

Cardiff Metropolitan University

Project Proposal

[ADVANCED MULTIFUNCTIONAL COURT CASES MANAGEMENT SYSTEM (CCMS) FOR SUPREME CORT LAWYERS BY USING LATEST LARAVEL PHP WEB FRAMEWORK]

Submitted by

[DASSANAYAKE MUDIYANSELAGE LAHIRU SAMPATH DASSANAYAKE]

(Student ID - [ST20197917] - [CL/BSCSD/21/10])

This project proposal is submitted in partial fulfillment of the requirements for the degree of

Bsc (Hons) Software Engineering

PART ONE

Name of applicant:	Dassanayake Mudiyanselage Lahiru Sampath Dassanayake
Supervisor (if student project):	Ms. Vindya Perera
School:	International College of Business & Technology
Student number (if applicable):	ST20197917
Programme enrolled on (if applicable):	BSc in Software Engineering
Project Title:	Advanced multifunctional court cases management system (CCMS) for supreme court lawyers by using latest Laravel PHP web framework.
Expected Start Date:	29/07/2021
Approximate Duration:	80 days
Funding Body (if applicable):	N/A
Other researcher(s) working on the project:	N/A
Will the study involve NHS patients or staff?	No
Will the study involve taking samples of human origin from participants?	No

In no more than 150 words, give a non-technical summary of the project

This is an advanced legal court cases management system for supreme court lawyers and using this management system lawyers will be able to manage their court cases/clients and many more. This system mainly based on latest Laravel PHP web framework.

If you have answered YES to any of these questions, no further information regarding your project is required.

If you have answered NO to all of these questions, you must complete Part 2 of this form

DECLARATION:	
I confirm that this project conforms with	h the Cardiff Met Research Governance Framework
Signature of the applicant:	Date:
and the second second	20/08/2021
- Consider the contract of the	
- Jungui	
FOR STUDENT PROJECTS ONLY	
Name of supervisor:	Date:
Signature of supervisor:	
Signature of supervisor.	
Research Ethics Committee use only	
Decision reached:	Project approved
	Project approved in principle
	Decision deferred
	Project not approved
	Project rejected
Project reference number: Click here to e	enter text.
Name: Click here to enter text.	Date: Click here to enter a date.
Signature:	
oignature.	
Details of any conditions upon which app	proval is dependant:
Click here to enter text	

Table of Contents

Introduction	5 ·
Purpose	5 ·
Problem Statement	5 ·
Literature Review	6 ·
Proposed System	15
Required Tools and Availability:	18
Software Requirements	18
Hardware Requirements	20
Project Schedule	21
References List	22 -

Introduction

Purpose

This project's main purpose is to develop well functional advanced court case management system and using this system supreme court lawyers will able to manage their court cases/clients and many more legal relational information. With this application lawyers can keep the records at their fingertips.

Another main focus of this project is to update and fix international/local existing systems issues by adding new advanced features and functions. This is a fully automation management system and this system will be able to fix all manual data management issues.

Moreover, lawyers will able to manage their client's works by storing their legal data and information in database enabling access to their files at any time at any place when they are in need very simply and easily. Through this system, the court lawyers can maintain separate records for each client and even store multiple cases of the same client.

Problem Statement

Government supreme court lawyers use all their efforts to win the justice from their part there is no digitalized proper way of managing their work stuff, legal data and information for lawyers to work effortlessly. It is that they must waste a lot of their time and effort to file a case by filling all the accurate documents into separate files. Whenever any client intervened with a case, the respective lawyer has to open a file for that case and have to collect and then file all the legal information; documents; shreds of evidence; proceedings all these things manually.

Moreover, if any change occurred in those documents the lawyer must find the files one by one through the file rack, to take the correct file out of from the rack, and to do each update manually. Furthermore, if a lawyer is handling many cases of a single client then the lawyer must maintain several files. So, this management of multiple files for a single client makes the lawyer's work complex and more tiresome. If the client requested an update, the lawyers must go through all the files of the respective client to find which file is that the update should be

done, by reading the case details. In addition to that, the manual management of the lawyer's business process retains them in the traditional era and makes everyone busy updating and keep reminding or noting down the file numbers; next court dates; status, etc.

Literature Review

Though the Sri Lankan lawyers have not yet stepped into the means of using applications or any other software to manage their paperwork more efficiently using a case data management system, in the technical renaissance, some foreign lawyers have touched the step of digitalization. There are many systems in the application in foreign law firms. Namely, those systems are "Cilo", "MyCase", "Filevine", "E-File Cabinet", "CaseFox", "App4Legal", "Best Case", "Pro Law", etc. But these software applications are not much applicable for the Sri Lankan context lawyers. Mainly because their functional requirements have targeted on billing and invoicing, expense tracking and time tracking. But for a Sri Lankan lawyer and a client, the fee for the lawyer depend upon the lawyer's practiced patterns and the relationships they have in between the client and the lawyer. But with the proposed system the major functionality is targeted on document and case data and information management as in a Sri Lankan law firm the burning problem is the inefficiency and the ineffectiveness with the bulks of files loaded in narrow office rooms.

When considering each software that has mentioned above, each has its unique features. Sometimes one or multiple applications have been adopted with the common unique features. When considering the applications, "Clio", "MyCase", "Filevine", "e-FileCabinet", "CaseFox", "App4Legal", "Best Case", "Pro Law", they possess common features such as document management, time tracking, online payments, invoicing and billing, tracking of expenses in parallel to the time usage, integration of Dropbox, Microsoft office excel plugin, auditing, etc. and it has reviewed in the following, "Filevine - ABA Legal Technology Buyers Guide," n.d., "Clio vs eFileCabinet Comparison | GetApp®," n.d., "App4Legal vs Best Case vs CaseFox vs ProLaw - 2020 Feature and Pricing Comparison," n.d.. But in addition to the above-mentioned features, except billing, invoicing, time and expense tracking, the proposed system is to be built with more other features such as live calendar to track task, notification system, income management, expense management, add venders, case file download/print option.

Other than the above reviews and comparisons on the systems on usage many other technical experts have proposed to develop an information system for law firms. In the paper of T. du Plessis and A.S.A. du Toit has emphasized the above statement clearly, "Several studies have shown that in the most recent years' advances in the ICTs are transforming the methods that lawyers use to access, retrieve and process information to deliver legal services to clients" (Du Plessis & Du Toit, 2005).

Moreover, that paper points up that the lawyers need organized access to the information generated concerning their clients while they are active in handling the case. Not only that, but the organized arrangement of the previous notes and case information should also be easily accessible at any time since those can be useful in other cases(Du Plessis & Du Toit, 2005).

According to the search results, some web applications have provided the service of file management for the lawyers and the most commonly used, popular software for managing lawyer's work are; "MyCase", "Clio", "eFileCabinet", "File vine", "Actionstep" etc.("Clio - ABA Legal Technology Buyers Guide," n.d.).

According to the research ideas by "West" and "Thomson", the document management systems allow lawyers to reuse some of their products. Also, it has said that DMS (Data Management Systems) is a better way to optimize work efficiency and effectiveness (Knowledgemanagement systems for law firms, 2003). Not only that, but the authors, Taylor and Aschner have also emphasized that "a file management system should be more functional rather than being organizational" (Aschner, 1986). Alok Mishra, Deepti Mishra (Mishra & Mishra, 2011) further emphasized that the digitalization of the work at legal firms makes it more costeffective, time-saving and especially adds competitive advantage among the busy and unorganized work patterns of others. In the paper, "Method and systems for performing legal services over the internet" (Classification, 2002) described a system where all the documents related to each client is stored in a cloud, where that lawyer and the related client can access their documents, review and update easily and efficiently at any time from any place they are. So, with these features nowadays Sri Lankan lawyers have played more attention to change into the new technology. It is that according to the "Van Ooarscot" and "Irene", the clerks and the judges who have practiced their work to be carried out with the paperwork manually have confronted with the digitalization of courts' work. So, according to that paper, to satisfy the users of the system, the system should provide fair functionalities that will support the lawyers to improve their quality of work while optimizing time management than before(Van Oorschot, 2014).

In the context of this file management, "Aschner" in 1989 has supposed a file management system with an approach to develop a generic file classification that covers broad subject areas and differentiates between file classifications based primarily on retention requirements. Also, they have emphasized that it will enable the users to add subject details to individual file folder labels to meet local retrieval requirements and will save money and easier to master than detailed schemes(Aschner, 1986).

Beyond the above mentioned main objectives of file management, the lawyers face a lot of challenges during their period of working as an attorney. The lawyers have to face situations like re-filing the cases they have handled many months or years ago. Sometimes it may be not a case of much longer, but the details may be missing or unavailable or difficult to find due to the huge bulks of file cabinets placed in the chamber. Therefore, the proper storing and permanent security for the case files are important as those points may be wanted in future cases as pieces of evidence. The "Evans, Nina Price, James" in their paper they have highlighted the need for new technology to be applied in the law firms. According to them, there is more pressure in law firms and the proliferation of legal information assets. Actually, "information overload and merely identifying and managing these assets becomes a challenge to legal firms (Evans & Price, 2017).

Advances in technology are provoking law firms to embrace information management systems and technologies, such that storage capacity in the cloud allows customer, case matters and other firm information to be stored centrally and accessed from work or home with significant cost savings, device mobility enables lawyers to access digital documents in court"(Evans & Price, 2017). In the paper, "legal Files management using big data" the authors, Aarthi, Siddharth, Athreya, & Balaji (2018) have paid their attention to the above-mentioned issues and they have supposed the concept of big data mining with the use of the "Hadoop" approach. According to their ideas they point out that "The technical advantages of organizing such data can be helpful not only in certain high-profile cases where a particular order or organization must be present at the most basic level, to get information that may be the turning point that is needed to win a particular case but also assist as an alibi for any vocal statements given during a particular session and also Lawyers, as well as lawmakers, will be able to successfully get facts in the argument without any Data

Unavailability" (Aarthi, Siddharth, Athreya, & Balaji, 2018). According to the (Aarthi et al., 2018) as the first step, the raw materials such as case details or files containing every aspect of a particular case are collected and organized in a structured way by dividing into groups, into subdivisions based on their case types and then those files have been analyzed using the Structured Query Language and using some basic Apache spark programming. Now after the analysis unprocessed data is then stored in a cluster. The processes of analyzing data are recorded step by step in a separate database called metadata. This data can be used for back trend analysis and also can be used as backup data in case of data loss. Along with the collection of the raw data, storing, organizing and updating the security of the data is also essential as each data is a "confidential set of information of one another about their life matters". Furthermore, the tacit knowledge of lawyers should be recorded so it will ease the work of lawyers in reusing the points in the future precedents of the future cases or may need in their daily cause of work. It is that "Experienced lawyers create forms, which include comprehensive annotations and practical comments that serve as models for the type of documents that are required repeatedly in the firm's daily practice" (Du Plessis & Du Toit, 2005).

So, it is clear that every document and form is an essential factor for a lawyer. Therefore, those data should be recorded methodically to reduce the stress with their busy working patterns. The above points thoroughly highlight the importance of having organized and easy access for the documents for lawyers. But the easy access should not create any security breaches and doubts about the confidentiality of the client's personal details and as well as of the case details. As emphasized in the paper by (Scheffer, 2017), "the file is not just a distracting medium, but a constitutive participant in legal discourse and it gives a voice to the client in the legal discourse". Therefore, the priority should be given to the security of the files as well. It is as mentioned by Du Plessis & Du Toit, that in the survey conducted in African law firms, "the main concerns lawyers might hold in terms of systems revealed a considerable concern regarding information security and confidentiality, computer viruses resulting in information corruption and content authenticity" (Du Plessis & Du Toit, 2005).

The researchers, Zhang, Diao, & Wen, (2008) have stated means of embedding security for the legal files and have proposed a system based on document watermark, cryptology and access control. According to the theories that have been used by "Zhang", "The watermarks are embedded by the first author of the file. All the files cannot be read or write until they are embedded with the watermark. So, this will assure that only the authorized users can read or write the files. And then secondly users are classed into different secure levels. Users with

different security levels have different rights to operate files. As the third level of security, the symmetric key algorithm is used to encrypt the file that is embedded with the first watermark. This can prevent unauthorized users read the file. The public key algorithm is used to provide a pair of keys. The keys are used to encrypt or decrypt files. The Kang, Chen, & Zhan, (2012) has highlighted that file management as a key principle that leads towards a standard way of management. As stated in the paper, "system is a small database management one and help to achieve the following; Accurate and timely collect, process and store; help managers solve daily routines and relieve the work intensity; improve working efficiency and management levels, to create a principled, institutionalized, standardized and scientific management; enhance management capabilities; assist to draw up plans, allocate resources practically, and promote the quality and effectiveness at the best level; transfer from decentralized management to systematic one and integrated basic files". Here the (Kang et al., 2012) has implemented the system using technologies such as; Visual Studio 2005 development platform, C# Programming Language, Structured Query Language (SQL) Server 2005 database management system. Furthermore, the existing software vendors such as "MyCase", "Clio", "eFileCabinet" etc. provides many numbers of functionalities. As emphasized in the ("Filevine - ABA Legal Technology Buyers Guide," n.d.) the key features are; include bill and expense tracking, a settlement calculator, deadline management, record management and advanced reporting and more other common functionalities like; track important deadlines, manage cases and documents and bill and collect from clients; manage tasks for the day, week or month and track billable time directly; scheduling purposes, etc. Further according to the proposed system by the Mishra, Alok, and Mishra, Deepti there are modules within a single system named as, File management; Asset management; Workflow and document management; Support services management, etc. Through all those modules though they have divided into differently named modules, they all function to ease the work of lawyers. According to their concept, that system consists of main functionalities such as; " printing of letters, notices and reports, automated creation and updating of case records, track the availability of documents, sending various alerts like email, a fax can be provided to the users with deadlines and schedules, etc." (Mishra & Mishra, 2011).

So as mentioned above systems have been proposed to develop and some are to be developed with the functionalities that have been identified as the solutions for the existing business problems. As technology is ubiquitous people are more vigilant about every single new thing that comes into the trend. Due to that vigilance customers are more demanding for the quality,

effectiveness, and efficiency for whatever the service or the business they engage in. As mentioned by (Evans & Price, 2017), "Clients are often ahead of lawyers in implementing new technologies, and they also have improved access to the legal information that is readily available on the Internet.

Main Features	Similar Applications	Proposed System
Advanced dashboard	Have basic dashboards	✓
Live daily calendar to track	×	✓
future appointments		
Clients management	✓	✓
Court cases management	✓	✓
Add tasks to daily calendar	×	✓
Clients appointments	✓	✓
management		
Multiple members support	✓	✓
Income management	×	✓
Expense management	×	✓
Legal cases/client's data and	×	✓
information backup option		
Pending case notifications	×	✓
Today's hearing case	×	✓
notifications		
Appointment notifications	✓	×
Time tracking	✓	×
Client's case reports	×	✓
download & print option		
Mailing system	✓	✓
System settings section	×	✓

Online Survey

Advanced Multifunctional Court Cases Management System for Supreme Court Lawyers by Using Latest Laravel Web Framework.

* Required	
* This form will record your name, please fill your name.	
1. Lawyer Name: *	
2. Age: *	
3. Experience(Years) and Specialization: *	
4. Registered Number: *	

8/20/2021

* Please answer following questions
5. Are you facing issues while using manual case management? If yes, what are those issues? *
6. Do you think automation case management system will solve those issues? *
○ Yes
○ No
7. Would you like to work with automation management system? *
○ Yes
○ No
8. As per your opinion, what are the advantages and benefits when using automation case management system? *

This content is neither created nor endorsed by Microsoft. The data you submit will be sent to the form owner.

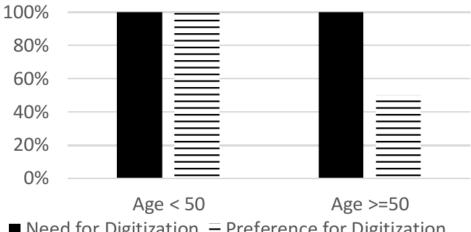
Microsoft Forms

Interviews and Survey to Gather Requirements and Information for the Proposed System

The requirements for the system were gathered by interviewing a sample of lawyers over the phone. In addition to that, a Microsoft form was shared among the lawyers to measure the applicability of digitizing the lawyers' work under the Sri Lankan context.

Secondly, the gathered information was analyzed to cross-check the lawyers' preferences about the automation of the manual process and their likelihood to shift into a digitalized system. As per the analysis results, as a whole, their main idea is that conventional file management makes them inefficient and more tiresome. Also, they point out that the manual method of file management wastes a lot of their time in searching for the files through each rack and then going through each page. Furthermore, it has analyzed that most of them are busy with the existing systems and it is not convenient for them. Also, an analysis of the literature was conducted to get knowledge about the existing systems. The final overview according to the age groups of the Sri Lankan Lawyers' analysis results is shown below.

Results from the Interviews and Survey



■ Need for Digitization = Preference for Digitization

Proposed System

Lawyer should login to the systems to access system functions. If somehow lawyer wants to recover the password the system will be send password recovery email to lawyers email address. After lawyer login the system lawyer will able to access his or her system dashboard.

System Dashboard: Dashboard of the system will show the summary of data and some more important information related to current day. like cases, appointments and linked them to their pages. also showing the Case Filling No, Appointments in daily calendar.

Court Case Notifications: There are two different notifications will be on menu; Today's hearing case notifications and pending case notifications. Under today's hearing case notifications lawyers will get notification for the cases which has today's hearing date. Also lawyers can see that cases from dashboard. Under pending cases notifications lawyers will get notification for the cases which has pending case date. Also lawyers can see that cases from dashboard.

Clients Management: In 'Client Section', lawyer can see all details about clients. Lawyer can add his or her clients by clicking on the add client button. Fields to be entered by lawyer for any client are first name, middle name, last name, gender, email, mobile number, alternate mobile number, address, country, state, city, reference name, reference mobile number.

Also, more person can be added by clicking on the checkbox of Add more person and there is a choice between single advocate and multiple advocate of that particular person. First name, middle name, last name, mobile number, address are the fields of single advocate person and first name, last name, mobile number, address, advocate name are the fields of the multiple advocate person.

In 'Action', lawyer can see all details about client history, client hearing history and client account history. When Clicking on client and the details of that particular client will be shown and details will be like Name, Mobile number, alternate mobile number, reference name, reference mobile number email, address, city, state, country.

When Clicking on 'Case' button, the cases of that particular client will be shown and details will be like Case detail, Court detail, Next hearing date, Case status etc.

When clicking on 'Account' button, the account of that particular client will be shown and details will be like Invoice No., Client name, Total amount, Due amount, Status etc. when clicking on 'Action' button, can add payment and see the payment history of the client.

Court Cases Management: In 'Case Section', lawyer can see all details about case and add case through 'Add Case' button. There are basically four sub sessions in case section, which are Running, Important, No Board Cases and Archived Cases. Client's name, registration number, case type, court, court no, magistrate, petitioner and respondent name, next date, case status, assign to, edited by will be displayed in the list of the cases. Also, user can sort the cases according to the next date filter.

There are few fields to be entered for adding case. Once all the mandatory fields of this form are added, the case of that particular client will be added in the Running cases section. If the lawyer has marked any case important then all those cases will be listed in Important cases, if any case is declared as No Board Case, then those cases will be listed in No Board case section. Those cases which are dismissed or say closed due to any reason will be displayed in the Archived case section of the Case section.

Fields to be entered by lawyer for any case are Client Details, Case details, FIR details, Court details, Task assign. In the client detail section for add client name, respondent name etc. In the case detail section for add case no., case type, filling no., etc. In the FIR detail section for add FIR no., FIR date, etc. In the court detail section for add court no., court type, etc. In the task assigned section select lawyer and also task assigned for particular user(team member).

In 'Action menu', when clicking on 'view', lawyer (user) can see three menus like case detail, hearing history and case transfer history. When clicking on 'view' in action bar, particular case will be open and user can see the case details like Case type, filling number, filling date, registration number, CNR number, first hearing date, court no., judge, etc. When clicking on history, user can see particular case history. In that you can see the history of hearing dates and etc. When clicking on transfer, user can see particular case transfer history. In that you can see Registration number, Transfer date, From court number and Judge, To court number and Judge, etc.

When Clicking on the 'Add Next Date' button and user can add next hearing date and change case status. When Clicking on 'Case Transfer' button, user can transfer case from current court to another court with the transfer date.

Lawyer Tasks Management: In 'Task Section', lawyer can see all details about task and add task through 'Add task' button. In 'Task Section', list of added tasks are displayed. Details like task name, start date, members, status, etc.

Client's Appointments Management: In 'Appointment Section', user can see all details about appointment and add appointment through 'Add appointment' button. Advocate can list out or add his appointments with his existing clients or new clients by adding all the details of the appointment. Also, user can sort the appointments according to the date filter.

For adding any appointment, user has a choice between new client or the existing client. If user chooses new client, he needs to add client name and if user chooses existing client, he needs to select a client from a given list of clients. Other fields like mobile number, date, time, and notes(optional) has to be filled up for adding an appointment.

When appointment is canceled then admin can change the status of appointment like 'cancel by client' or 'cancel by advocate'.

Add Team Members: There are two sections available; role and team member. In 'role section', lawyer can see all details about role and add role through 'Add role' button. After adding roles, all the roles added by the lawyer is listed here. Details role name, action are displayed. When clicking 'Add role' button, lawyer can add role name and role description. after creating role, lawyer can assign permissions from action menu.

In 'Team Member Section', lawyer can see all details about team member and add team member through 'Add team member' button. After adding teams members, all the team members added by the lawyer will be listed. Details like team member name, email, contact number, etc.

To add team members (juniors), fields like profile picture, first name, last name, email, mobile number, address, zip code, country, state and city, role should be filled up by the main lawyer.

Lawyer Income Management: There are two sections available; service and invoice. In 'service section', lawyer can see all details about services and add service through 'Add service' button. After adding services, all the services added by the lawyer will be listed. Details are name, amount, status, action are displayed.

Lawyer can add services through 'Add Service' button(like fees,.. etc.) and lawyer can use this service at the time of creating invoice.

In 'invoice Section', lawyer can see all details about invoice and add invoice through 'Add invoice' button. After adding invoices, all the invoices added by the lawyer will be displayed. Details are invoice number, client name, total amount, due amount, paid amount, status and action are displayed.

user can create an invoice for lawyer's client by filling all the details. user can add invoice due payments when he or she receive due payments from client. By clicking on 'Action' button, user can see invoice payment history.

Add Venders: In 'vendor section', user can see all details about vendor and add vendor through 'Add vendor' button. After adding venders, all the vendors added by the user will be displayed. Details are vendor name, mobile number, status and action are displayed.

When clicking on 'Add vendor', fields like company name, first name, last name, email id, mobile number, alternate number, address, country, state, city, GSTIN, PAN will be shown and user can fill it.

Expenses Management: There are two sections available; expense type and expense. User can add new expense type through 'Add Expense' button (like phone bill, stationary..., etc.) and user can use this expense at the time of creating expense. After adding expenses, all expenses added by the user will be displayed. Details are vendor name, invoice number, total amount, due amount, paid amount, status and action are displayed.

System Settings Section: Using this section user will able to add or change settings such as case types, court types, courts, case status, judge, tax, general settings, database backup.

Required Tools and Availability:

Software Requirements

Operating system - Windows 7 or Windows 10

We need operating system to run all the required software and Microsoft Windows offers variety of resources for web development and design.

■ Web browser – any web browser (recommend: Firefox browser developer edition)

Firefox web browser is a one of the fastest web browser we can choose. Firefox provide best developer tools latest features such as CSS grid support and framework support etc.

■ Web server – XAMPP or WAMPP (recommend: XAMPP)

XAMPP is an open source free web server and it allows to run web applications offline, on a local web server on our computers. Apache, which is helped to build the local server, and MySQL which we can use as a database language for our web application.

Code editor and IDE – Microsoft VS Code Editor

VS Code is a best code editor with support for development operations such as code debugging, building and editing. VS Code provide just the tools a developer needs for a quick development.

Version control software – GitHub Desktop

GitHub Desktop is a software that enables to interact with GitHub using a GUI instead of the command prompt command or a web browser. Using this software we can push requests, pull requests, and also can clone remote repositories with the help of GitHub Desktop.

Graphics editor – Adobe Photoshop, Adobe XD

Working in web design involves creating UIs (user interfaces) icons, graphics, wireframes, & mockups. Adobe Photoshop software provides the capabilities needed to make these design elements transition smoothly and easily to design web applications.

Wireframe tool - Balsamiq Wireframes Desktop

Balsamiq Wireframes desktop is a simple UI wireframing software to draw wireframes easily.

• Front-end development: HTML, CSS, SASS, SCSS & JavaScript

HTML – For front-end page layouts

CSS – For front-end designs

SASS/ SCSS - For front-end designs

JavaScript – For some front-end functions/ designs

• Back-end development: PHP (Blade) Laravel/ Core PHP & SQL

PHP Laravel – Use as back-end scripting language and framework

- PHP >= 7.2.0
- BCMath PHP Extension
- Ctype PHP Extension
- JSON PHP Extension
- Mbstring PHP Extension
- OpenSSL PHP Extension
- PDO PHP Extension
- Tokenizer PHP Extension
- XML PHP Extension

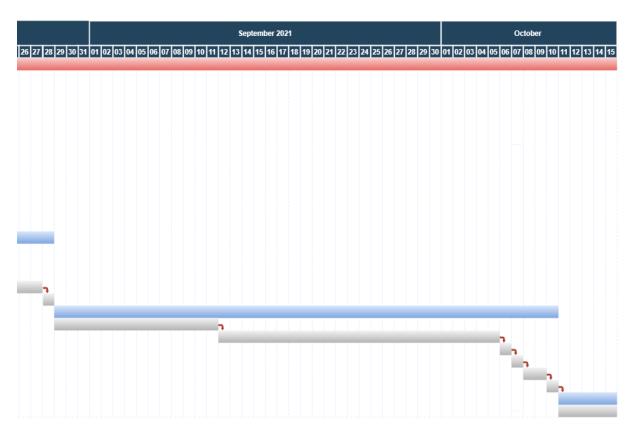
SQL – Use to manage and handle system database data

Hardware Requirements

- Electronics laptop or desktop pc, keyboard and mouse
- RAM minimum 2GB or 4GB
- Screen Resolution minimum 1920x1080
- CPU minimum Core i3 or i5
- Hard Disk Space minimum 500MB
- Internet connection

Project Schedule

	Task Name	Duration	Start Date	End Date	July 2021	August 2021
					29 30 31	01 02 03 04 05 06 07 08 09 10 11 12 13 14 15 16 17 18 19 20 21 22 2
1 C	omplete project execution	80 days	29/07/2021	15/10/2021		
2 PI	lanning	12 days	29/07/2021	08/08/2021		
3 C	hoosing the project topic	1 day	29/07/2021	29/07/2021	7	
4 G	oing through the project literature review	3 days	30/07/2021	01/08/2021		<u> </u>
5 Pr	reparing the project proposal	1 day	02/08/2021	02/08/2021		3
6 C	hecking errors and doing some modifications	2 days	03/08/2021	04/08/2021		
7 Pr	reparing the project proposal presentation slides	2 days	05/08/2021	06/08/2021		
8 Pr	resenting the project proposal	1 day	07/08/2021	07/08/2021		
9 G	etting approval to continue the project	1 day	07/08/2021	07/08/2021		
10 G	etting ethical approvals	1 day	08/08/2021	08/08/2021		
11 R	equirments gathering	8 days	09/08/2021	16/08/2021		
12 Pi	reparing questionnaire	2 days	09/08/2021	10/08/2021		3
13 Pı	reparing interview guide	2 days	11/08/2021	12/08/2021		
14 Pi	reparing SRS document	4 days	13/08/2021	16/08/2021		
15 D	esign	12 days	17/08/2021	28/08/2021		
16 D	rawing use case diagrams	3 days	17/08/2021	19/08/2021		,
17 D	rawing sequence diagrams	2 days	20/08/2021	21/08/2021		
18 D	rawing class diagrams	3 days	22/08/2021	24/08/2021		
19 D	rawing mock up diagrams	3 days	25/08/2021	27/08/2021		
20 Va	alidating design with the SRS created	1 day	28/08/2021	28/08/2021		
21 In	nplementation	43 days	29/08/2021	10/10/2021		
22 D	esigning software interfaces	14 days	29/08/2021	11/09/2021		
23 D	eveloping core functionality of the software	24 days	12/09/2021	05/10/2021		
24 P	erforming unit testing	1 day	06/10/2021	06/10/2021		
25 P	erforming modifications	1 day	07/10/2021	07/10/2021		
26 Va	alidating the software with the design	2 days	08/10/2021	09/10/2021		
27 Pr	repare for release	1 day	10/10/2021	10/10/2021		
28 D	eployment	5 days	11/10/2021	15/10/2021		
29 Pı	reparation of project report	5 days	11/10/2021	15/10/2021		



References List

Aarthi, S., Siddharth, S., Athreya, V., & Balaji, P. (2018). LEGAL FILES MANAGEMENT SYSTEM USING BIG DATA. 2018 3rd International Conference on Communication and Electronics Systems (ICCES), (Icces), 979–983.

App4Legal vs Best Case vs CaseFox vs ProLaw - 2020 Feature and Pricing Comparison. (n.d.). Retrieved April 5, 2020, Available at: https://www.capterra.com/legal-case-management software/compare/146976-180363-121682-35611/App4Legal-vs-Best-Case-Bankruptcy-vs-CaseFox-vs-ProLaw. [Accessed 17 August 2021].

Aschner, K. (1986). Files management in the pre-paperless office. Journal of Information Systems Management, 3(4), 78–81. Available at: https://doi.org/10.1080/07399018608965279. [Accessed 17 August 2021].

Best Legal Case Management Software | 2020 Reviews of the Most Popular Tools & Systems. (n.d.). Retrieved April 5, 2020, Available at: https://www.capterra.com/Legal-case-management-software/. [Accessed 17 August 2021].

Classification, P. (2002). (12) Patent Application Publication (10) Pub. No.: US 2002/0019741 A1.

Clio - ABA Legal Technology Buyers Guide. (n.d.) Retrieved October 11, 2019, Available at: http://buyersguide.americanbar.org/sites/clio/3092/Document+Management. [Accessed 17 August 2021].

Clio vs eFileCabinet Comparison | GetApp®.(n.d.). Retrieved April 6, 2020, Available at: https://www.getapp.com/finance-accounting-software/a/ cilo/compare/efilecabinet/.

Du Plessis, T., & Du Toit, A. S. A. (2005). Survey of information and knowledge management in South African law firms. SA Journal of Information Management, 7(1). Available at: https://doi.org/10.4102/sajim.v7i1.252E [Accessed 17 August 2021].

vans, N., & Price, J. (2017). Managing information in law firms: changes and challenges. Filevine - ABA Legal Technology Buyers Guide. (n.d.). Retrieved October 11, 2019, Available at:

https://buyersguide.americanbar.org/sites/filevine/8930/Document+Management [Accessed 17 August 2021].

Kang, D., Chen, J., & Zhan, J. (2012). Design of University Teachers's) files Management System. (1), 298–300. Available at: https://doi.org/10.1109/CIS.2012.73 [Accessed 17 August 2021].

Knowledge-management systems for law firms. (2003). Available at: https://patents.google.com/patent/US8126818B2/en. [Accessed 17 August 2021].

Mishra, A., & Mishra, D. (2011). A Legal Business Information System: Implementation Process Context. 8(2), 45–59. Scheffer, T. (2017). File work, legal care, and professional habitus an ethnographic reflection on different styles of advocacy.(July). Available at: https://doi.org/10.1080/09695950701323005 [Accessed 17 August 2021].

Van Oorschot, I. (2014). Seeing the case clearly: File-work, material mediation, and visualizing practices in a Dutch criminal court. Symbolic Interaction, 37(4), 439–457. Available at: https://doi.org/10.1002/SYMB.126 [Accessed 17 August 2021].

Zhang, H., Diao, J., & Wen, Q. (2008). Secure Files Management System in Intranet. 306–311. Available at: https://doi.org/10.1109/ICICSE.2008.100