

# SOFTWARE PROJECT MANAGEMENT

(PROJECT REPORT ON CASE STUDY NO. 32)

## **ONLINE LAW SYSTEM**

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## **A BRIEF INTRODUCTION TO THE INDIAN PENAL CODE**

- The Indian Penal code, is a document listing all the cases and punishments that a person committing any crimes is liable to be charged with. It covers any Indian citizen or a person of Indian origin.
- The exception here is that the armed forces crimes cannot be charged based on the Indian Penal Code. Military as well as the armed forces have a different dedicated list of laws and the Indian Penal Code does not have the privilege to supersede any part of it. The Indian Penal Code also has the power to charge for any crimes committed by a person who is an Indian citizen on any means of transport belonging to India-an Indian aircraft or ship.
- The IPC has **23 chapters** containing **511 sections**.

### **ONLINE LAW SYSTEM: THE DRIVING FORCE**

1. The need for an online law system is obvious because of the pending cases in the courts, the increasing population, increasing crime rates across the country and the inability of the courts to settle cases on time.
2. Online law system can be a light of hope in this scenario. With ever increasing population, the corruption is also rising. Today, if a common man wants to file a case in court, the costs increase for him/her because of the number of middlemen involved. The online law system will eliminate this.
3. Most of the people do not know where to begin from in order to file a case in court or to search for a lawyer or to find the details of a certain person with criminal background. The online portal will eliminate this problem. It will provide all such details.
4. The details of courts (jurisdiction wise or area wise location) can be easily provided via this system.
5. The legal information can be made available to common man on the tips of his hand. Ease of access is a major factor in developing this portal.

## **REQUIREMENTS**

The various basic requirements for the system are as listed:

### 1. SOFTWARE REQUIREMENTS:

- Windows 7 and above
- Microsoft SQL Server.
- Visual Studio

### 2. HARDWARE REQUIREMENTS:

- Processor – i3
- Hard Disk – 5 GB
- Memory – 1GB RAM

### 3. Non-Functional Requirements:

- It must be ensured that system is available on any platform of user's choice. So the coding must be done accordingly.
- The information provided by the system must be correct.
- It must be easy for the user to file a case, search for information about laws, or get details of a lawyer etc.

### 4. Functional Requirements:

- The online law system must be easy to access from both a PC and a handheld device.
- The system must be secure from malware attacks and other threats.
- It must be ensured that system is available on any platform of user's choice. So the coding must be done accordingly.
- The system must have easy navigation for the user.
- Results of user's query must be delivered fast.

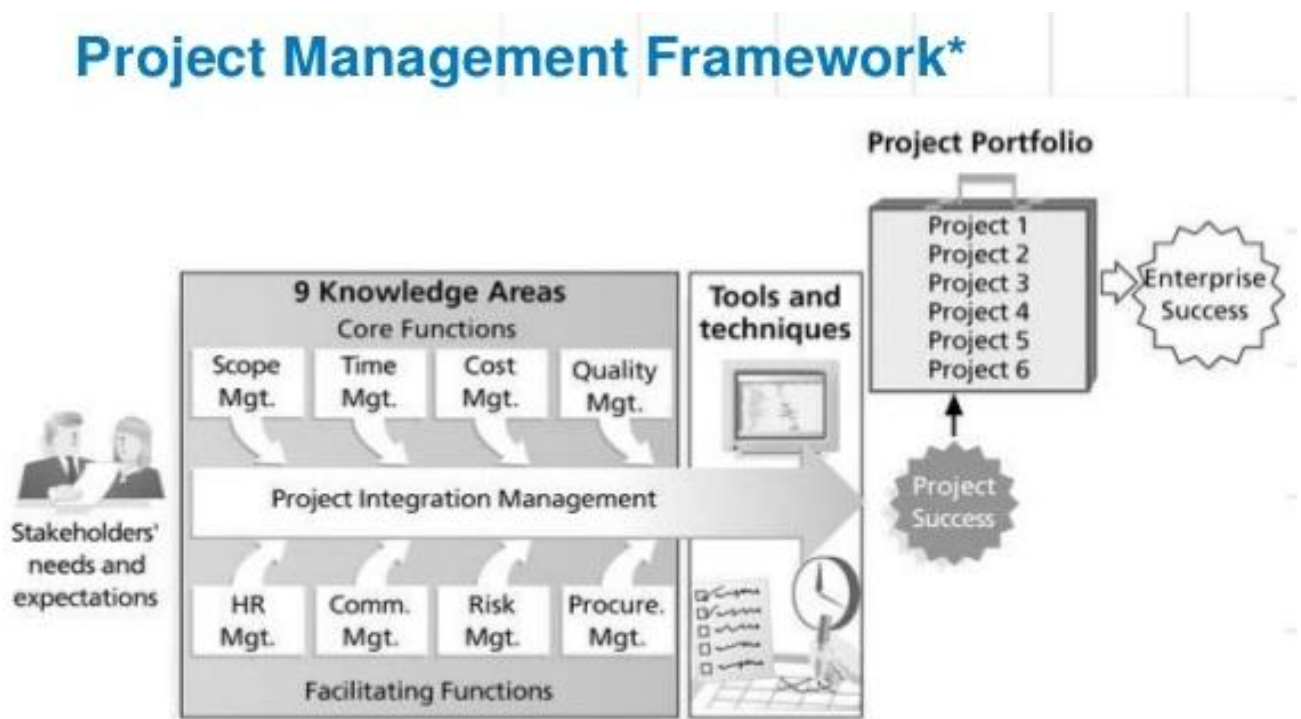
## PROJECT CHARTER

<b>Project Title:</b> Online Law System Project <b>Project Start Date:</b> 01 Jan 2018 <b>Project Finish Date:</b> 30 Nov 2018																	
<b>Budget Information:</b> INR 10,00,000 has been allocated. The major portion of the budget will be spent of information gathering and portal's development. Approximately 45 hours per week will be required.																	
<b>Project Manager:</b> Sarvesh Prajapati, 9876543210, <a href="mailto:sap1741070@sicsr.ac.in">sap1741070@sicsr.ac.in</a>																	
<b>Project Objectives:</b> The project Online Law System is a software system that contains all the laws of IPC so that people can come and search for the laws for respective crime. <ul style="list-style-type: none"><li>• Thus the main objectives is to provide reliable and authentic legal content and criminal details to common people through a website.</li><li>• The website will provide the user with access to unclassified information about convicts, lawyers, benches of courts, jurisdiction of courts, court case status, adjournment date of cases, verdicts on cases, filing of petitions etc.</li></ul>																	
<b>Main Project Success Criteria:</b> This project must enable users to have easy and secured access to legal information.																	
<b>Approach:</b> <ul style="list-style-type: none"><li>• Information gathering will take a lot of time in this project as the legal system in India is extremely complex with Crores of cases pending. Keeping an updated information about all of them is a huge task.</li><li>• Surveys, interviews, polling can be used to sense the vibes of common mass about such a website.</li><li>• The expectation of the people must be mapped with the requirements of the project.</li><li>• The UI development and data gathering must be done iteratively as the legal information is ever changing.</li><li>• Modules like <b>User Login, Law Search, Court Search, Lawyer Search, Law Updates, Criminal Search, Admin Login, Court Entry</b> and <b>Lawyer Entry</b> must be carefully designed and implemented referring to other countries' law system portals.</li><li>• Security agencies can be sought to provide unclassified and reliable information about convicts and criminals.</li></ul>																	
<b>Roles &amp; Responsibilities:</b>																	
<table><tr><th>Name</th><th>Position</th><th>Contact Details</th></tr><tr><td>Dr. Parag Kaveri</td><td>CEO</td><td>parag.kaveri@sicsr.ac.in</td></tr><tr><td>Sarvesh Prajapati</td><td>Project Manager</td><td>sap1741070@sicsr.ac.in</td></tr><tr><td>Sonali Sharma</td><td>Senior Business Analyst</td><td>sos1741082@sicsr.ac.in</td></tr><tr><td>Amruni Waingankar</td><td>Senior Software Developer</td><td>amw1741005@sicsr.ac.in</td></tr></table>			Name	Position	Contact Details	Dr. Parag Kaveri	CEO	parag.kaveri@sicsr.ac.in	Sarvesh Prajapati	Project Manager	sap1741070@sicsr.ac.in	Sonali Sharma	Senior Business Analyst	sos1741082@sicsr.ac.in	Amruni Waingankar	Senior Software Developer	amw1741005@sicsr.ac.in
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## **PROJECT MANAGEMENT FRAMEWORK**

The project management framework describes the stages a project must undergo to be completed on time in a smooth manner with proper and optimum utilization of resources at hand and completing all sub-tasks and activities with minimum to no error or glitch.

Here is a figure depicting the project management framework:



The framework with respect to the online legal system is described as follows:

### **1. Scope Management:**

It involves managing the scope of the system. The scope of the system is:

- The users of the system i.e. the people who will access the legal details and file for litigations and cases through the portal.

- Time duration to complete the system
- The domain of data collection for the database

## 2. Time Management:

- Time management has a very high importance to complete developing and making the portal go live on time.
- This will require that the various teams which are involved to collect requirements, legal data, the development teams, testing team etc. must complete their own subtasks on time.

## 3. Cost Management:

- Every project has a cost associated with it. The online legal system will also have a budget allocated to it. The managers will always try to keep the costs as low as possible.
- The online legal system may have following costs associated with:
  - (a) Collection of legal data various resources
  - (b) Fetching details of courts, lawyers and criminals
  - (c) Hiring of professionals to create and test the portal
  - (d) HR management costs

## 4. Quality Management:

- The online legal system must have good and easy-to-use GUI.
- It must have least response time.
- The turnaround time must be minimum.
- The system must be secure and must contain latest data for users.

All these metrics must be met during the system's development.

## 5. HRM (Human Resources Management):

- Every software project has people involved. The team leads must know where to put who and for what task.
- Also, the salaries and perks for overtime done for the system's development (and other such things) must be taken into account.



6. Communications Management:

- The teams must coordinate properly and clearly.
- Any issues among the team members must be resolved amicably for the sake of the project.
- Regular communication among members will keep everyone updated about the overall progress of the project.

7. Risk Management (*discussed in next to next chapter*)

8. Procurement Management:

This involves managing the necessary resources required to develop the online law system and make it live for use by people.

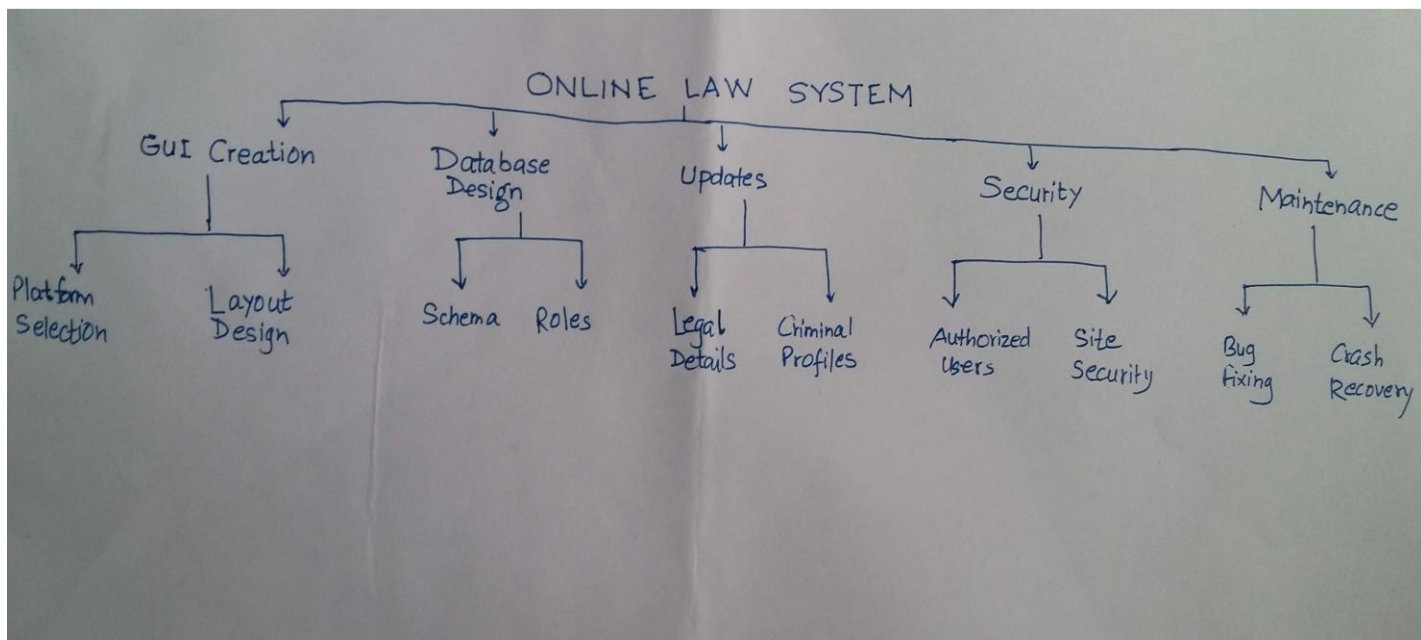
9. Tools & Techniques:

The development process itself may follow various approaches like top-down, bottom-up etc. The tasks may be broken down through a work breakdown structure.

## WORK BREAKDOWN STRUCTURE

The work breakdown structure decomposes the entire project into manageable modules or components. Each module can then be individually monitored for progress and any anomalies can be easily detected and corrected.

It also provides a visual representation of the complexity of the system that is to be created and it helps to visualize how to plan to allocate what resources. The WBS of our project is as drawn here:



## **RISK ASSESSMENT AND ITS MANAGEMENT**

Every project involves some seen and some unforeseen risks. Risk is an uncertainty of suffering any kind of loss. Developing an online law system is a daunting task in itself as it aggregates sensitive data about the Indian judiciary and criminal fraternity. Any minor glitch or human fault may vanquish the very essence of the service the system is trying to provide. Thus, it is necessary to take prior precautions to handle risks and have contingency plans in place.

Following is a list of the possible risks involved in any online portal's development. The risks for the online law system's development will be same, more or less.

1. Unclear Objectives: The objective of the online portal is to provide legal information on the fingertips of the common man. It is to be ensured that all the objectives and goals of the sub-tasks of developing this application must be clear to every team member. If goals are not clear to everyone, the project will not even begin properly, let alone complete it.
2. Limited Accessibility to Project Manager:  
The leaders and managers must be easily accessible to team members and the communication must be open always.
3. Handling Sensitive Information: The portal provides legal information. It contains details of courts, judges, lawyers, jurisdictions of operation, criminal history and record of infamous criminals. All this information must be carefully handled.
4. The portal must have latest security certificates configured for smooth running.
5. The influence of outsiders (and redundant authorities) is a threat to the portal's development.

6. Financial budgeting must be controlled tightly. As this portal is of relevance to government also, misuse of funds due to corruption is possible.
7. Regular backup must be taken of the portal's development. One cannot predict the onslaught of an earthquake or an EMP burst for that matter!
8. Make sure the information provided in the online law system is credible and unquestionable. If a person who has completed his/her sentence in prison, his/her record must be removed from the online system as soon as possible.
9. If a particular section number of IPC is omitted/neglected deliberately/ignored by choice, then the user will be left guessing in the need of hour. So, the team members must have exceptional integrity in character.
10. Improper Estimation & Scheduling: The scheduling of tasks must be done carefully so that any contingency can be dealt with effectively and successfully and the overall project growth is not hampered.
11. Lack of Proper Awareness About How the Legal System in India works:  
This may not seem as a threat on the face of it, however, it DOES lead to inefficient and error-prone system development which can have catastrophic effects later on after the portal goes live.
12. HR Management: Any developer/tester or any member going on leave/fired, or relocation (transfers) will lead to shortcoming of efficient workforce. This must be taken into consideration beforehand.
13. Improper mapping between the GUI components and their corresponding codes will compromise the accuracy and effectiveness of the system. For instance, if the button label is to be "SUBMIT" but it is mapped to the code of button labelled "CANCEL" (indeliberately!), then the purpose of the system is defeated.

## **RESOURCES**

1. <http://lawmin.nic.in>
2. [http://ecourts.gov.in/sites/default/files/ipc%20sections%20ecourts%20pta\\_1.pdf](http://ecourts.gov.in/sites/default/files/ipc%20sections%20ecourts%20pta_1.pdf)
3. <http://indiancourts.nic.in/>
4. <http://www.ipc.in/>
5. <https://study.com/academy/lesson/what-is-a-project-management-framework-definition-examples.html>
6. <http://www.itproposal.com/>

