"TheLegalHub" Second year Mini Project Report

Submitted in partial fulfillment of the requirements of the degree

BACHELOR OF ENGINEERING IN COMPUTER ENGINEERING

By

Nitika Nagdevani 33

Sanika Ingale 19

Ishwari Dehadray 14

Vedika Walhe 63

Supervisor

Prof. Prerna Solanke



Department of Computer Engineering

Vivekanand Education Society's Institute of Technology
HAMC, Collector's Colony, Chembur,
Mumbai-400074
University of Mumbai

(AY 2023-24)

CERTIFICATE

This	is to	certify	that	the	Mini	Project	entitled	"	Thel	LegalHu	ıb	" is a
bona	fide	work	of	Niti	ika	Nagde	vani(33)	,San	ika	Ingale(19),Is	hwari
Deha	adray((14),Ve	dika	Wall	he(63	3) subm	itted to	the	Unive	ersity of	Mum	ıbai in
partia	al fulfi	Ilment o	of the	requ	uirem	ent for t	he awar	d of	the d	egree of	"Bac	chelor
of Engineering" in "Computer Engineering" .												
					(Pro		pervisor)				
,	Drof				`			/	Drof			,
(d of Dep			_)			(1	-10I	Princip)

Mini Project Approval

This Mini Project entitled "<u>TheLegalHub</u>" by Nitika Nagdevani(33), Sanika Ingale(19), Ishwari Dehadray(14), Vedika Walhe(63) is approved for the degree of Bachelor of Engineering in Computer Engineering.

	Examiners
	1 (Internal Examiner Name & Sign)
	2(External Examiner name & Sign)
Date:	
Place	

Contents

Abst	tract		ii			
Ackı	nowled	gments	iii			
List	of Abb	reviations	iv			
List	of Figu	res	٧			
List	of Tabl	es	v i			
List	of Sym	bols	vii			
1	Introduction					
	1.1	Introduction				
	1.2	Motivation				
	1.3	Problem Statement & Objectives				
	1.4	Organization of the Report				
2	Literature Survey					
	2.1	Survey of Existing System				
	2.2	Limitation Existing system or research gap				
	2.3	Mini Project Contribution				
3	Prop	oosed System (eg New Approach of Data Summarization)	18			
	3.1	Introduction				
	3.2	Architecture/ Framework				
	3.3	Algorithm and Process Design				
	3.4	Details of Hardware & Software				
	3.4	Experiment and Results				
	3.5	Conclusion and Future work.				

References 32

Abstract:

Law students and other law practitioners need a comprehensive resource platform to find information with ease and thus save time. The Legal Hub aims to achieve the same. A common problem for law practitioners is the difficult accessibility of the various document formats needed. Law involves a significant amount of reading and research. Law students must grapple with extensive case law, statutes, regulations, and legal texts, which can be overwhelming. Apart from this, legal texts can be challenging to read especially for newcomers to the field. Translating theoretical scenarios can be difficult. Understanding how legal principles apply to real cases and situations is perplexing at times. The website counters all these issues by providing the various laws passed along with the previous cases in association with each other as well as the document formats.

1. Introduction:

1.1 Introduction:

TheLegalHub is a law resources platform which provides enacted laws, previous cases as well as the format of various documents required while settling a case. The accumulation of all such information in a single place makes it more accessible and useful, the target audience being law practitioners and law students. However, this does not restrict the common public for viewing the same. The main objective of the website is to display and simplify information by correlating it to real life scenarios with the help of the previous cases. Legal information is often scattered across various sources. A centralized law resources website can aggregate relevant and reliable legal information, making it easily accessible to a wider audience. Navigating through statutes, regulations, and case law databases can be challenging. A law resources website can offer search and filtering functionalities to help users find specific laws and relevant cases efficiently.

1.2 Motivation:

Creating a legal website that compiles and displays all laws is driven by a fundamental desire to democratize access to legal information. This platform aims to break down barriers by providing a user-friendly, transparent, and easily navigable resource for all, promoting legal understanding, education, and efficiency. It serves as a tool for professionals, students, and the public, fostering a more informed, engaged, and accountable society while also

enabling innovation in the legal tech space.

1.3 Problem Statement & Objectives:

Due to the limited availability and accuracy of online resources, finding the needed information can frequently be a difficult task for lawyers or students studying law. Finding up-to-date and precise legal resources is a common struggle. The difficulty of the language is another significant issue that makes it difficult and time-consuming to investigate a case or conduct research. Due to the competitive nature of law school, law students also experience stress and worry about their academic performance and class standing. Additionally, legal practitioners must learn how to apply principles correctly and critically assess legal matters. This requires more than just knowledge of the laws; it also requires examples from real-world situations. The Legal Hub thus meets the needs of attorneys. The objective is to build a user-friendly interface called " TheLegalHub" that will provide comprehensive information about numerous laws, rules, regulations, commissions and tribunals. Additionally, provide a number of templates for legal papers necessary at various stages of a case, such as petitions, affidavits, contracts, and more. The Legal Hub aims to empower underprivileged and vulnerable members of society, such as women, children, older citizens, and people with disabilities, by assisting them in understanding and exercising their rights. We take pride in our ability to orchestrate a smooth legal experience by adhering to strict data security measures and using monetization approaches that blend accessibility with sustainability. This assures its sustained contribution to legal education and research.

1.4 Organization of the Report:

This report includes a brief overview of the introduction, highlighting the motivating factors, problem statement, and the objectives we aim to address. The "Literature Survey" segment delves into existing systems, their limitations, and identifies the research gap that our project addresses. The "Mini Project Contribution" elaborates on our unique contributions to the field. Moving on to the "Proposed System," we introduce our innovative approach for data summarization, describe the architectural framework, the algorithmic design, and the hardware and software infrastructure supporting our website. We present experimental results and analyze them, leading to conclusions drawn from our work. Finally, we offer insights into future work, outlining potential avenues for expansion and improvement. This organization is designed to provide a clear and comprehensive

understanding of the entire report, ensuring readers can navigate it efficiently and extract the information they seek.

2. Literature Survey

2.1 Survey of Existing System:

1. Name of paper: Survey On Open Access To Legal Information System

• Summary

The paper discusses the potential recognition of public access to legal information as a fundamental human right, which could enhance global accessibility.

2. **Name of paper:** Development of Online Legal Information System: Lawyers' Perceptions

• Summary

Practicing lawyers preferred features and services, while academic lawyers leaned toward case law, research articles, and legal news.

3. Name of paper: Developing a legal assistant website 'Notoaturan' using Waterfall Method

• Summary

Notoaturan is a website which provides notary services, searches for a lawyer and also complaint service in case of offense. The website is mainly divided in three main parts viz.clients, notary and lawyer dashboard and admin dashboard.

4. Name of paper: Online Legal Information System(OLIS) Levering Access to Legal Information Resources in Indian Environment.

• Summary

It is an online resource for Indian law students, researchers, and the general public, providing access to various legal resources, citation search facilities, and Web 2.0 tools, fostering interdisciplinary research and learning in the field of law.

2.2 Limitation Existing system or research gap:

The website may lack the latest legal updates due to rapid changes in legal content. Limited

technology access can hinder effective use of virtual consultations. Users should verify local

law applicability as the website's information may not be jurisdiction-specific. While

simplifying legal concepts, the website may not cover all intricate issues, necessitating

personalized advice. Search results may vary in accuracy, requiring verification. Remote

consultations may not suit all legal matters, especially those needing in-person court

representation.

2.3 Mini Project Contribution

Nitika Nagdevani: Template and front-end designing

Sanika Ingale: Data collection and front-end designing

Ishwari Dehadray: Front-end designing and chatbot development

Vedika Walhe: Frontend functionality and chatbot development

3. Proposed System

3.1 Introduction

The objective is to build a user-friendly interface called "TheLegalHub" that will provide

comprehensive information about numerous laws, rules, regulations, commissions and

tribunals. Provide a number of templates for legal papers necessary at various stages of a

case, such as petitions, affidavits, contracts, and more. We take pride in our ability to

orchestrate a smooth legal experience by adhering to strict data security measures and using

monetization approaches that blend accessibility with sustainability.

3.1 Architecture/ Framework

• App Framework:

Our website's home page will provide the user with the different options to choose from

such as Laws, Find a lawyer, Templates and Previous cases. The website is integrated with

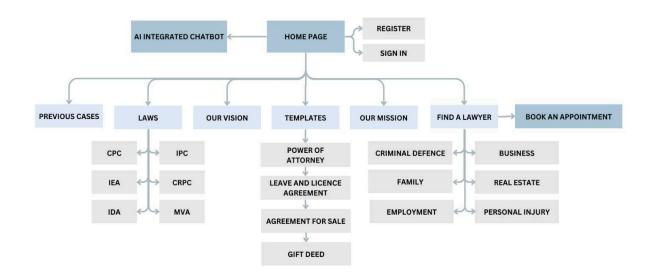
an ai chatbot that can help the user understand any law related concept simply and with

greater ease. The user can navigate through different law categories as well as book an online appointment with a lawyer. The law categories provided are ipc, cpc, crpc, ida, iea and mva. The website has been made user-friendly by the different filtering options provided on the previous cases page. This ensures easier navigation. Frequently used legal documents can be downloaded and printed from the template's page, these documents get used in legal proceedings. The user can learn more about the website and the vision from the Our mission and Our vision cards on the home page.

• Server side:

First, information on all applicable laws, rules, and legal documents were gathered from reliable sources including official government websites, legal databases, and legislative archives. To make navigation and searching for information easier for users, the material is divided into logical parts or subjects. Users will be able to search for certain legislation using keywords when the database has been filtered.

3.3 Algorithm and Process Design



3.4 Details of Hardware & Software

Hardware:

- Web Server: Capable of hosting and serving web pages.
- **Processor:** Modern multi-core CPU for efficient handling of requests.
- Memory (RAM): At least 4GB, more for multitasking and user sessions.
- Storage: Enough space, preferably SSD, for files and databases.
- Network: Stable, fast internet connection for smooth interactions.
- **Security:** Firewalls, encryption, and backup systems for protection.

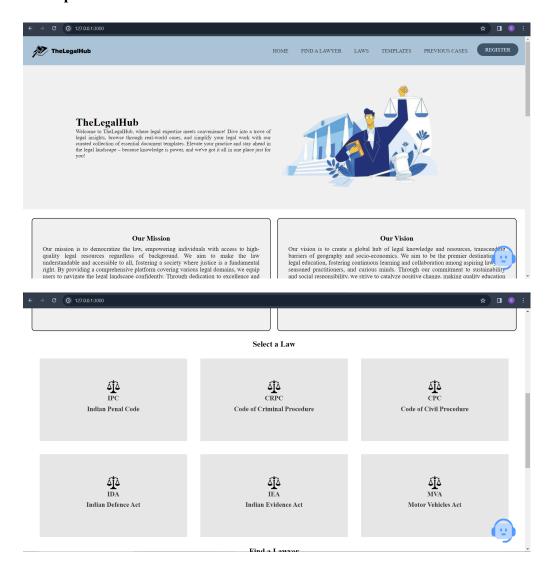
Software:

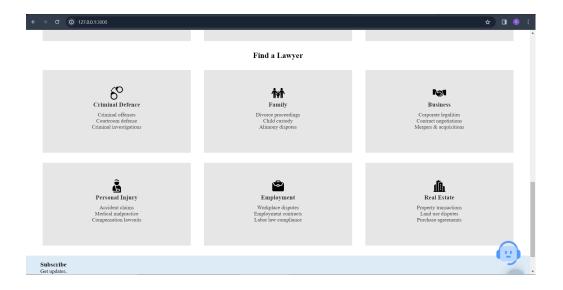
- HTML (Hypertext Markup Language): In a resources platform, HTML would be used to create the main structure of the web pages, organizing the various types of resources, such as legal documents, case law summaries, templates, and study materials.
- CSS (Cascading Style Sheets): For a resources platform, CSS would be used to make the platform visually appealing and user-friendly. It would define the colors and typography, arrange content in a readable format, and ensure consistent styling across different pages.
- **Javascript:** For a resources platform, Javascript could be used to create features like search functionality, dropdown menus, or even real-time notifications for updates to resources. It would enhance user experience by making the platform more engaging and functional.
- **Python:** Python could be used to build the backend of the resources platform. This could involve managing user accounts, handling file uploads, maintaining a database

of resources, and processing user interactions. Python's versatility would help in implementing various server-side functionalities.

• Flask: It facilitates the creation of server-side functionalities such as managing user accounts, handling file uploads, maintaining a database of resources, and processing user interactions efficiently.

3.5 Experiment and Results:







3.6 Conclusion and Future Work:

TheLegalHub is an instructive and user-friendly website that provides a comprehensive knowledge of the legal services available. Unlike other platforms, it has features such as clear navigation, extensive material, accurate and dependable information. It improves learning, keeps users up to date on legal updates, fosters a connected legal community, and provides opportunities for collaboration.

In future The Legal Hub can be developed by including the following:

- •Mobile App Development: Creating a mobile app version of the website.
- •Community and Forums: Building an active online community or forum where users can discuss legal issues, seek advice and share experiences.

- •AI Assistance: Implementing AI for search and content recommendations.
- •Online Appointments: Appointing a lawyer online.
- •Virtual Courtrooms: Case can be resolved online.
- •Collaborations and Partnerships: Partnering with law firms, legal tech startups or other legal organizations.

References

[1]Bhardwaj, Raj & Margam, Madhusudhan. (2013). Open access legal information Sources and their use by students of National Law University. Annals of Library and Information Studies.60.314-19.https://api.semanticscholar.org/CorpusID:155321803

[2]Bhardwaj, Raj Kumar. DESIDOC Journal of Library & Information Technology; Delhi Vol. 39, Iss. 2, (Mar 2019): 131-139. https://.org/10.14429/djlit.39.2.13860

[3]Utami, M. ., Zen, B. P. ., & Rauna, Y. S. . (2021). Developing a legal assistant website "Notoaturan" using Waterfall method. Sinkron: Jurnal Dan Penelitian Teknik Informatika, 5(2), 229-238. https://doi.org/10.33395/sinkron.v5i2.10902

[4]Bhardwaj, R., & Madhusudhan, M. (2016). Online Legal Information System (OLIS) Leveraging Access to Legal Information Resources in Indian Environment. DESIDOC Journal of Library & Information Technology, 36(1). https://doi.org/10.14429/djlit.36.1.9271