, the framework built with the Bouncy Castle API was created to aid and promote the process of signing and verifying documents, as well as to produce certificates that provide authentication, data integrity, and non-repudiation services. The application is divided into two parts: the first is a desktop application built in Java Swing that generates the private-public key pair and uses the Elliptic Curve Digital Signature Algorithm (ECDSA) and the hash function SHA3 for digital fingerprinting, and the second is a web application built in JSP that generates digital certificates and simulates the tasks of a Certification Authority. A CA offers certification services that ensure the relationship between a user's identity and his public key to third parties who trust their certificates.

### PROBLEM STATEMENT

Developing single point solution for Lawyers and Clients to seek legal advice on a click. The use of technology such as web-based apps is considered capable of overcoming obstacles in carrying out business activities during the pandemic. A web-based app enables everyone in an organization to interact with each other within any condition, as long as there is an internet connection.

### MATHEMATICAL MODEL

<b>Input</b> =S{U ,L, Reg ,Log ,Doc, Pay}
U: User
L :Lawyer
Reg : User registration
Log: User Login
Doc: document sending to
Show: lawyer can see document.
Pay: payment to lawyer
<b>Procedure</b> =
U={Doc}
L={Show}
U={pay}
<b>Output</b> =
Successfully send document and see the document payment.

Fig -1: Mathematical Model

### DIAGRAMS

#### 1. Class Diagram:

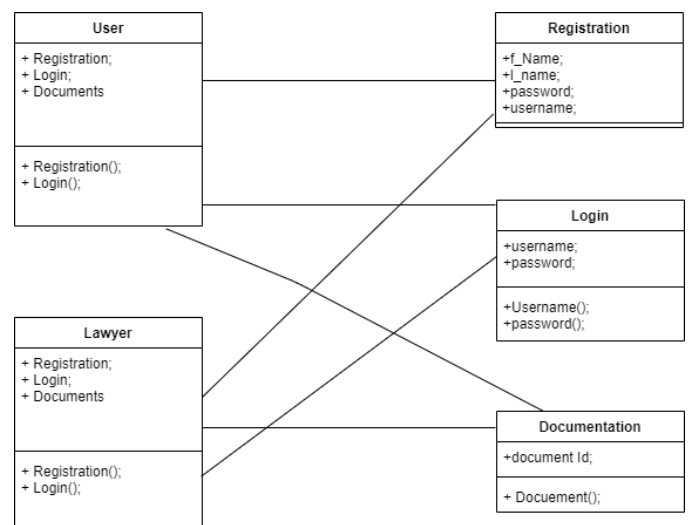


Fig-Class Diagram

#### 2. Use Case Diagram:

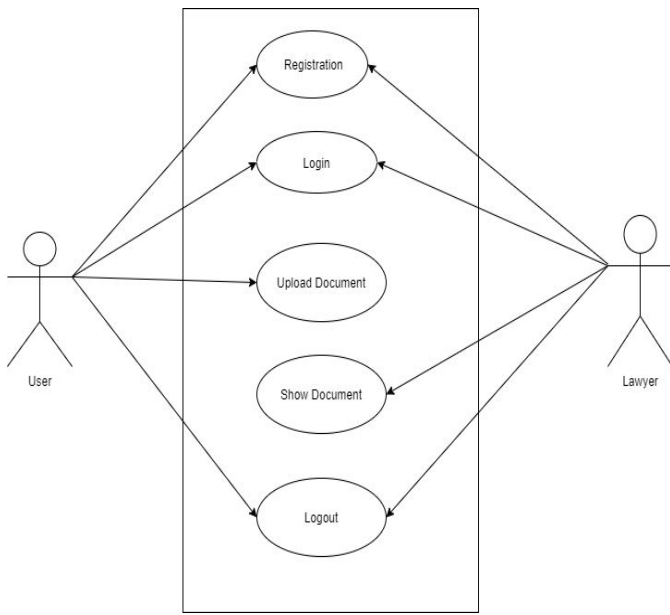


Fig-Use case Diagram

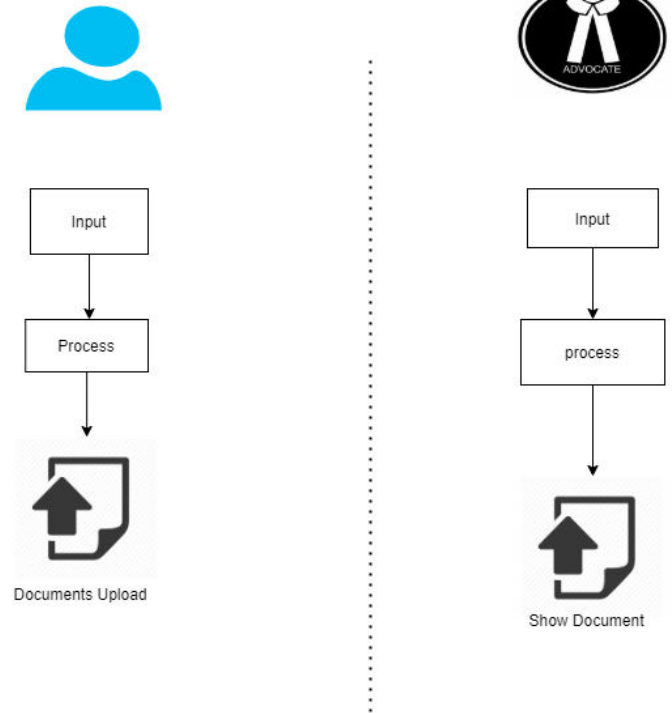


Fig- Data Flow Diagram Level 2

3. Data Flow Diagram:



Fig- Data Flow Diagram Level 1

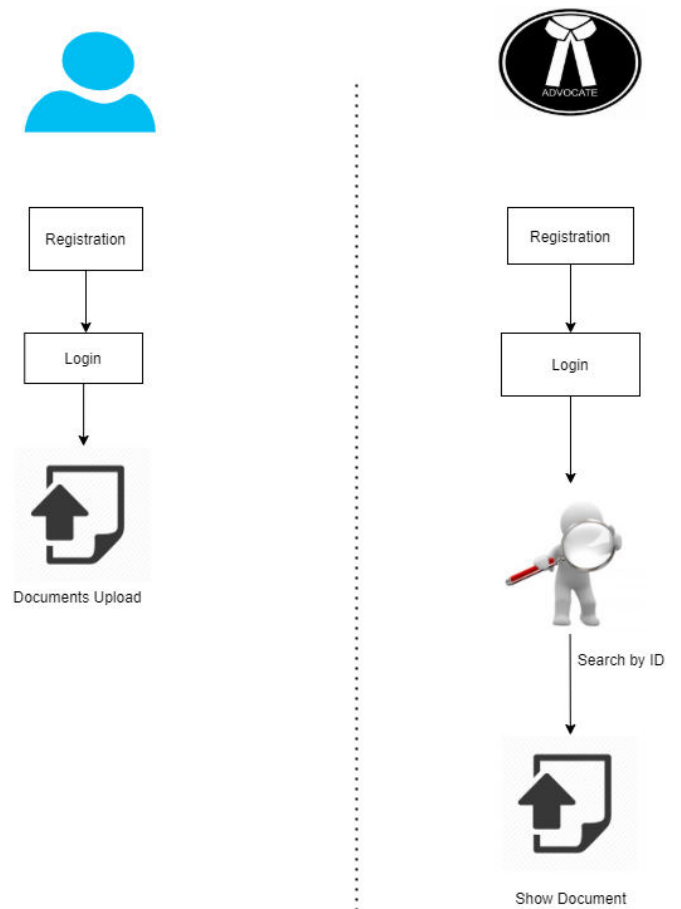
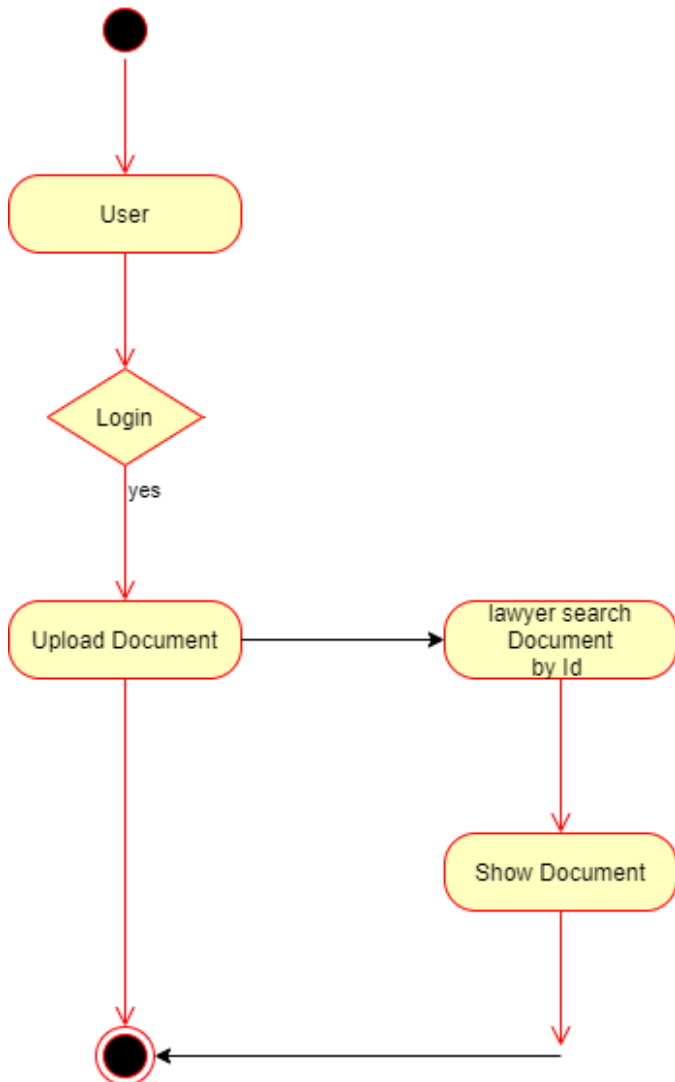


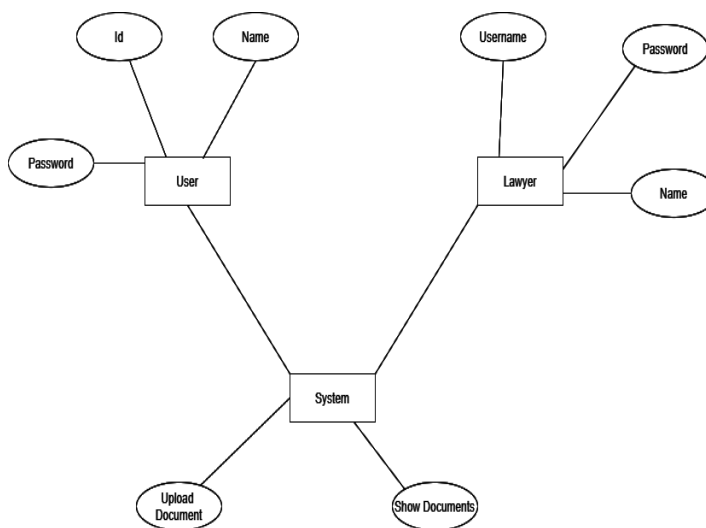
Fig- Data Flow Diagram Level 3

**4. Activity Diagram:**



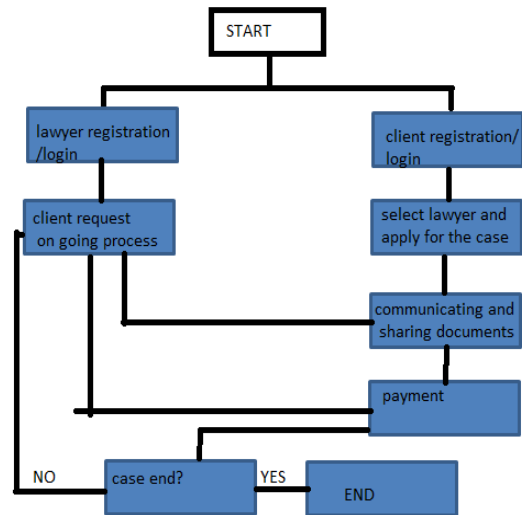
**Fig-Activity Diagram**

**5. ER Diagram:**



**Fig-ER Diagram**

**6. Project Flow Diagram:**



**Fig-Project Flow Diagram**

**IMPLEMENTATION WORK**

Modules:

User Login - User can login to the system using his User ID and password.

Law Search- User can search for particular law as per the area of law.

Request to Lawyer - User can search for lawyer of particular court based on the expertise. The system provides the lawyer contact and description so that users can refer them.

Lawyer Login - Lawyer can view their requests.

Notification - Users can view notification that whether their request is accepted or rejected.

Chat window- Both the client and the user can communicate.

**CONCLUSION**

As a result, it is important to educate citizens on all of the laws against crime enacted by our constitution so that people can come forward to file a complaint. Taking these factors into account, we are attempting to create a structure that would benefit both lawyers and clients by providing a single point of contact.

## REFERENCES

1. ChawanTaha Hama Ali ;AsafVarol“Design and Implementation of a Simple Online Court Case Management System Based on the Android Platform “ 2020
2. CH. Sindhuja ; P. Siva Prasad ; L. Venkateshwarakiran “Automation system for law and legal proceedings “ 2019
3. Wan MohdHirwani bin Wan Hussain ; MohdNizam Abdul Rahman ; Noor InayahYakub ; ZinatulAshiqinZainul ; Wan Kamal Mujani “Online legal marketing: How lawyers assist in commercialization of university research ”2010
4. N. K. Fontaine, R. Ryf, H. Chen, A. V. Benitez, J. E. A. Lopez, R. A. Correa, B. Guan, B. Ercan, R. P. Scott, S. J. B. Yoo, L. Gruner-Nielsen, Y. Sun, and R. J. Lingle, “30x30 MIMO transmission over 15 spatial
5. S. Deterding, D. Dixon, R. Khaled, L. Nacke, “From game design elements to gamefulness: defining ”gamification”, Proceedings of the 15th International Academic MindTrek Conference: Envisioning Future Media Environments (MindTrek ’11), ACM New York, NY, USA, 2011, pp. 9-15.
6. K. Karl, L. Blair, and R. Mesch, “The Gamification of Learning and Instruction: Game-based Methods and Strategies for Training and Education”. John Wiley Sons, 2012.
7. A. Scully-Hill, P. Lam, and H. Yu, “Beyond Role Playing: Using Drama in Legal Education”. Journal of Legal Education, Vol. 60, 1, 2010 pp. 147- 156.
8. T.L. Naps, G. Roßling, V. Almstrum, W. Dann, R. Fleischer, C. Hundhausen, A. Korhonen, L. Malmi, M. McNally, S. Rodger, J. A. Velázquez-Iturbide, “Exploring the role of visualization and engagement in computer science education”. ACM SIGCSE, Vol. 35, 2, 2003, pp. 131-152.