Software Engineering Laboratory
CS3074

Judiciary Information System (JIS)

Software Requirements Specification
Document

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1. Introduction

1.1. Purpose

The purpose of this document is to present a detailed description of the Judiciary Information System(JIS). It will explain the purpose and features of the system,the interfaces of the system will do, the onstraints under which it must operate and how the system will react to external stimuli.This document is intended for the Register of the court and the developers of the system.

1.2. Scope

This software will be designed to provide a helping hand for the judges as well as the lawyers of the court by providing tools to help handle court cases which would otherwise have to be performed manually.

- This system will make the past court cases easily accessible to the lawyers and judges.
- The judges would be able to browse through the old cases for guidance on their judgement and examining the lines of judgement given previously to similar cases.
- It would be possible to search for the history of past court cases by entering keywords.
- The lawyers would be permitted to browse old cases, but would be charged for each old case they browse.
- For the purpose of maintaining the charge for lawyers, separate login accounts are created for the lawyers and the judges which are maintained by the Registrar of the court.
- This system will allow the Registrar to see the details of the currently pending cases and the cases which have been resolved or the status of any particular case.

1.3. References

IEEE : IEEE Std 830-1998 IEEE Recommended Practice for Software Requirements Specifications. IEEE Computer Society, 1998.

2. Overall Description

2.1. Product Perspective

The J udiciary Information System is a package to be used by the judges and the lawyers to improve the efficiency in handling court cases. The system provides information related to the cases which have been resolved so that judges can get guidance on their judgement and the lawyers can get guidance on their cases. This system is the first of its kind and replaces the old system of browsing through physical documents and papers thus reducing the maintenance burden.

2.2. Product Features

The J udiciary Information System provides help to handle court cases and also to make the past court cases easily accessible to the lawyers and judges. The functions of the system include the system providing different type of services based on the type of users [Registrar/Judge/Lawyer].

- The judges would be able to browse through the old cases for guidance on their judgement and examining the lines of judgement given previously to similar cases.
- The lawyers would be permitted to browse old cases, but would be charged for each old case they browse.
- This system allows to search for history of past cases by entering key words.
- The registrar can assign a date of hearing for each case by the help of the computer which displays the vacant slots on any working day.

- The registrar can get the information about the currently pending cases, the cases which have been resolved, the cases that are coming up for hearing on a particular day and the status of any particular case.
- The registrar is provided with the interface to add/delete the accounts of judges/lawyers.
- The lawyers when complete the past case browsing process, the amount to be paid by them are calculated and the information about the lawyer and the amount is sent to the billing system.

2.3. User Classes and Characteristics

The users of J udiciary Information System are the Registrar, the judges,the lawyers and the administrators who maintain the system.The users are assumed to have basic knowledge of the computers,internet and the system.The administrators of the system should have more knowledge of the internals of the system and should be able to rectify the small problems that may arise due to disk crashes, power failures and other catastrophes to the system.

2.4. Operating Environment

- The internet connection should be available 24 hours a day for the server to run.
- This software is platform independent i.e it runs on every operating system(Windows/Linux/Mac).
- The system using this software should have J ava SE 6 installed.
- The system running this software should have minimum 128 MB RAM for Windows and 64 MB RAM for Linux.

2.5. Design and Implementation Constraints

- The information of all the past cases must be stored in a database that is accessibleby the Judiciary Information System.
- The billing system is connected to the J udiciary Information System (JIS) and the database used by the billing system must be compatible with the interfaces of the JIS.
- The users must have their correct usernames and passwords to enter the JIS.
- The files in which the information regarding the previous cases are stored should be secured against malicious deformations.

2.6. User Documentation

The proper user interfaces, user's manual, online help and the guide to installation and maintenance of the system must be sufficient to educate the users on how to use the system without any problems.

2.7. Assumptions and Dependencies

- Full working of JIS is dependent on availability of an internet connection.
- The users have sufficient knowledge of computers and internet.
- The users know English language as the user interface will be provided in English.
- The system can access the previous cases database.

3. Functional Requirements

3.1. Registrar Logs-In the Software

Input: The Registrar logs into the system by selecting the Registrar Log-In option. The defendant's name, defendant's address, crime type, date of crime, place of crime, name of arresting officer and the date of arrest for each case are entered by selecting the Input Case Details option.

Processing: The system opens the file which stores the log-in details of the users and matches it against the input.

Output: The computer automatically generates a unique case identification number (CIN) for each case.

3.2. Date of Hearing

Input: The Registrar selects the Display Dates option.

Processing: The system opens the file which stores the dates and checks if they are occupied or not and prints the non-occupied dates.

Output: The computer displays the vacant slots on any working day during which the case can be scheduled.

3.3. Reason of Adjournment

Input: The Registrar enters the reason due to which the case was adjourned by selecting Enter Summary option and selects the Display Dates option.
Processing: The system opens the file which stores the case details and the Registrar writes the reason into that file and closes it.
Output: A new hearing date is assigned for that case.

3.4. Summary of Court Proceedings

Input: The Registrar enters the summary of the case by selecting Enter Summary option and selects the Display Dates option for new hearing date.
Processing: The system opens the file which stores the case details and the Registrar writes the summary into that file and closes it.
Output: A new hearing date is assigned for the case.

3.5. Currently Pending Court Cases

Input: The Registrar queries about the pending cases by selecting the Pending Cases option.
Processing: The system opens the file which stores the pending cases details and the Registrar reads from that file and closes it.
Output: The computer prints out the pending cases sorted by their CIN. For each pending case, the following data are listed: the date in which the case started, the defendant's name,address, crime details, the lawyer's name, the public prosecutor's name and the attending judge's name.

3.6. Resolved Cases

Input: The Registrar queries about the resolved cases by selecting the Resolved Cases option.
Processing: The system opens the file which stores the resolved cases details and the Registrar reads from that file and closes it.
Output: The computer chronologically lists the starting date of the case, the CIN, the date on which the judgement was delivered, the name of the attending judge and the judgement summary.

3.7. Cases on a particular date

Input: The Registrar selects the Due Cases option and enters the date of hearing.
Processing: The system opens the file which stores the due cases details and the Registrar reads from that file and closes it.
Output: All the cases that are scheduled on that day are listed in the form of their CIN.

3.8. Case Status

Input: The Registrar selects the Case Status option and enters the CIN of the case he is interested in.
Processing: The system opens the file which stores the cases details and the Registrar reads the summary from that file and closes it.
Output: The computer displays the status of the particular case.

3.9. Create/Delete Accounts

Input: The Registrar creates accounts by selecting the Create New Account option and entering the name of the judge/lawyer. He deletes an account by selecting the Delete Account option and entering the name of the judge/lawyer.
Processing: The system opens the file which stores the log-in details of the users and creates/deletes the corresponding user's details.
Output: A username and password is created for every account created and deleted for every account deleted.

3.10. Judges Log-In

Input: The judges log into the system by selection the J udges Log-In option and can select the previous cases by selecting the Resolved Cases option and entering key words like their CIN.

Processing: The system opens the file which stores the log-in details of the users and matches it against the input.
Output: The case details of the particular case are displayed.

3.11. Lawyers Log-In

Input: The lawyers log into the system by selection the Lawyers Log-In option and can select the previous cases by selecting Resolved Cases option and entering key words like their CIN.
Processing: The system opens the file which stores the log-in details of the users and matches it against the input.
Output: The case details of the particular case are displayed. Also, the number of previous cases views for each lawyer is displayed.

3.12. Pay Charge

Input: The lawyers can pay for their charges by logging into JIS and selecting Pay Charges.
Processing: The system opens the file which stores the amount details of the lawyers and resets the amount to NIL of the corresponding lawyer.
Output: This connects the JIS to the Billing System which generates the printed bill and resets the charges to NIL for the lawyer.

4. External Interface Requirements

4.1. Software Interfaces

The Judiciary Information System connects to the database through internet. It opens the file which is required to perform a certain function.The Judiciary Information System connects directly to the system software and hence is platform independent and therefore runs on every operating system.A firewall will be used with the server to prevent unauthorized access to the system.

4.2. Hardware Interfaces

No more Extra hardware system is required to operate this system neither from the citizen side nor from the personnel's side.

4.3. Communications Interfaces

The user system must be connected to an internet server to operate the software.

5. Other Requirements

5.1 Attributes

Portability: Universally available operating systems such as Windows, Linux, etc should be used to make this software portable. This software is capable to adapting to different specified environments.
Maintainability: The tutorials and user's manuals provided should be thoroughly read to efficiently maintain the software. This software is capable of modifying for purpose of making corrections, improvements and adaptation.
Performance: Internet connection should be available 24 hours a day for excellent performance. Performance is optimum as requirements for the given software is minimum.

5.2 Database

Certain files are required to maintain the details of the court cases for present and future use by the judges and the lawyers.

5.3 Hardware

A printer is required by the Billing System for giving a printed bill to the lawyers when they pay for their charges.A dedicated server in the Attorney General's office for functioning of the JIS.

6. Appendix

JIS:Judiciary Information System
CIN:Case Identification Number