JUDICIARY INFORMATION SYSTEM

(JIS)

ABSTRACT

An software requirement specifications(SRS) documentation for [JIS] – A dynamic web page for accessing judicial information.

TEAM UPROOTERS

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Problem Statement

Judiciary Information System (JIS)

The attorney general's office has requested us to develop a Judiciary Information System (JIS), to help handle court cases and also to make the past court cases easily accessible to the lawyers and judges. For each court case, the name of the defendant, defendant's address, the crime type (e.g., theft, arson, etc.), when committed (date), where committed (location), name of the arresting officer, and the date of the arrest are entered by the court registrar. Each court case is identified by a unique case identification number (CIN) which is generated by the computer. The registrar assigns a date of hearing for each case. For this the registrar expects the computer to display the vacant slots on any working day during which the case can be scheduled. Each time a case is adjourned, the reason for adjournment is entered by the registrar and he assigns a new hearing date. If hearing takes place on any day for a case, the registrar enters the summary of the court proceedings and assigns a new hearing date. Also, on completion of a court case, the summary of the judgment is recorded and the case is closed but the details of the case is maintained for future reference. Other data maintained about a case include the name of the presiding judge, the public prosecutor, the starting date, and the expected completion date of a trial. The judges should be able to browse through the old cases for guidance on their judgment. The lawyers should also be permitted to browse old cases, but should be charged for each old case they browse. Using the JIS software, the Registrar of the court should be able to query the following:

(a) The currently pending court cases. In response to this query, the computer should print out the pending cases sorted by CIN. For each pending case, the following data should be 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.

(b) The cases that have been resolved over any given period. The output in this case should chronologically list the starting date of the case, the CIN, the date on which the judgment was delivered, the name of the attending judge, and the judgment summary.

(c) The cases that are coming up for hearing on a particular date.

(d) The status of any particular case (cases are identified by CIN). The lawyers and the judges need to refer to the past court cases. The lawyers need to refer these to prepare for their line of arguments. The judges need to refer the past court cases to examine the lines of judgments given previously to similar cases. It should be possible to search for the history of past court cases by entering key words. However, the lawyers should be charged for each time they see the details of a court case to recover some of the computerization costs. For this purpose, it is necessary to provide separate login accounts to the JIS software and keep track of how many court cases each lawyer views. The registrar should be able to create login accounts for the different users (i.e. judges, lawyers, etc) and should be able to delete these accounts.

1. Introduction

1.1 Purpose

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

1.2 Intended audience

The intended audience will be Judges , Lawyers , Legal professionals ,Police , Attorney general , clients

1.3 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 key words.
- 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.
- A police officer registers a case and send this details to registrar , where registrar assigns Judge and hearing dates to case.

1.4 Definition

- **Lawyer** : A person who represent clients in legal matters
- **Judge** : A public officer appointed to decide cases in a law court.
- **Registrar**: A person who is responsible for the administrative and judicial work
- **CIN** : Case Identification Number
- **Police** : A public officer who files a case and sends to the registrar.

1.5 References

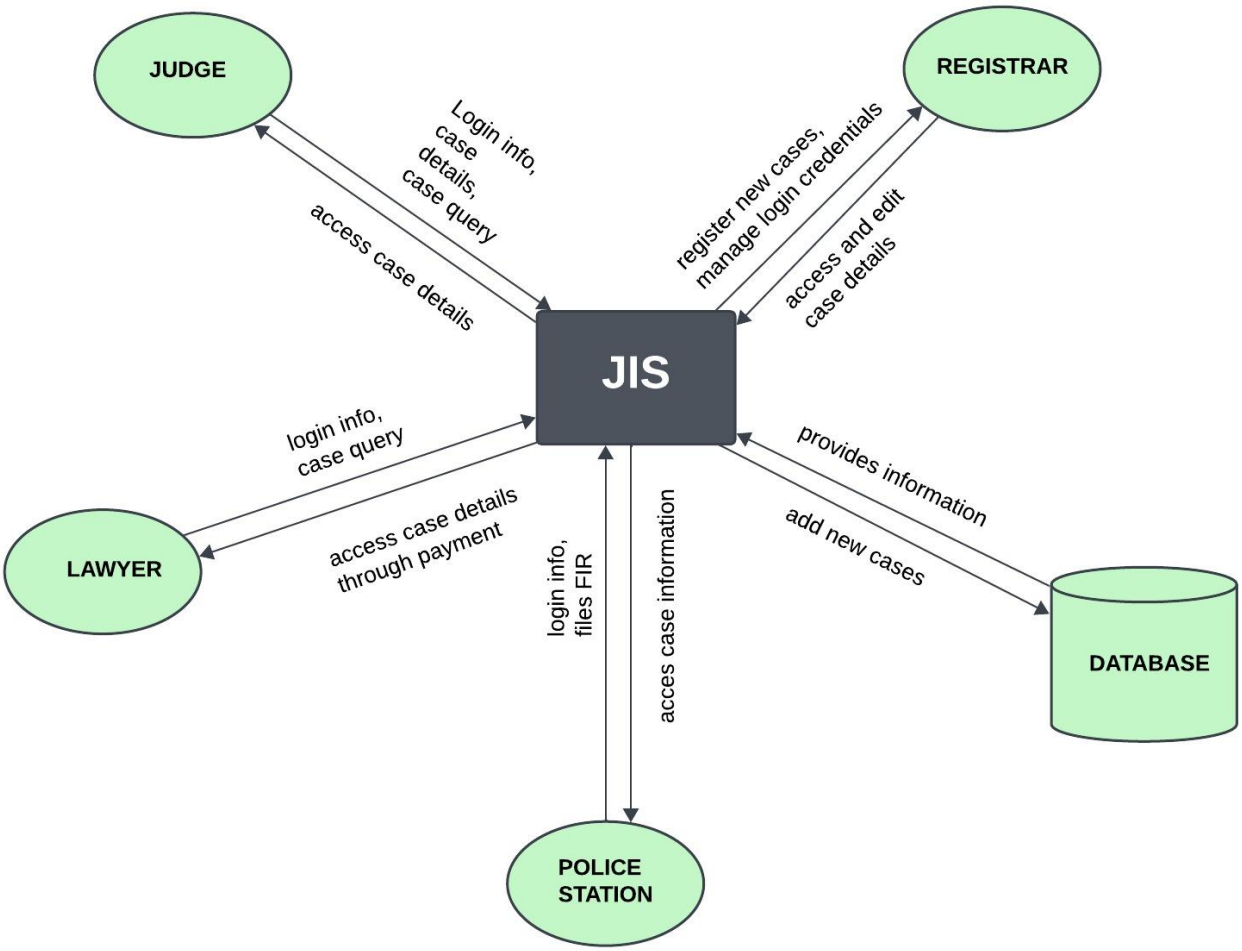
- Software Engineering Roger Pressman McGraw Hill Fifth edition.
- An Integrated Approach to Software Engineering Pankaj Jalote.

2. Overall Description

2.1 Product Perspective

The Judiciary 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.
The complete overview of the system is as shown in the overview diagram below:

CONTEXT DIAGRAM



Technologies:

HTML , CSS , JAVASCRIPT , ADVANCED JAVA.

2.2 User Interfaces

- **Lawyer** : A lawyer can login through login page and he can find his cases and can get reference from previous cases through Cases Tracking page. A Lawyer can pay money through billing page to get access to the previous cases.

- **Judge** : A Judge can login through the login page. 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. Through cases interface.
- **Registrar** : 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.
- **Police** : A police officer can files a case and send the details to registrar and receives acknowledgements from registrar.

2.3 Constraints

- The information of all the past cases must be stored in a database that is accessible by the Judiciary Information System.
- 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.

2.4 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.

2.5 User Characteristics

- The users of Judiciary Information System are the Registrar, Police, 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.

3.1 System Requirements

- 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).
- The system using this software should have Java EE 10 installed.
- The system running this software should have minimum 4 GB RAM for Windows and 8 GB RAM for Linux.

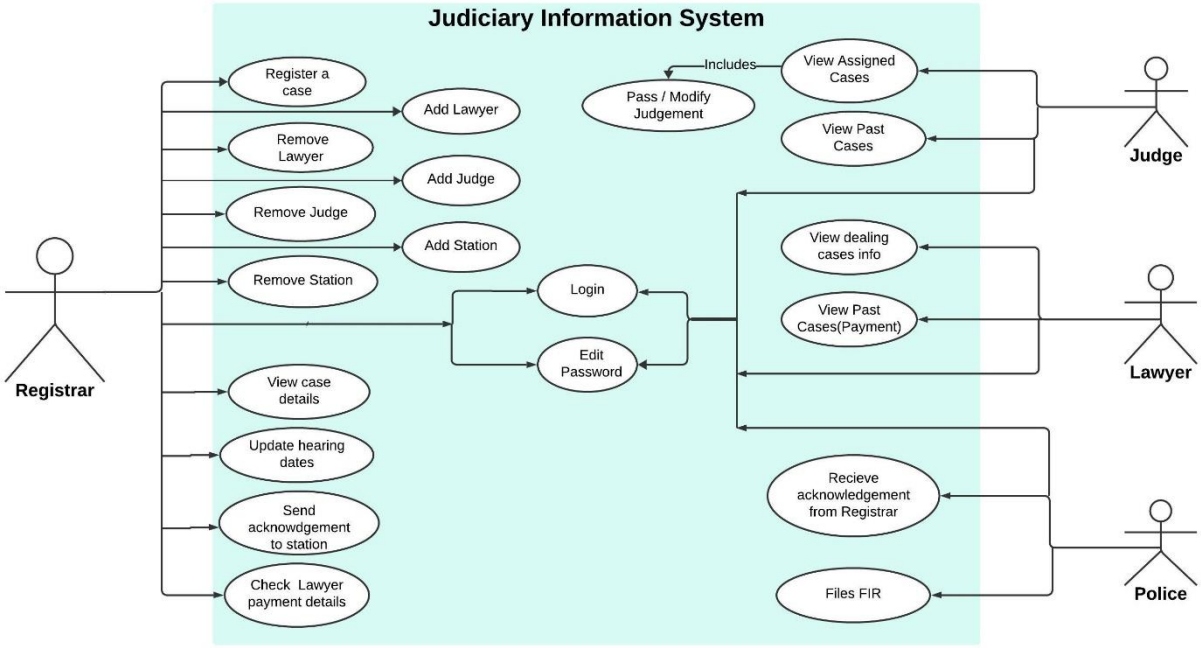
3.2 Functional Requirements

Use Case Overview Table

Use Case ID	Use Case Name	Priority	Stability	Verifiability
UC-JIS-RC	Register a Case	High	Stable	verifiable
UC-JIS-RL	Remove Lawyer	Low	Stable	verifiable
UC-JIS-RJ	Remove Judge	Low	Stable	verifiable
UC-JIS-RS	Remove Station	Low	Stable	verifiable
UC-JIS-AL	Add Lawyer	Low	Stable	verifiable
UC-JIS-AJ	Add Judge	Low	Stable	verifiable
UC-JIS-AS	Add Station	Low	Stable	verifiable
UC-JIS-VAC	View Assigned Cases	High	Stable	verifiable
UC-JIS-VPC	View Past Cases	High	Stable	verifiable
UC-JIS-VDCI	View Dealing Cases Info	High	Stable	verifiable
UC-JIS-VPCL	View Past Cases (Payment)	High	Stable	verifiable
UC-JIS-RAR	Receive Acknowledgement from Registrar	Medium	Stable	verifiable
UC-JIS-FF	File FIR	High	Stable	verifiable
UC-JIS-LI	Login	VeryHigh	Stable	verifiable
UC-JIS-EP	Edit Password	Low	Stable	verifiable
UC-JIS-VCD	View Case Details	High	Stable	verifiable
UC-JIS-UHD	Update Hearing Dates	High	Stable	verifiable
UC-JIS-SAS	Send Acknowledgement to Station	Medium	Stable	verifiable
UC-JIS-CLPD	Check Lawyer Payment Details	Medium	Stable	verifiable
UC-JIS-PMJ	Pass or Modify Judgement	Medium	Stable	verifiable

3.3 Use Case Functionalities

USE CASE DIAGRAM



Use Case Specifications

1. Login

Use Case ID	**UC-JIS-LI**
Use Case Name	Login
Actor	Registrar, Judge, Lawyer, Police
Description	The user logs into the Judiciary Information System.
Preconditions	The user has a valid user ID and password.
Postconditions	The user is logged in and can access the system functionalities according to their role.
Main Flow	1. User opens the login page. 2. User enters user ID and password. 3. System verifies credentials. 4. System grants access and redirects to the user's dashboard.
Alternative Flow	3a. If credentials are invalid, the system displays an error message and prompts the user to re-enter the credentials.
Frequency of Use	Very High
Frequency of Occurrence	Multiple times daily

2. Register a Case

Use Case ID	**UC-JIS-RC**
Use Case Name	Register a Case
Actor	Registrar
Description	The Registrar registers a new case in the system.
Preconditions	The Registrar is logged in.
Postconditions	A new case is created and stored in the system.
Main Flow	1. Registrar selects "Register a case" option. 2. System prompts for case details. 3. Registrar enters case details. 4. System saves the case and confirms registration.
Alternative Flow	1a. If case details are incomplete, the system prompts for missing information. 3a. If there is an error in saving, the system shows an error message.
Frequency of Use	High
Frequency of Occurrence	Daily

3. Add Lawyer

Use Case ID	**UC-JIS-AL**
Use Case Name	Add Lawyer
Actor	Registrar
Description	The Registrar adds a new lawyer to the system.
Preconditions	The Registrar is logged in.
Postconditions	A new lawyer is added to the system.
Main Flow	1. Registrar selects "Add Lawyer" option. 2. System prompts for lawyer details. 3. Registrar enters lawyer details. 4. System saves the lawyer details and confirms the addition.
Alternative Flow	1a. If lawyer details are incomplete, the system prompts for missing information. 3a. If there is an error in saving, the system shows an error message.
Frequency of Use	Low
Frequency of Occurrence	Monthly or as needed.

4. Remove Lawyer

Use Case ID	**UC-JIS-RL**
Use Case Name	Remove Lawyer
Actor	Registrar
Description	The Registrar removes an existing lawyer from the system.
Preconditions	The Registrar is logged in.
Postconditions	The lawyer is removed from the system.
Main Flow	1. Registrar selects "Remove Lawyer" option. 2. System prompts for lawyer identification. 3. Registrar enters lawyer identification.

	4. System removes the lawyer and confirms the removal.
Alternative Flow	1a. If lawyer identification is incorrect, the system prompts for correct information. 3a. If there is an error in removal, the system shows an error message.
Frequency of Use	Low
Frequency of Occurrence	Monthly

5. Add Judge

Use Case ID	**UC-JIS-AJ**
Use Case Name	Add Judge
Actor	Registrar
Description	The Registrar adds a new judge to the system.
Preconditions	The Registrar is logged in.
Postconditions	A new judge is added to the system.
Main Flow	1. Registrar selects "Add Judge" option. 2. System prompts for judge details. 3. Registrar enters judge details. 4. System saves the judge details and confirms the addition.
Alternative Flow	1a. If judge details are incomplete, the system prompts for missing information. 3a. If there is an error in saving, the system shows an error message.
Frequency of Use	Low
Frequency of Occurrence	Monthly or as needed.

6. Remove Judge

Use Case ID	**UC- JIS-RJ**
Use Case Name	Remove Judge
Actor	Registrar
Description	The Registrar removes an existing judge from the system.
Preconditions	The Registrar is logged in.
Postconditions	The judge is removed from the system.
Main Flow	1. Registrar selects "Remove Judge" option. 2. System prompts for judge identification. 3. Registrar enters judge identification. 4. System removes the judge and confirms the removal.
Alternative Flow	1a. If judge identification is incorrect, the system prompts for correct information. 3a. If there is an error in removal, the system shows an error message.
Frequency of Use	Low
Frequency of Occurrence	Monthly

7. Add Station

Use Case ID	**UC- JIS-AS**
Use Case Name	Add Station
Actor	Registrar
Description	The Registrar adds a new station to the system.
Preconditions	The Registrar is logged in.
Postconditions	A new station is added to the system.
Main Flow	1. Registrar selects "Add Station" option. 2. System prompts for station details. 3. Registrar enters station details. 4. System saves the station details and confirms the addition.
Alternative Flow	1a. If station details are incomplete, the system prompts for missing information. 3a. If there is an error in saving, the system shows an error message.
Frequency of Use	Low
Frequency of Occurrence	Monthly or as needed.

8. Remove Station

Use Case ID	**UC- JIS-RS**
Use Case Name	Remove Station
Actor	Registrar
Description	The Registrar removes an existing station from the system.
Preconditions	The Registrar is logged in.
Postconditions	The station is removed from the system.
Main Flow	1. Registrar selects "Remove Station" option. 2. System prompts for station identification. 3. Registrar enters station identification. 4. System removes the station and confirms the removal.
Alternative Flow	1a. If station identification is incorrect, the system prompts for correct information. 3a. If there is an error in removal, the system shows an error message.
Frequency of Use	Low
Frequency of Occurrence	Monthly or as needed

9. View Assigned Cases

Use Case ID	**UC- JIS-VAC**
Use Case Name	View Assigned Cases
Actor	Judge
Description	The Judge views the list of cases assigned to them.
Preconditions	The Judge is logged in.

Postconditions	The list of assigned cases is displayed.
Main Flow	1. Judge selects "View Assigned Cases" option. 2. System retrieves and displays the list of assigned cases.
Alternative Flow	2a. If there are no assigned cases, the system displays a message indicating this.
Frequency of Use	High
Frequency of Occurrence	Daily

10. View Past Cases

Use Case ID	**UC- JIS-VPC**
Use Case Name	View Past Cases
Actor	Judge
Description	The Judge views the list of past cases they were involved in or other.
Preconditions	The Judge is logged in and CIN of particular case.
Postconditions	The past case is displayed.
Main Flow	1. User selects "View Past Cases" option. 2. System retrieves and displays the past case.
Alternative Flow	2a. If there are no past cases, the system displays a message indicating this, if CIN is incorrect display an error message.
Frequency of Use	High
Frequency of Occurrence	Daily

11. View Dealing Cases Info

Use Case ID	**UC- JIS-VDCI**
Use Case Name	View Dealing Cases Info
Actor	Lawyer
Description	The Lawyer views information about the cases they are currently dealing with.
Preconditions	The Lawyer is logged in.
Postconditions	The dealing cases information is displayed.
Main Flow	1. Lawyer selects "View Dealing Cases Info" option. 2. System retrieves and displays the dealing cases information.
Alternative Flow	2a. If there are no dealing cases, the system displays a message indicating this.
Frequency of Use	High
Frequency of Occurrence	Daily

12. File FIR

Use Case ID	**UC- JIS-FF**
Use Case Name	File FIR
Actor	Police
Description	The Police files a First Information Report (FIR) in the system.
Preconditions	The Police is logged in.

Postconditions	The FIR is created and stored in the system.
Main Flow	1. Police selects "File FIR" option. 2. System prompts for FIR details. 3. Police enters FIR details. 4. System saves the FIR and confirms the filing.
Alternative Flow	1a. If FIR details are incomplete, the system prompts for missing information. 3a. If there is an error in saving, the system shows an error message.
Frequency of Use	High
Frequency of Occurrence	Daily

13. Receive Acknowledgment from Registrar

Use Case ID	**UC- JIS-RAR**
Use Case Name	Receive Acknowledgment from Registrar
Actor	Police
Description	The Police receives acknowledgment from the Registrar about a case or FIR.
Preconditions	The Police is logged in.
Postconditions	The acknowledgment is displayed.
Main Flow	1. Police selects "Receive Acknowledgment from Registrar" option. 2. System retrieves and displays the acknowledgment.
Alternative Flow	2a. If there is no acknowledgment, the system displays a message indicating this.
Frequency of Use	Medium
Frequency of Occurrence	Weekly

14. Edit Password

Use Case ID	**UC- JIS-EP**
Use Case Name	Edit Password
Actor	Registrar, Judge, Lawyer, Police
Description	The user changes their account password.
Preconditions	The user is logged in.
Postconditions	The user's password is updated in the system.
Main Flow	1. User navigates to the account settings or profile page. 2. User selects the "Edit Password" option. 3. System prompts for the current password, new password, and confirmation of the new password. 4. User enters the required information. 5. System verifies the current password. 6. System updates the password and confirms the change.
Alternative Flow	3a. If the current password is incorrect, the system displays an error message and prompts the user to re-enter the information. 4a. If the new password and confirmation do not match, the system displays an error message and prompts the user to re-enter the information.

	5a. If there is an error updating the password, the system displays an error message.
Frequency of Use	Low
Frequency of Occurrence	Monthly or as needed

15. View Case Details

Use Case ID	**UC- JIS-VCD**
Use Case Name	View Case Details
Actor	Registrar
Description	The Registrar views details of a specific case.
Preconditions	The Registrar is logged in.
Postconditions	The case details are displayed.
Main Flow	1. Registrar selects "View Case Details" option. 2. System prompts for case identification. 3. Registrar enters case identification. 4. System retrieves and displays case details.
Alternative Flow	2a. If case identification is incorrect or case does not exist, the system displays an error message.
Frequency of Use	High
Frequency of Occurrence	Daily

16. Update Hearing Dates

Use Case ID	**UC- JIS-UHD**
Use Case Name	Update Hearing Dates
Actor	Registrar
Description	The Registrar updates the hearing dates of a case.
Preconditions	The Registrar is logged in.
Postconditions	The hearing dates are updated in the system.
Main Flow	1. Registrar selects "Update Hearing Dates" option. 2. System prompts for case identification and new hearing dates. 3. Registrar enters the required information. 4. System updates the hearing dates and confirms the update.
Alternative Flow	2a. If case identification is incorrect or case does not exist, the system displays an error message. 4a. If the new hearing dates are invalid, the system displays an error message.
Frequency of Use	High
Frequency of Occurrence	Daily

17. Send Acknowledgement to Station

Use Case ID	**UC- JIS-SAS**
Use Case Name	Send Acknowledgement to Station
Actor	Registrar

Description	The Registrar sends an acknowledgment to a police station regarding a case or FIR.
Preconditions	The Registrar is logged in.
Postconditions	The acknowledgment is sent to the specified station.
Main Flow	1. Registrar selects "Send Acknowledgement to Station" option. 2. System prompts for case or FIR identification and station details. 3. Registrar enters the required information. 4. System sends the acknowledgment and confirms the action.
Alternative Flow	2a. If case or FIR identification is incorrect, the system displays an error message. 3a. If station details are incorrect, the system displays an error message.
Frequency of Use	Medium
Frequency of Occurrence	Weekly

18. Check Lawyer Payment Details

Use Case ID	**UC- JIS-CLPD**
Use Case Name	Check Lawyer Payment Details
Actor	Registrar
Description	The Registrar checks the payment details of a lawyer.
Preconditions	The Registrar is logged in.
Postconditions	The lawyer's payment details are displayed.
Main Flow	1. Registrar selects "Check Lawyer Payment Details" option. 2. System prompts for lawyer identification. 3. Registrar enters lawyer identification. 4. System retrieves and displays the lawyer's payment details.
Alternative Flow	2a. If lawyer identification is incorrect or lawyer does not exist, the system displays an error message.
Frequency of Use	Medium
Frequency of Occurrence	Weekly

19. Pass or Modify Judgement

Use Case ID	**UC- JIS-PMJ**
Use Case Name	Pass or Modify Judgement
Actor	Judge
Description	The Judge passes or modifies a judgement for a case.
Preconditions	The Judge is logged in.
Postconditions	The judgement is passed or modified in the system.
Main Flow	1. Judge selects "Pass or Modify Judgement" option. 2. System prompts for case identification and judgement details. 3. Judge enters the required information. 4. System updates the judgement and confirms the action.
Alternative Flow	2a. If case identification is incorrect or case does not exist, the system displays an error message. 4a. If the judgement details are invalid, the system displays an error message.

Frequency of Use	Medium
Frequency of Occurrence	Weekly

20. View Past Cases (Payment)

Use Case ID	**UC- JIS-VPCL**
Use Case Name	View Past Cases (Payment)
Actor	Lawyer
Description	The Lawyer views the past case through payment.
Preconditions	The Lawyer is logged in.
Postconditions	The past cases details are displayed.
Main Flow	1. Lawyer selects "View Past Cases (Payment)" option. 2. System retrieves and displays the past cases details.
Alternative Flow	2a. If there are no past cases or payment details are unavailable, the system displays a message indicating this.
Frequency of Use	High
Frequency of Occurrence	Daily

3.4 Non functional requirements

- **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

- **Reliability** : Users can get appropriate information about case details , hearing dates etc.

- **Security** : As this is a web application it should be more secure in order to confidential case details from hackers.