A dark blue vertical bar is on the left. A blue arrow points right from it, containing the date.

13/4/2016

Judiciary Information System Software

Test Results Document

Several thin, curved lines in shades of blue and grey originate from the bottom left and curve upwards and to the right.

Vaishal Shah

14CS10059

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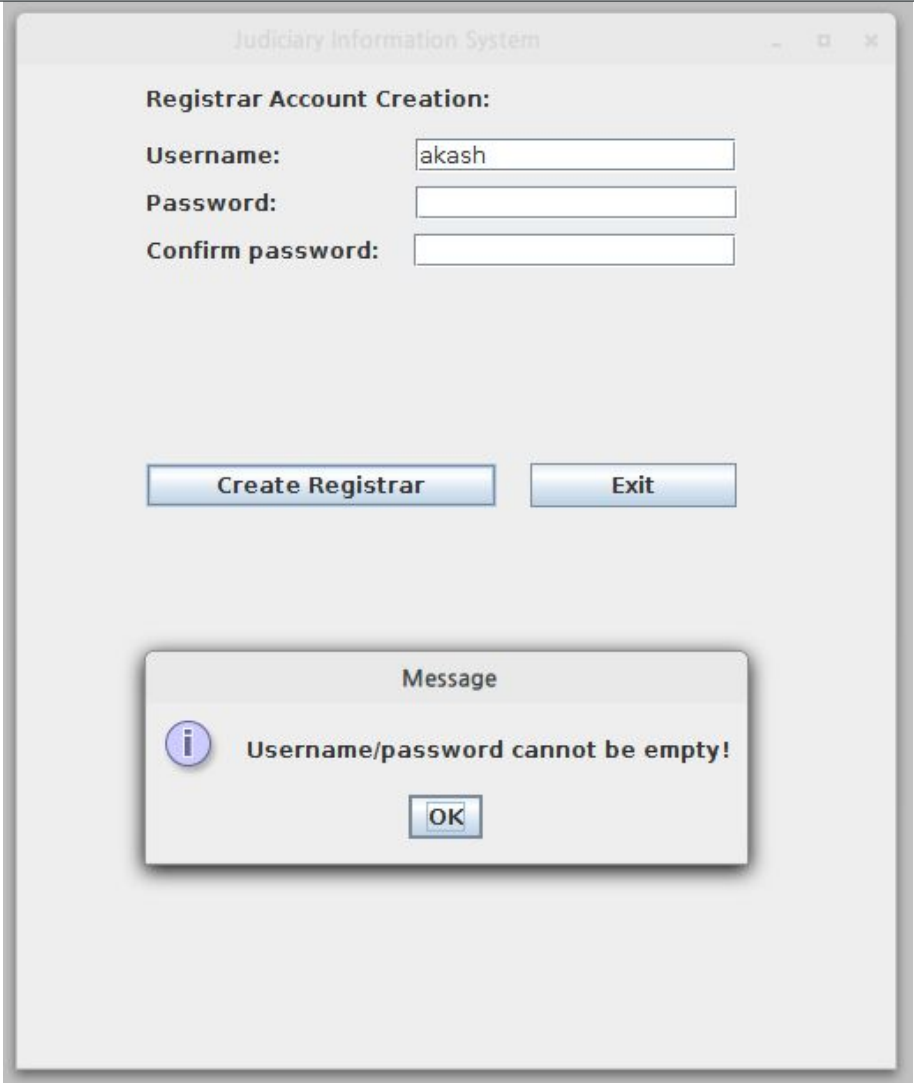
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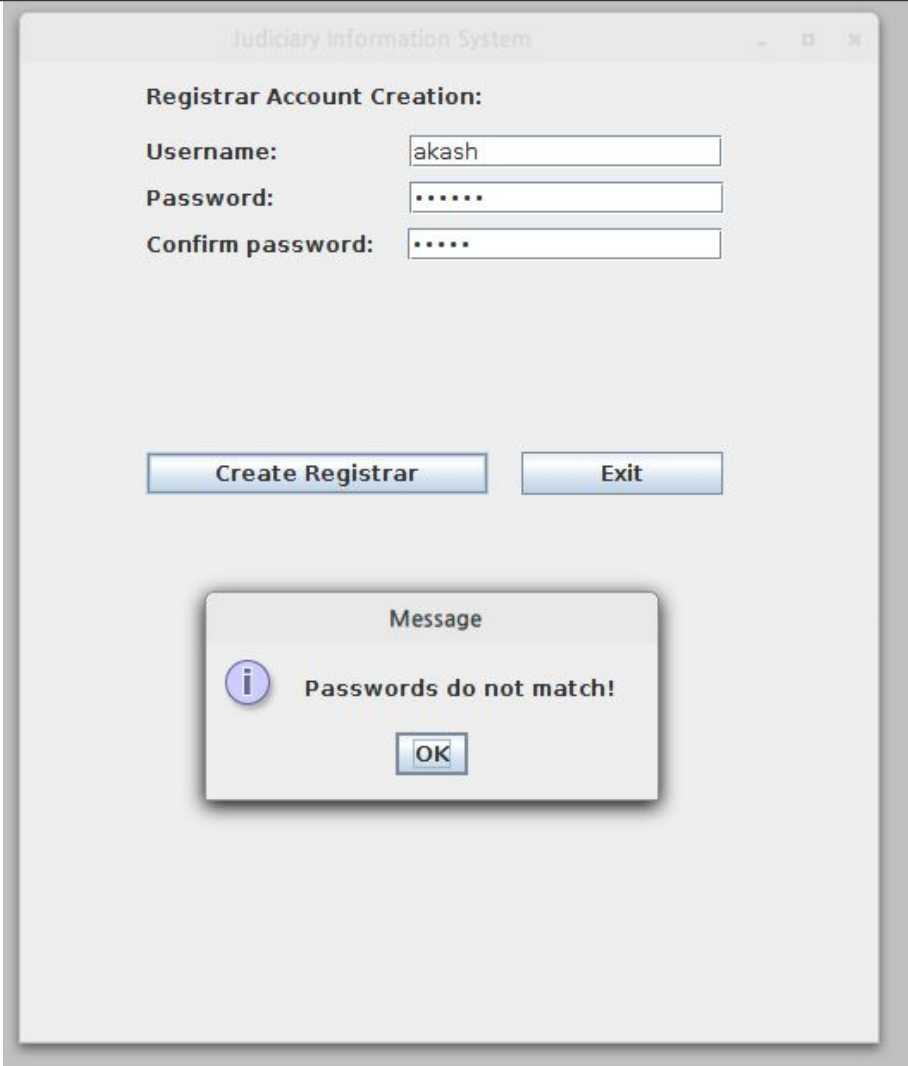
BLACK BOX TESTING

1. BBT for Registrar Account Creation:

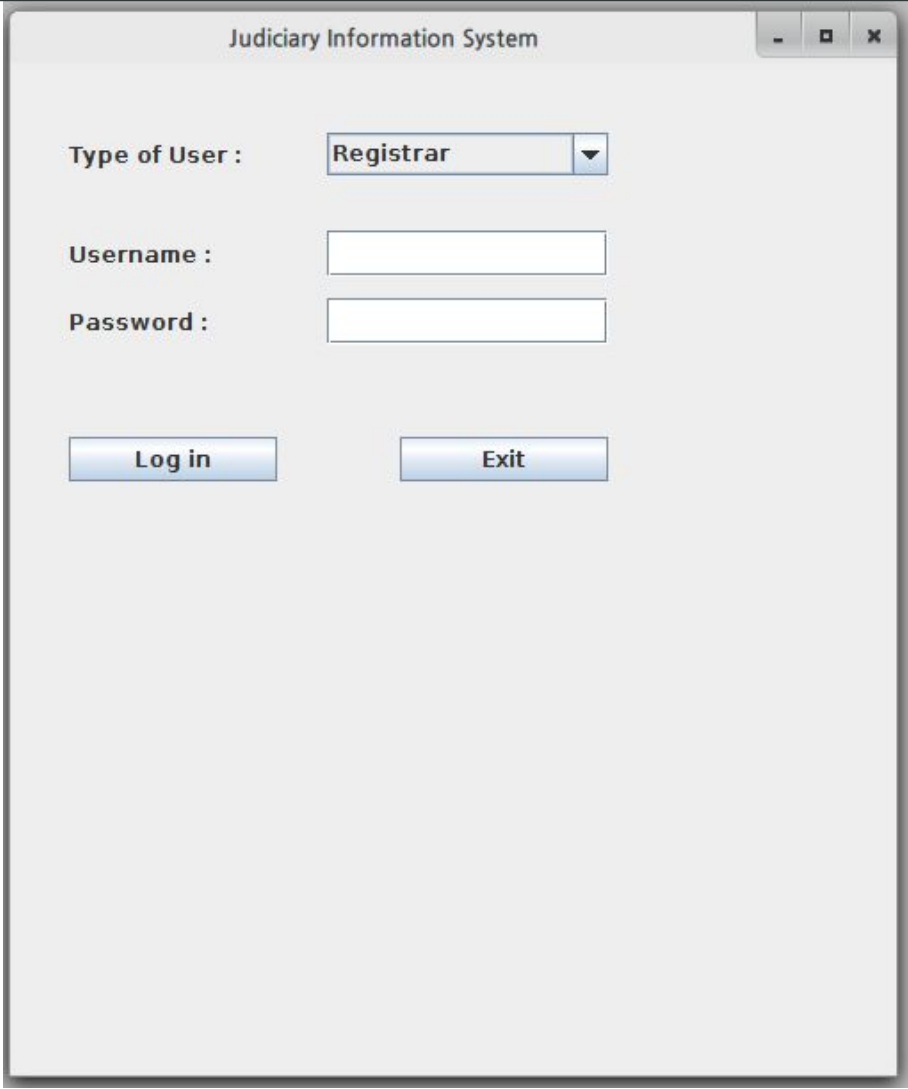
CASE 1 - User name or password missing

Username	akash
Password	
Confirm password	
Expected output	Error message
Actual output	
Status	Test passed

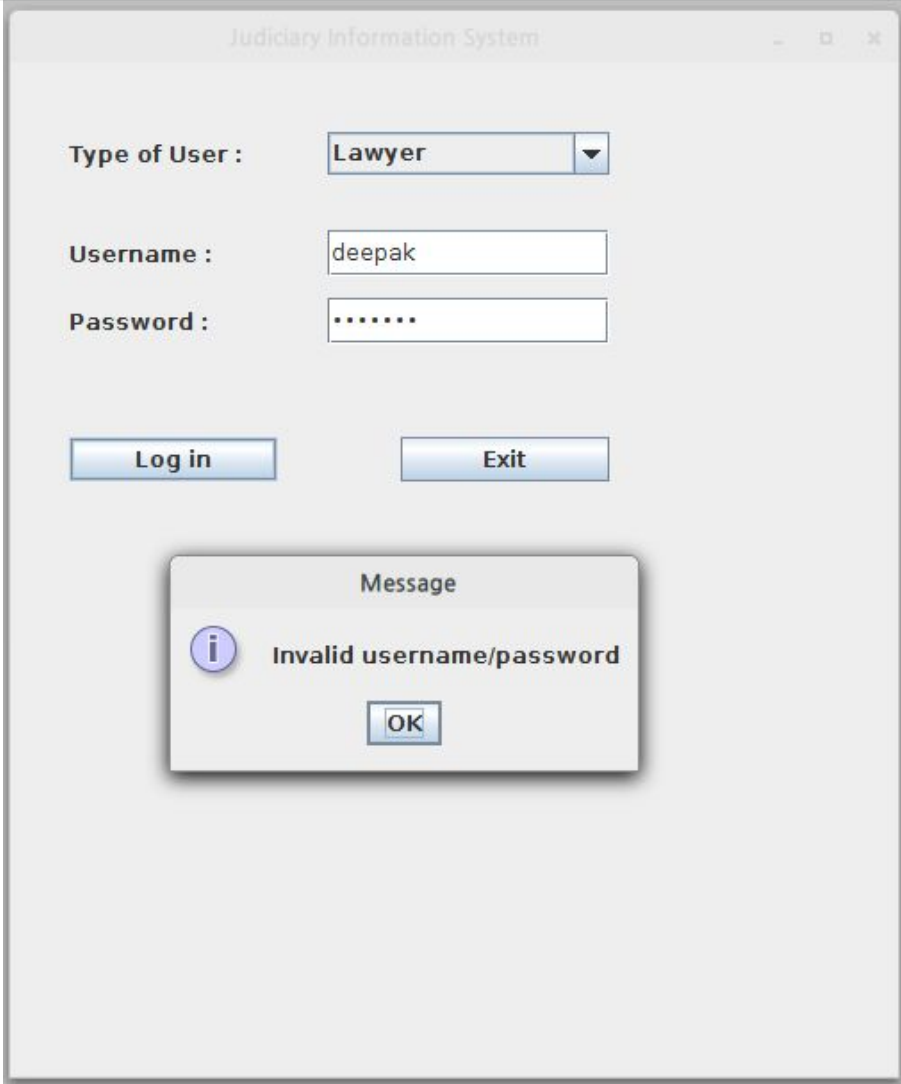
CASE 2 - The two entered passwords are different

Username	akash
Password	qwerty
Confirm password	qwert
Expected output	Error message
Actual output	
Status	Test passed

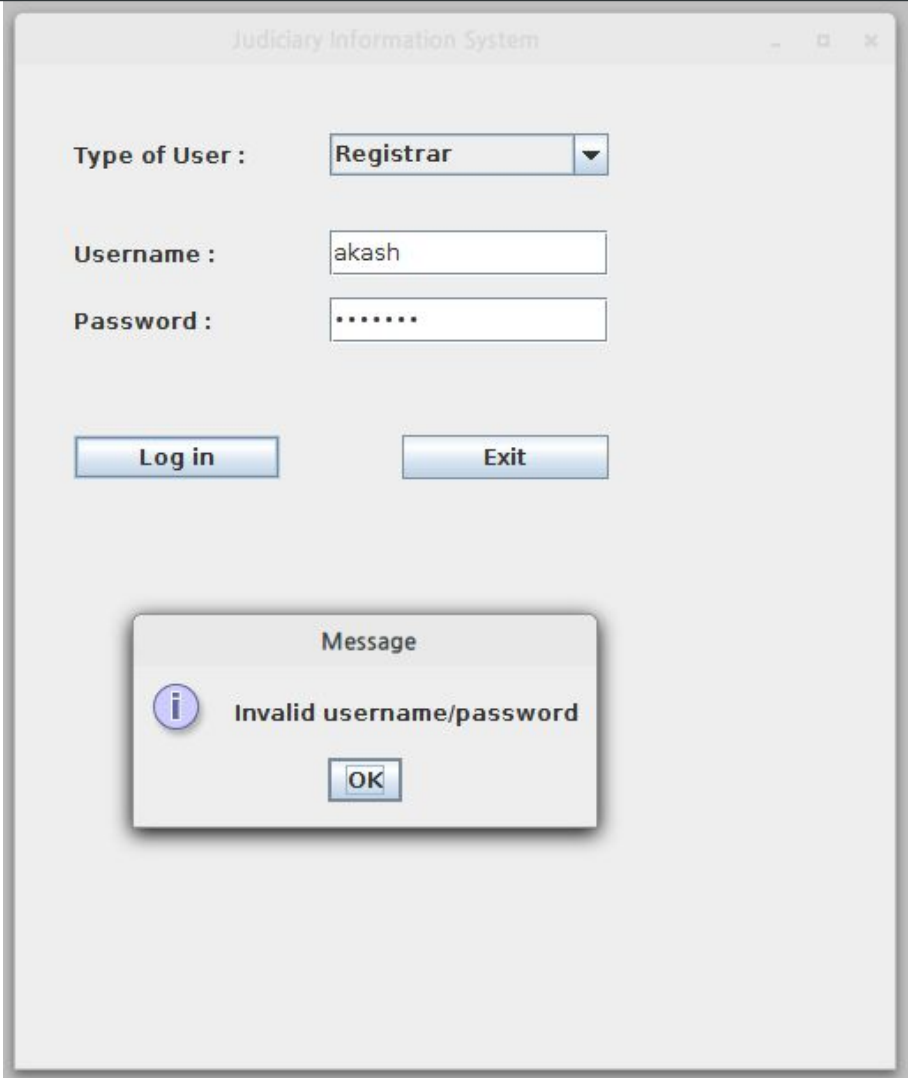
CASE 3 - Proper input

Username	akash
Password	qwerty
Confirm password	qwerty
Expected output	Registrar account creation successful, log-in screen displayed
Actual output	
Status	Test passed

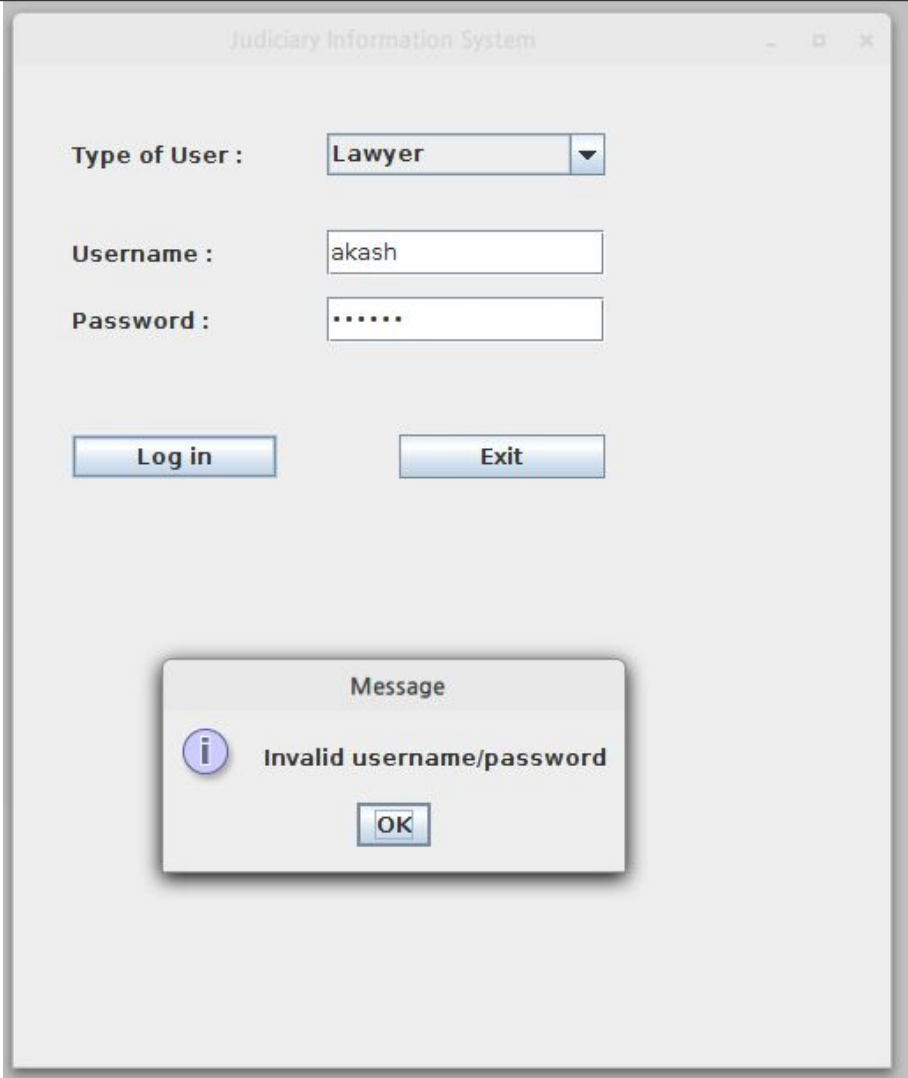
2. BBT for Log-in:CASE 1 - Invalid username

Type of user	Lawyer
Username	deepak
Password	Deep123
Expected output	Error message, since there is no such user
Actual output	 The screenshot shows a window titled "Judiciary Information System". Inside, there are three labels: "Type of User :", "Username :", and "Password :". The "Type of User" is a dropdown menu with "Lawyer" selected. The "Username" field contains "deepak" and the "Password" field contains ".....". Below these fields are two buttons: "Log in" and "Exit". In the center of the window, there is a smaller "Message" dialog box. This dialog box has an information icon (i) and the text "Invalid username/password". At the bottom of the message box is an "OK" button.
Status	Test passed

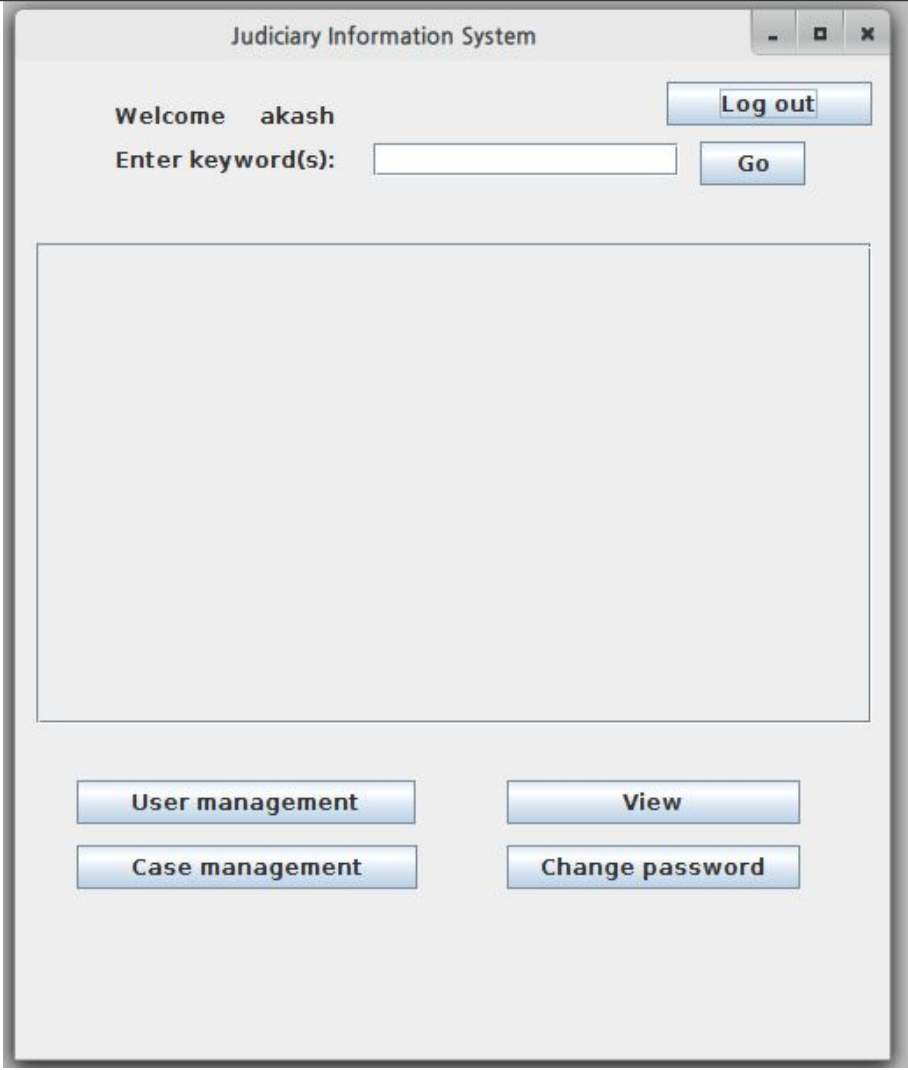
CASE 2 - Wrong password entered

Type of user	Registrar
Username	akash
Password	Akash12
Expected output	Error message, since the correct password for 'akash' is 'qwerty'
Actual output	 <p>The screenshot shows a window titled 'Judiciary Information System'. Inside, there are three labels: 'Type of User :', 'Username :', and 'Password :'. The 'Type of User' is set to 'Registrar' in a dropdown menu. The 'Username' field contains 'akash' and the 'Password' field contains '.....'. Below these fields are two buttons: 'Log in' and 'Exit'. A message dialog box is displayed in the foreground with the title 'Message', an information icon, and the text 'Invalid username/password'. An 'OK' button is at the bottom of the message box.</p>
Status	Test passed

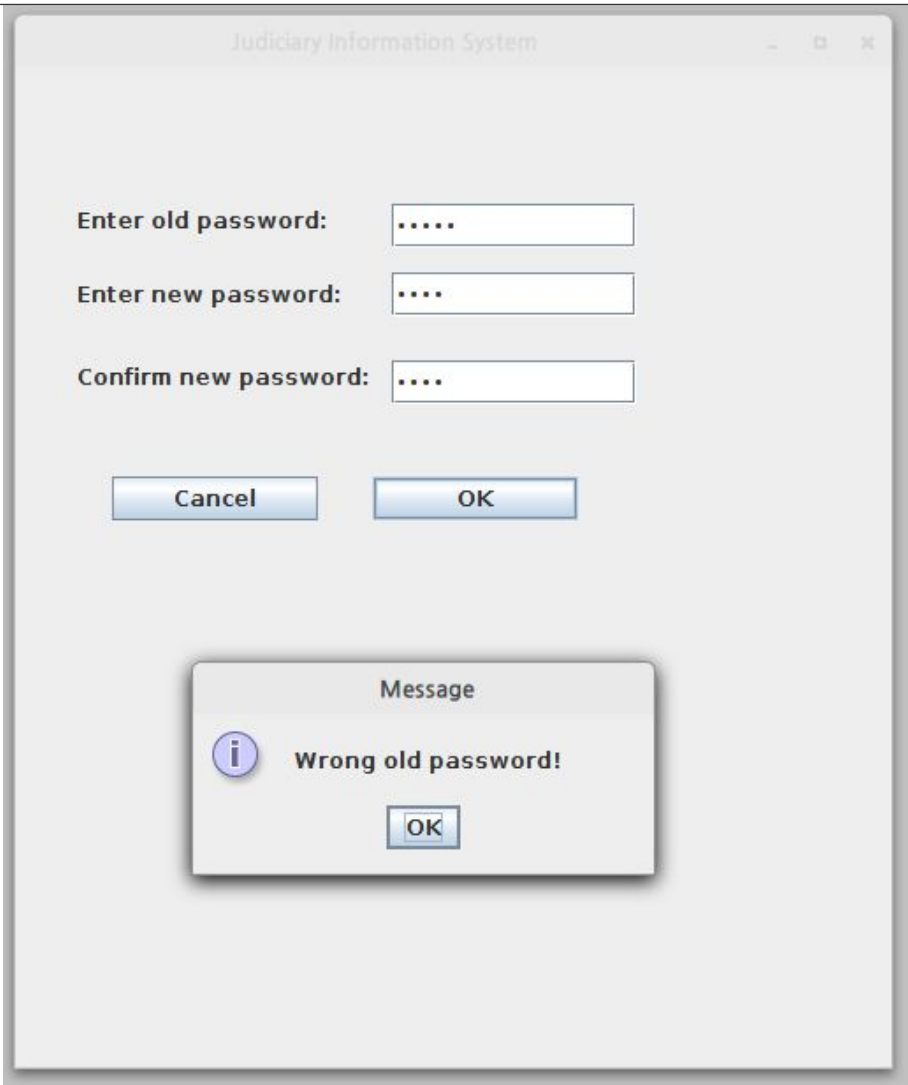
CASE 3 - Valid user name and password, wrong type of user

Type of user	Lawyer
Username	akash
Password	qwerty
Expected output	Error message, since the correct mode is Registrar
Actual output	 <p>The screenshot shows the 'Judiciary Information System' login window. It has a title bar with standard window controls. The main area contains three labels: 'Type of User :', 'Username :', and 'Password :'. The 'Type of User' is a dropdown menu currently set to 'Lawyer'. The 'Username' field contains 'akash' and the 'Password' field contains 'qwerty' (masked with dots). Below these fields are two buttons: 'Log in' and 'Exit'. A modal message box is displayed in the center, titled 'Message', with an information icon and the text 'Invalid username/password'. The message box has an 'OK' button.</p>
Status	Test passed

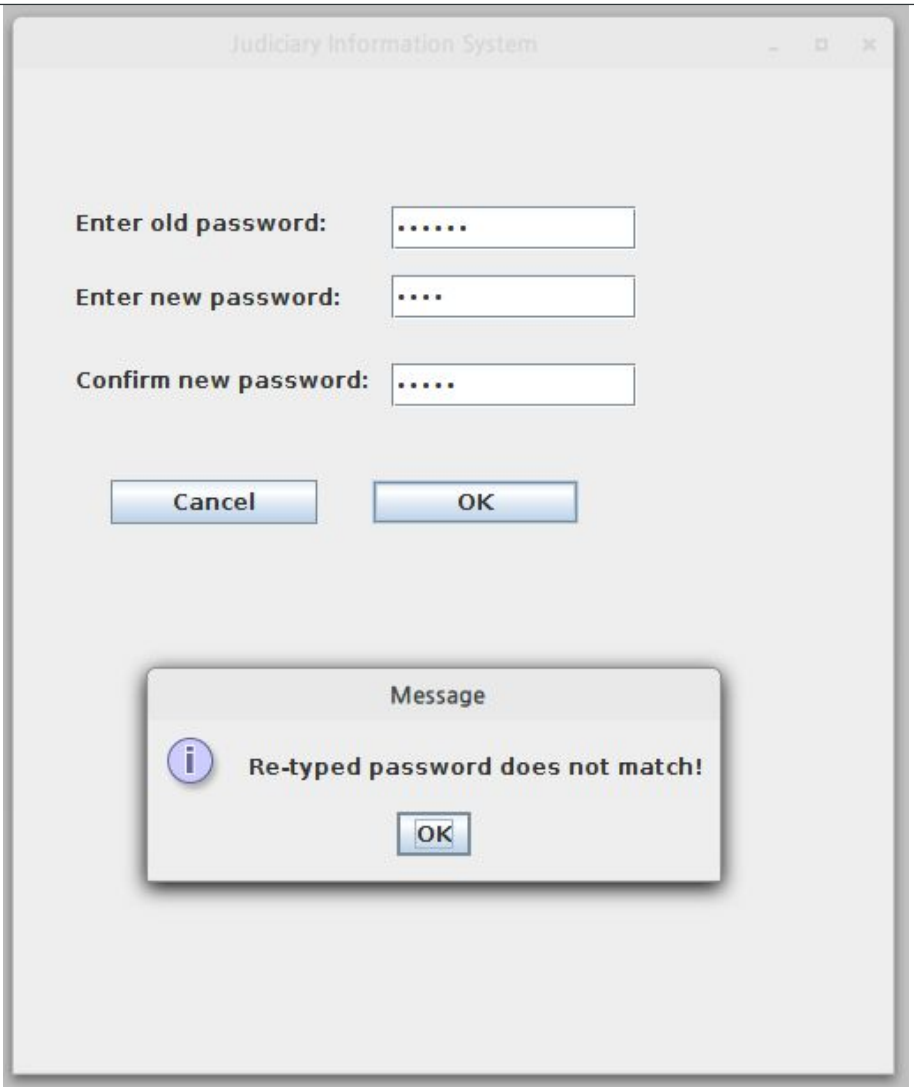
CASE 4 - Proper input

Type of user	Registrar
Username	akash
Password	qwerty
Expected output	Log-in successful, user home screen is displayed
Actual output	
Status	Test passed

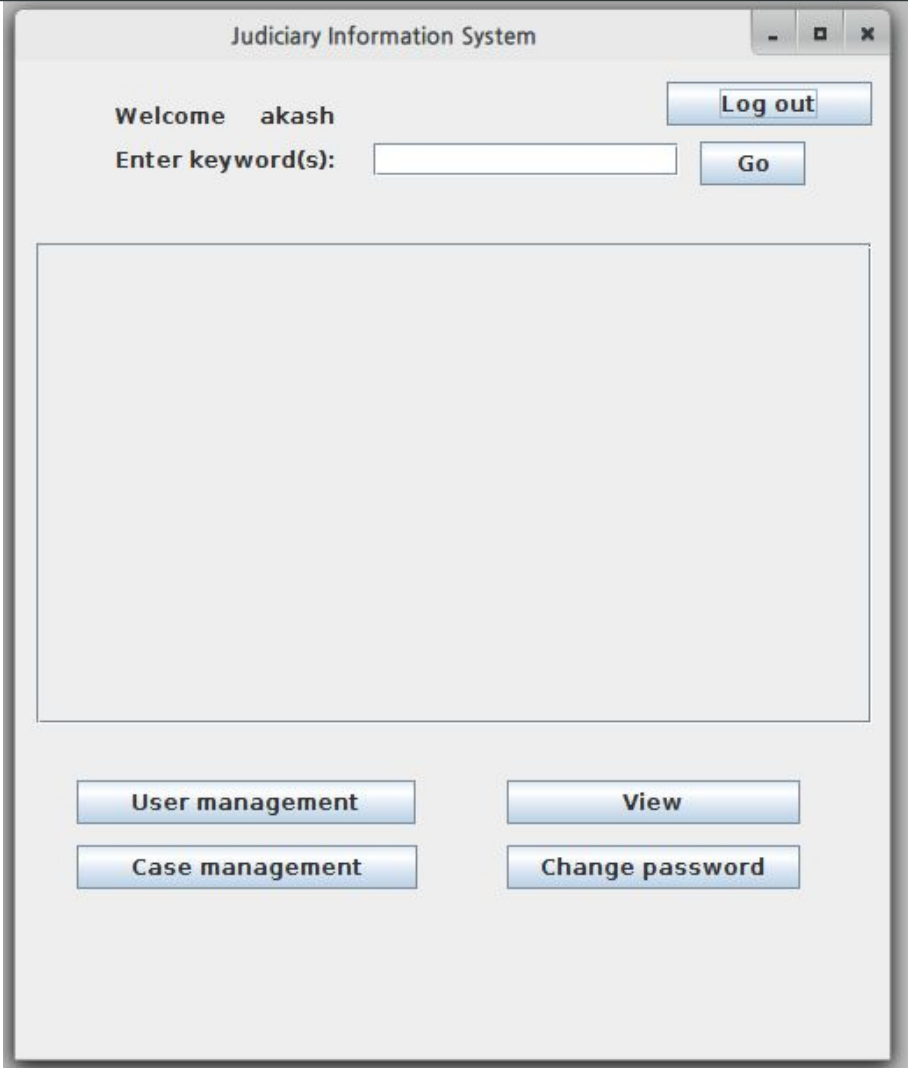
3. BBT for Change Password:CASE 1 - Wrong old password entered

Old password	asdfg
New password	zxcv
Confirm password	zxcv
Expected output	Error message, since correct old password is 'qwerty'
Actual output	 The screenshot shows a window titled "Judiciary Information System" with three password input fields labeled "Enter old password:", "Enter new password:", and "Confirm new password:". The "old password" field contains five dots. Below the fields are "Cancel" and "OK" buttons. A modal dialog box titled "Message" is displayed in the foreground, containing an information icon, the text "Wrong old password!", and an "OK" button.
Status	Test passed

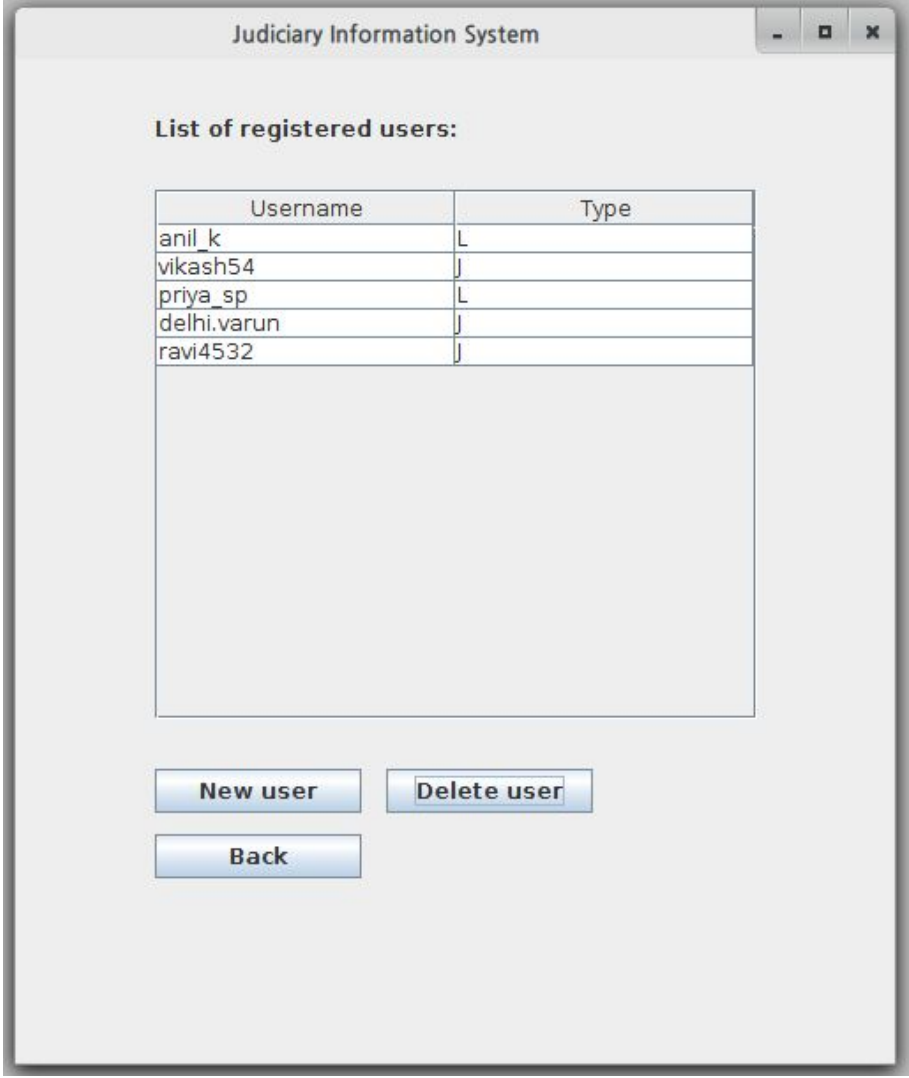
CASE 2 - Two new passwords are different

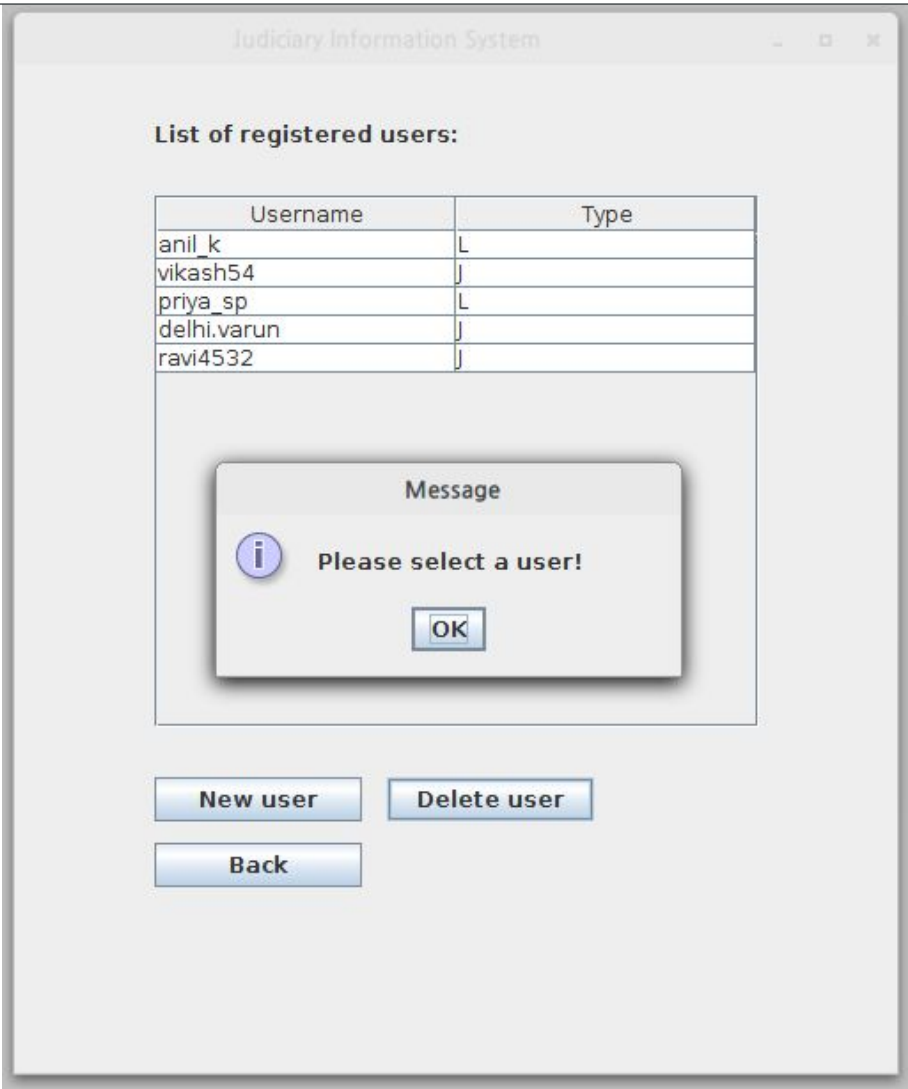

Old password	qwerty
New password	zxcv
Confirm password	zxcvb
Expected output	Error message
Actual output	 The screenshot shows a window titled "Judiciary Information System" with three password input fields: "Enter old password:" (filled with "qwerty"), "Enter new password:" (filled with "zxcv"), and "Confirm new password:" (filled with "zxcvb"). Below the fields are "Cancel" and "OK" buttons. A modal "Message" dialog is displayed in the foreground with an information icon and the text "Re-typed password does not match!", with an "OK" button.
Status	Test passed

CASE 3 - Proper input

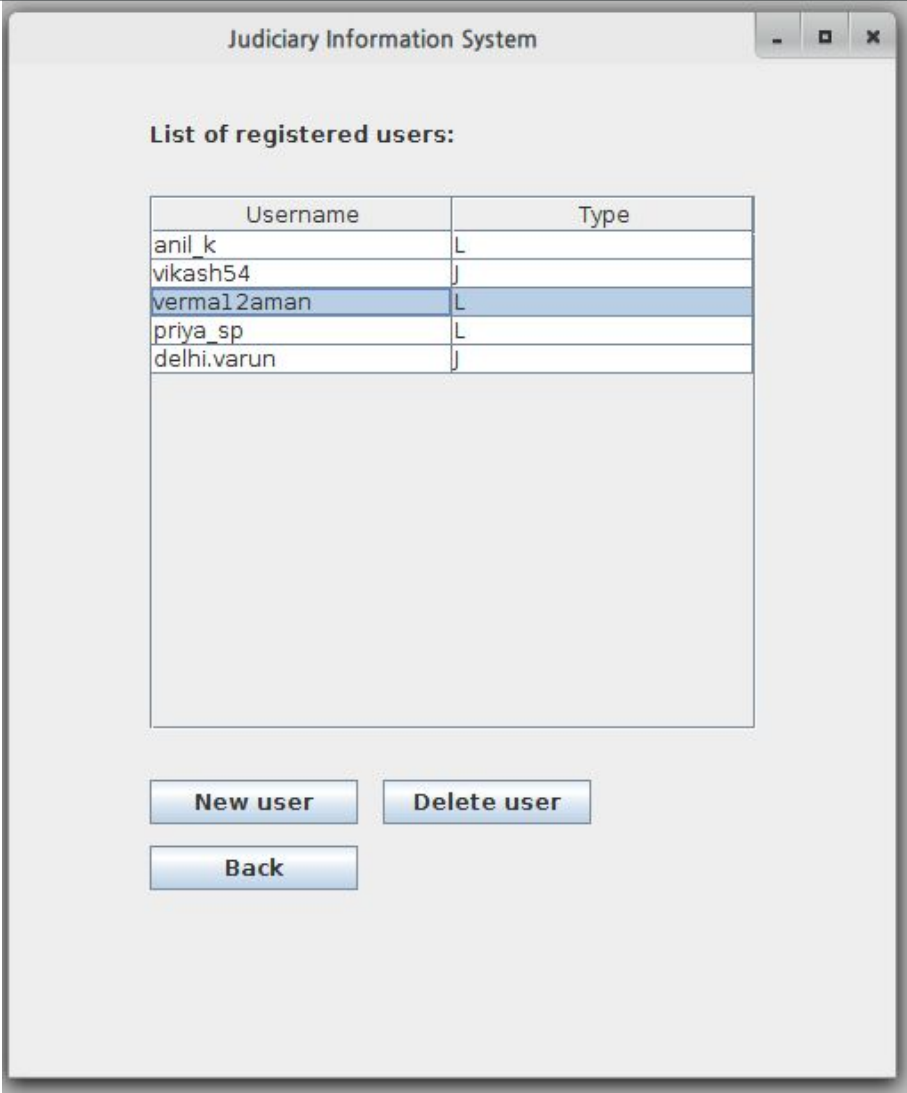
Old password	qwerty
New password	zxcv
Confirm password	zxcv
Expected output	Password change successful, returns to home screen
Actual output	
Status	Test passed


User Management**4. BBT for Delete User:****CASE 1 - No user selected**

Initial state	 <p>The screenshot shows a window titled 'Judiciary Information System'. Inside, there is a section titled 'List of registered users:' followed by a table with two columns: 'Username' and 'Type'. The table contains five rows of data. Below the table, there are three buttons: 'New user', 'Delete user', and 'Back'.</p> <table border="1"><thead><tr><th>Username</th><th>Type</th></tr></thead><tbody><tr><td>anil_k</td><td>L</td></tr><tr><td>vikash54</td><td>J</td></tr><tr><td>priya_sp</td><td>L</td></tr><tr><td>delhi.varun</td><td>J</td></tr><tr><td>ravi4532</td><td>J</td></tr></tbody></table>	Username	Type	anil_k	L	vikash54	J	priya_sp	L	delhi.varun	J	ravi4532	J
Username	Type												
anil_k	L												
vikash54	J												
priya_sp	L												
delhi.varun	J												
ravi4532	J												
Action	'Delete user' is clicked with no user selected, as shown.												
Expected output	Error message												

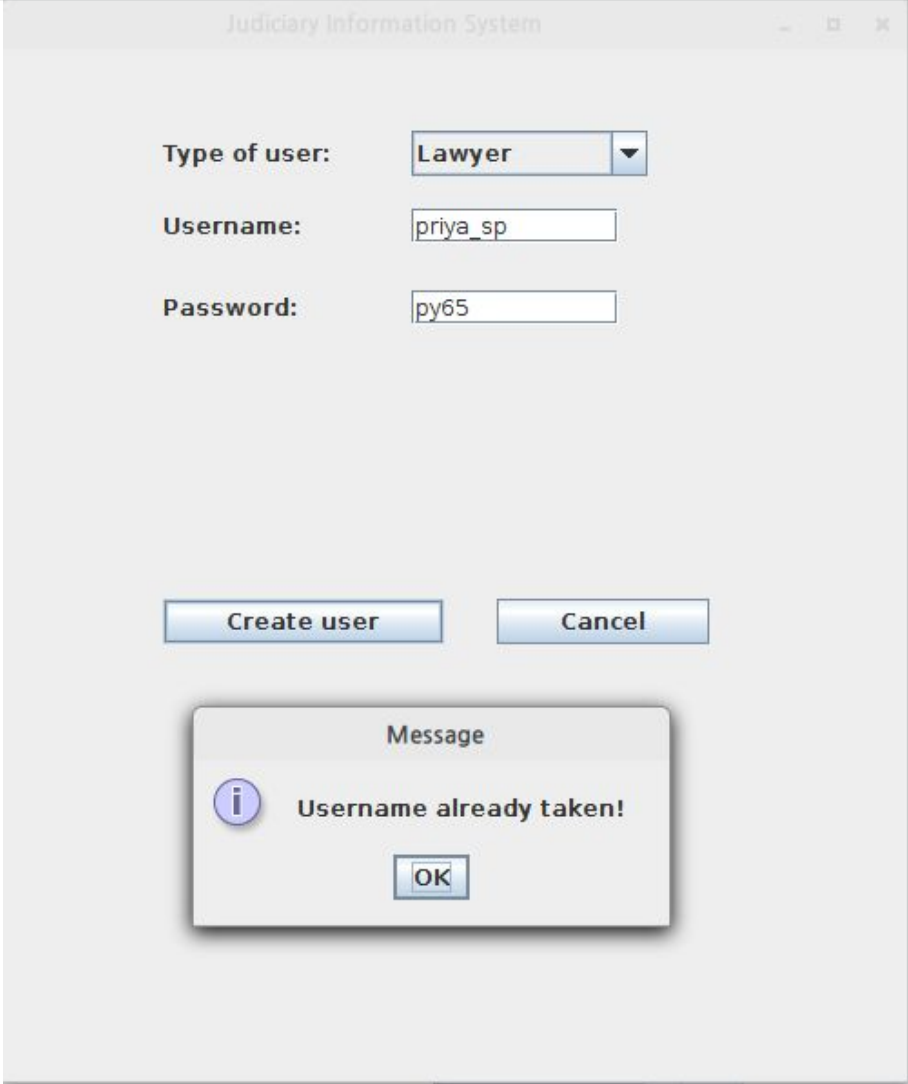
Final state	 <p>The screenshot displays the 'Judiciary Information System' window. It features a title bar with standard window controls. The main content area is titled 'List of registered users:' and contains a table with two columns: 'Username' and 'Type'. The table lists five users: anil_k (L), vikash54 (J), priya_sp (L), delhi.varun (J), and ravi4532 (J). Below the table, there is a 'Message' dialog box with an information icon and the text 'Please select a user!', with an 'OK' button. At the bottom of the window, there are three buttons: 'New user', 'Delete user', and 'Back'.</p> <table border="1"><thead><tr><th>Username</th><th>Type</th></tr></thead><tbody><tr><td>anil_k</td><td>L</td></tr><tr><td>vikash54</td><td>J</td></tr><tr><td>priya_sp</td><td>L</td></tr><tr><td>delhi.varun</td><td>J</td></tr><tr><td>ravi4532</td><td>J</td></tr></tbody></table> <p>Message</p> <p> Please select a user!</p> <p>OK</p> <p>New user Delete user</p> <p>Back</p>	Username	Type	anil_k	L	vikash54	J	priya_sp	L	delhi.varun	J	ravi4532	J
Username	Type												
anil_k	L												
vikash54	J												
priya_sp	L												
delhi.varun	J												
ravi4532	J												
Status	Test passed												

CASE 2 - Proper input

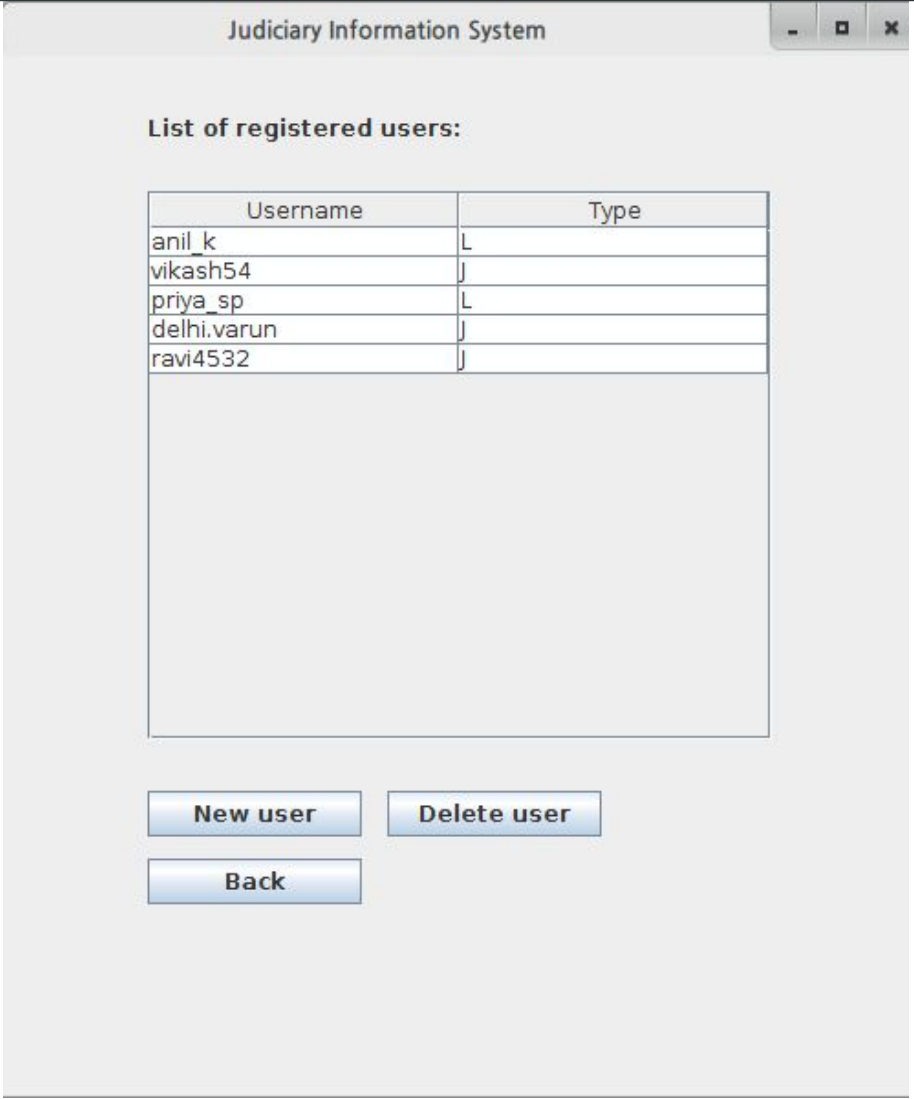
Initial state	 <p>The screenshot shows a window titled "Judiciary Information System". Inside, there is a section titled "List of registered users:" followed by a table with two columns: "Username" and "Type". The table contains five rows of data. The third row, with "verma12aman" as the username and "L" as the type, is highlighted in blue. Below the table, there are three buttons: "New user", "Delete user", and "Back".</p> <table border="1"><thead><tr><th>Username</th><th>Type</th></tr></thead><tbody><tr><td>anil k</td><td>L</td></tr><tr><td>vikash54</td><td>J</td></tr><tr><td>verma12aman</td><td>L</td></tr><tr><td>priya_sp</td><td>L</td></tr><tr><td>delhi.varun</td><td>J</td></tr></tbody></table>	Username	Type	anil k	L	vikash54	J	verma12aman	L	priya_sp	L	delhi.varun	J
Username	Type												
anil k	L												
vikash54	J												
verma12aman	L												
priya_sp	L												
delhi.varun	J												
Action	'Delete user' is clicked with the user 'verma12aman' selected as shown.												
Expected output	The selected user is deleted successfully												

Final state	 <p>The screenshot shows a window titled "Judiciary Information System". Inside, there is a section titled "List of registered users:" followed by a table with two columns: "Username" and "Type". The table contains four rows of data. Below the table, there are three buttons: "New user", "Delete user", and "Back".</p> <table border="1"><thead><tr><th>Username</th><th>Type</th></tr></thead><tbody><tr><td>anil_k</td><td>L</td></tr><tr><td>vikash54</td><td>J</td></tr><tr><td>priya_sp</td><td>L</td></tr><tr><td>delhi.varun</td><td>J</td></tr></tbody></table>	Username	Type	anil_k	L	vikash54	J	priya_sp	L	delhi.varun	J
Username	Type										
anil_k	L										
vikash54	J										
priya_sp	L										
delhi.varun	J										
Status	Test passed										

5. BBT for New User:CASE 1 - User name already exists

Type of user	Lawyer
Username	priya_sp
Password	py65
Expected output	Error message, since 'priya_sp' already exists in the database
Actual output	 <p>The screenshot shows a window titled 'Judiciary Information System'. Inside, there are three input fields: 'Type of user:' with a dropdown menu set to 'Lawyer', 'Username:' with the text 'priya_sp', and 'Password:' with the text 'py65'. Below these fields are two buttons: 'Create user' and 'Cancel'. A modal dialog box titled 'Message' is displayed in the foreground, containing an information icon, the text 'Username already taken!', and an 'OK' button.</p>
Status	Test passed

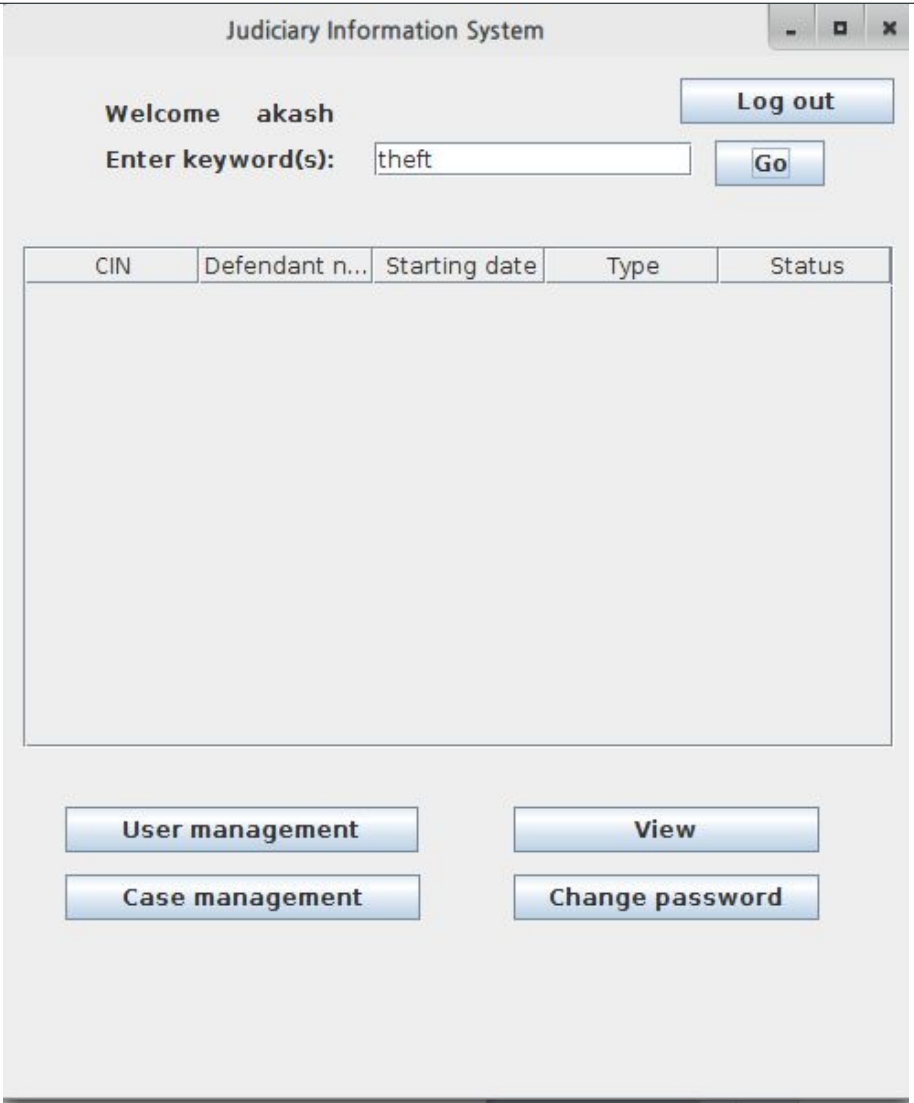
CASE 2 - Proper input

Type of user	Judge												
Username	ravi4532												
Password	kumarravi2												
Expected output	User successfully created, updated users table is displayed												
Actual output	 <p>The screenshot displays a window titled "Judiciary Information System". Inside, there is a section labeled "List of registered users:" followed by a table with two columns: "Username" and "Type". The table contains five rows of data. Below the table, there are three buttons: "New user", "Delete user", and "Back".</p> <table><thead><tr><th>Username</th><th>Type</th></tr></thead><tbody><tr><td>anil_k</td><td>L</td></tr><tr><td>vikash54</td><td>J</td></tr><tr><td>priya_sp</td><td>L</td></tr><tr><td>delhi.varun</td><td>J</td></tr><tr><td>ravi4532</td><td>J</td></tr></tbody></table>	Username	Type	anil_k	L	vikash54	J	priya_sp	L	delhi.varun	J	ravi4532	J
Username	Type												
anil_k	L												
vikash54	J												
priya_sp	L												
delhi.varun	J												
ravi4532	J												
Status	Test passed												

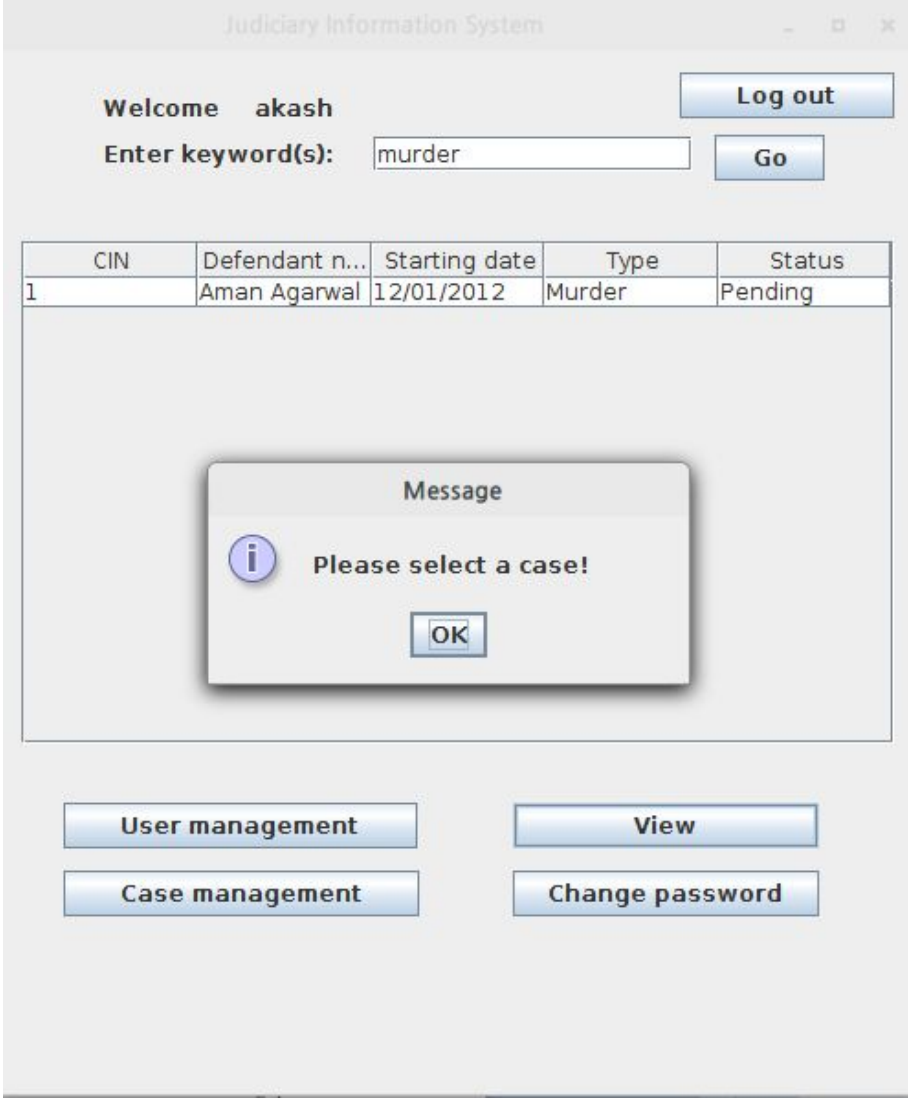
User actions**6. BBT for Searching Cases by Keyword:****CASE 1 - Keyword matches**

Keyword	assault															
Expected output	All cases containing the word 'assault' in the case data are displayed															
Actual output	<div><div>Judiciary Information System</div><div><div>Welcome akash</div><div>Enter keyword(s): <input type="text" value="assault"/> <input type="button" value="Go"/> <input type="button" value="Log out"/></div></div><table><thead><tr><th>CIN</th><th>Defendant n...</th><th>Starting date</th><th>Type</th><th>Status</th></tr></thead><tbody><tr><td>2</td><td>Raju Singh</td><td>27/02/2012</td><td>Assault</td><td>Pending</td></tr><tr><td>4</td><td>AP Singh</td><td>03/11/2013</td><td>Assault</td><td>Pending</td></tr></tbody></table><div><div><input type="button" value="User management"/> <input type="button" value="View"/></div><div><input type="button" value="Case management"/> <input type="button" value="Change password"/></div></div></div>	CIN	Defendant n...	Starting date	Type	Status	2	Raju Singh	27/02/2012	Assault	Pending	4	AP Singh	03/11/2013	Assault	Pending
CIN	Defendant n...	Starting date	Type	Status												
2	Raju Singh	27/02/2012	Assault	Pending												
4	AP Singh	03/11/2013	Assault	Pending												
Status	Test passed															

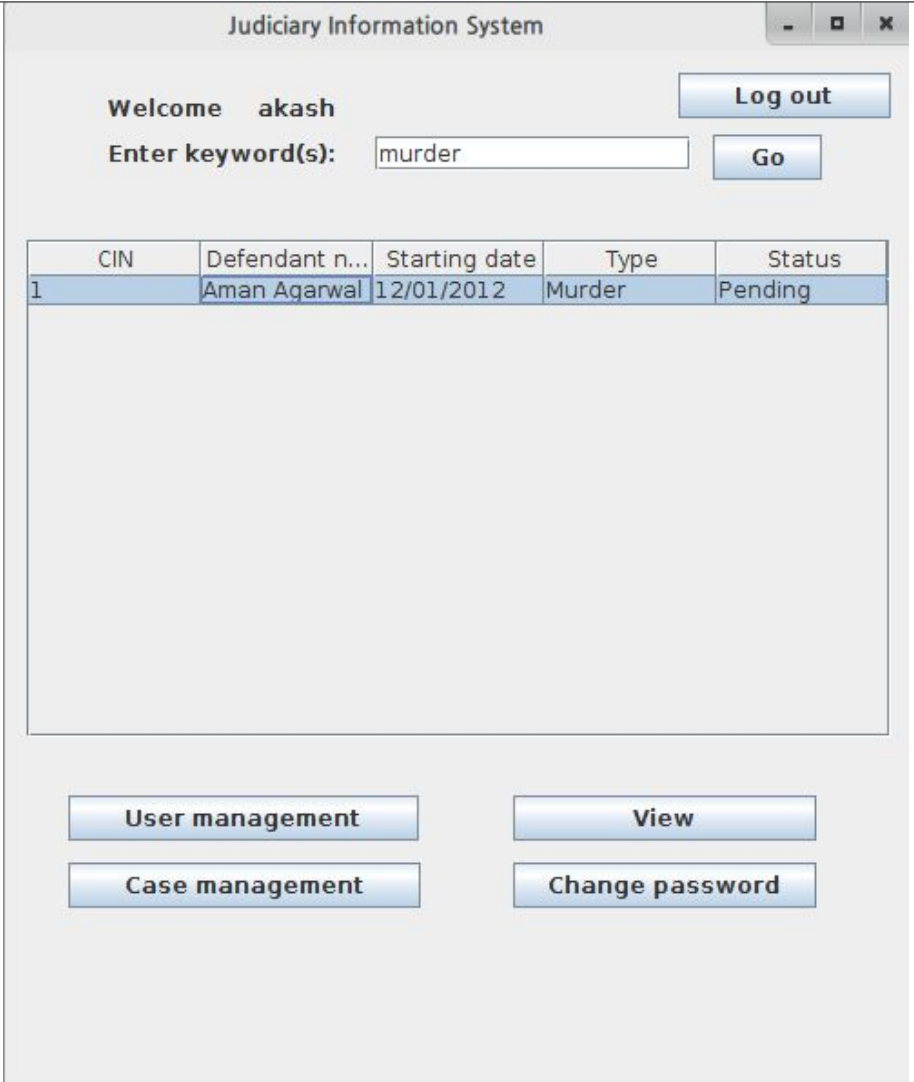
CASE 2 - Keyword does not match

Keyword	theft
Expected output	No case data contains the keyword 'theft', so no data displayed
Actual output	 <p>The screenshot shows the Judiciary Information System interface. At the top, it says 'Judiciary Information System' with window control buttons. Below that, it says 'Welcome akash' and 'Log out'. There is a search bar labeled 'Enter keyword(s):' with the text 'theft' entered and a 'Go' button. Below the search bar is a table with columns: CIN, Defendant n..., Starting date, Type, and Status. The table is empty. At the bottom, there are four buttons: 'User management', 'View', 'Case management', and 'Change password'.</p>
Status	Test passed

7. BBT for View Case:CASE 1 - No case selected

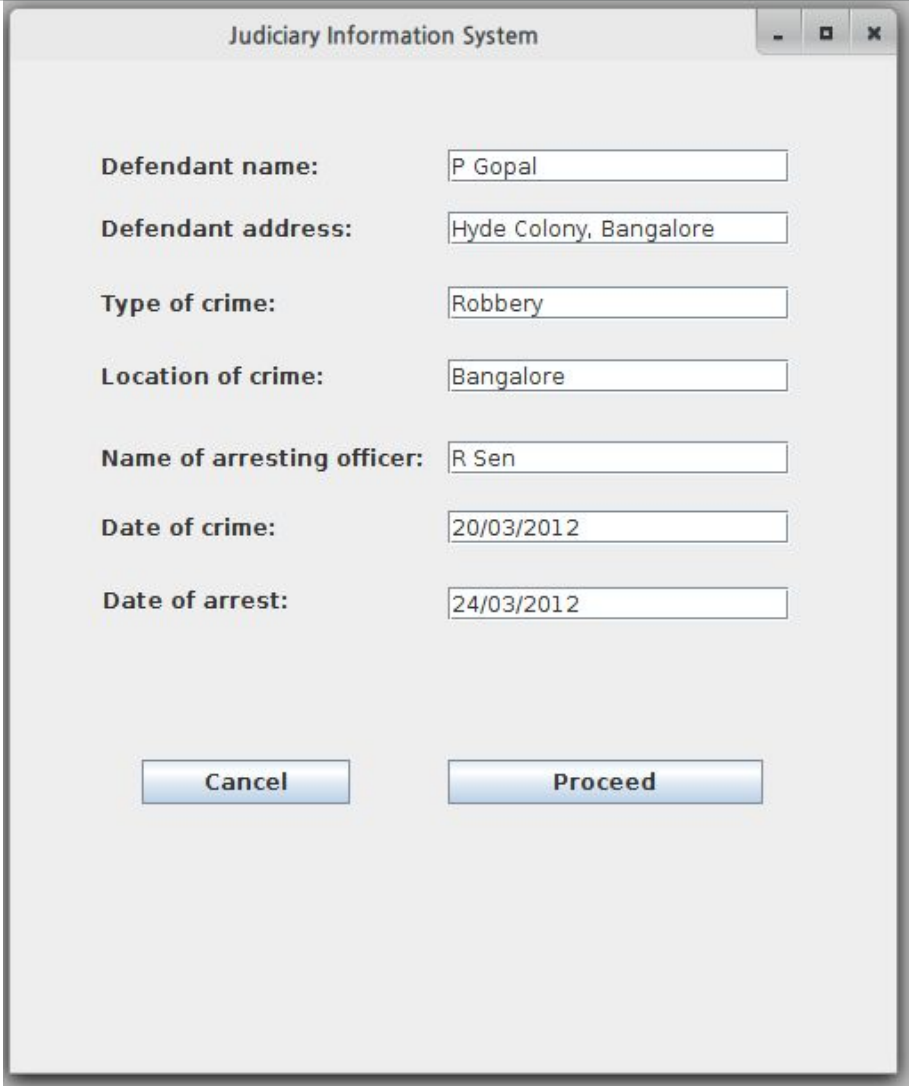
Initial state	No case is selected from the query result table.
Action	'View' is selected with no case selected, as shown.
Expected output	Error message
Actual output	 <p>The screenshot shows the Judiciary Information System interface. At the top, it says 'Welcome akash' and 'Enter keyword(s):' with a text box containing 'murder' and a 'Go' button. There is a 'Log out' button in the top right. Below the search bar is a table with columns: CIN, Defendant n..., Starting date, Type, and Status. The table contains one row: 1, Aman Agarwal, 12/01/2012, Murder, Pending. In the center of the screen, there is a modal dialog box titled 'Message' with an information icon and the text 'Please select a case!' and an 'OK' button. At the bottom, there are four buttons: 'User management', 'View', 'Case management', and 'Change password'.</p>
Status	Test passed

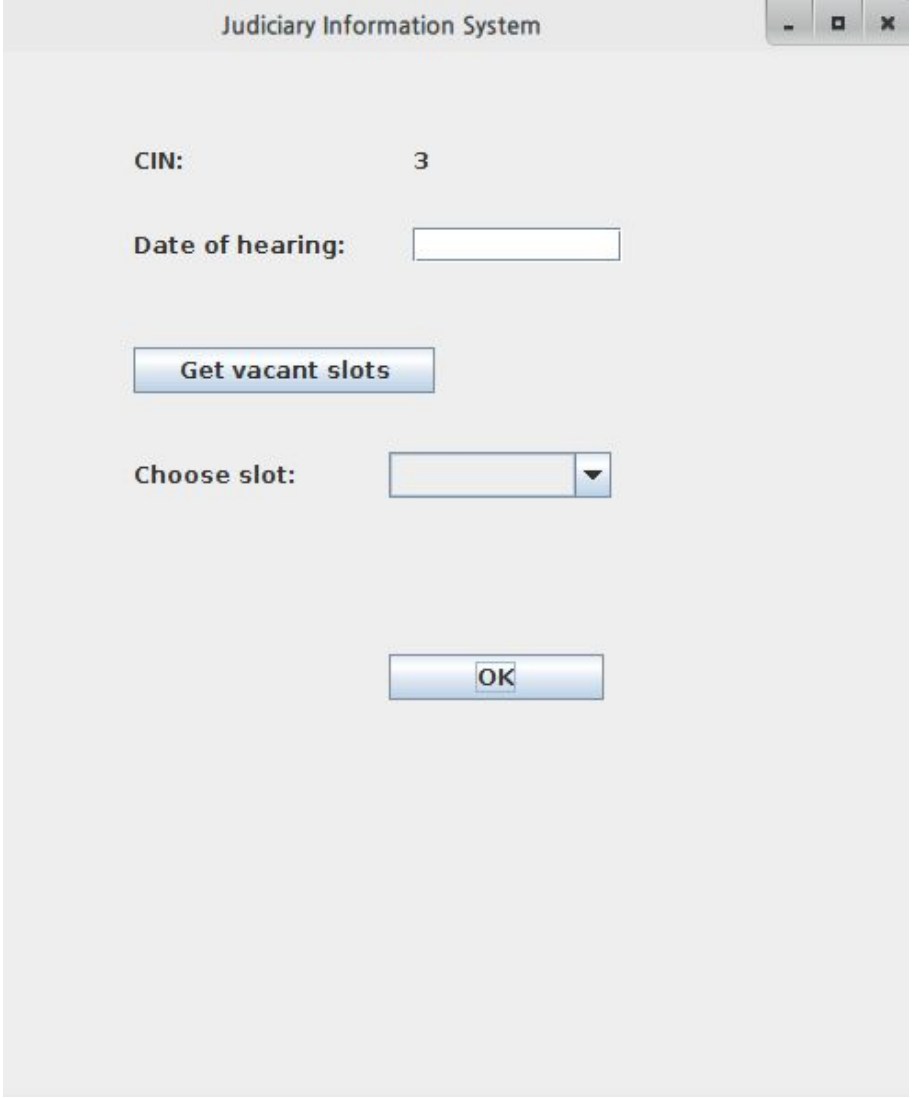
CASE 2 - A case is selected

Initial state	
Action	'View' is clicked with the case selected.
Expected output	The case home screen is displayed.

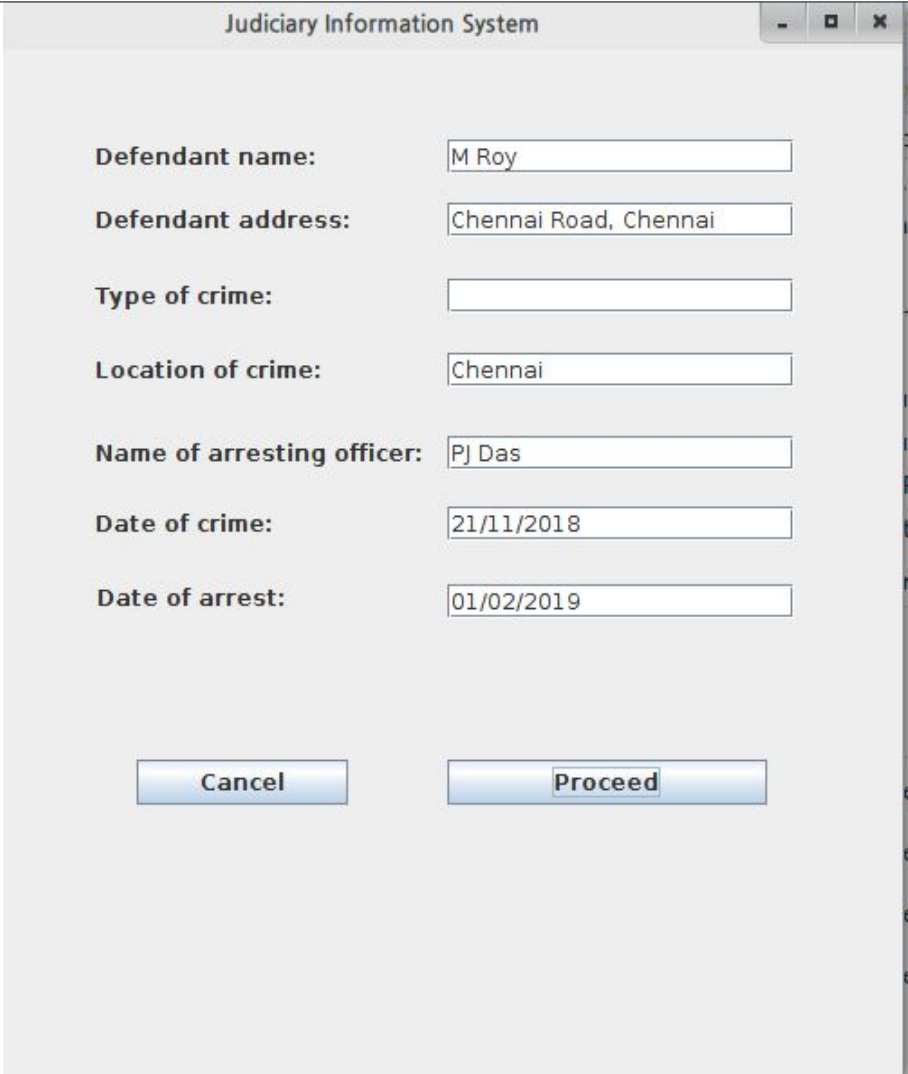
Final state	<div><div>Judiciary Information System</div><div><div>CIN:1</div><div>Defendant name:Aman Agarwal</div><div>Defendant address:Park Road, Delhi</div><div>Type of crime:Murder</div><div>Location of crime:Delhi</div><div>Date of crime:11/09/2011</div><div>Date of arrest:01/10/2011</div><div>Name of arresting officer:Shyam Kumar</div><div>Name of presiding judge:K Yadav</div><div>Name of public prosecutor:G Patel</div><div>Date of starting:12/01/2012</div><div>Expctd date of completion:21/12/2012</div><div>Date of next hearing:12/01/2012</div><div>Judgement summary:</div><div>Status:Pending</div><div>Save & BackCase history</div><div>Update hearing detailsAdjourn hearing</div></div></div>
Status	Test passed


Case Management:**8. BBT for New Case:****CASE 1 - Proper input**

Input	 <p>The screenshot shows a window titled "Judiciary Information System". It contains several input fields with the following data: Defendant name: P Gopal; Defendant address: Hyde Colony, Bangalore; Type of crime: Robbery; Location of crime: Bangalore; Name of arresting officer: R Sen; Date of crime: 20/03/2012; Date of arrest: 24/03/2012. At the bottom, there are two buttons: "Cancel" and "Proceed".</p>
Action	'Proceed' button is clicked.
Expected output	A new case is created, CIN generated, and a window for entering date of hearing is displayed.

Actual output	 <p>The screenshot shows a window titled "Judiciary Information System". Inside the window, there is a form with the following elements: "CIN:" followed by the value "3"; "Date of hearing:" followed by an empty text input field; a button labeled "Get vacant slots"; "Choose slot:" followed by an empty dropdown menu; and an "OK" button at the bottom center.</p>
Status	Test passed


CASE 2 - A required field is left empty

Input	
Action	'Proceed' button is clicked.
Expected output	Error message, since type of crime has been assumed to be a required field.


Actual output	 <p>The screenshot displays the 'Judiciary Information System' window. It contains several input fields: 'Defendant name' (filled with 'M Roy'), 'Defendant address' (filled with 'Chennai Road, Chennai'), 'Type of crime' (empty), and 'Location of crime' (filled with 'Chennai'). A modal message box is overlaid on the form, titled 'Message', with an information icon and the text 'Required fields: defendant name, type of crime'. An 'OK' button is at the bottom of the message box. Below the message box, there are 'Cancel' and 'Proceed' buttons. The 'Name of arresting officer' field is partially visible at the bottom of the form.</p>
Status	Test passed

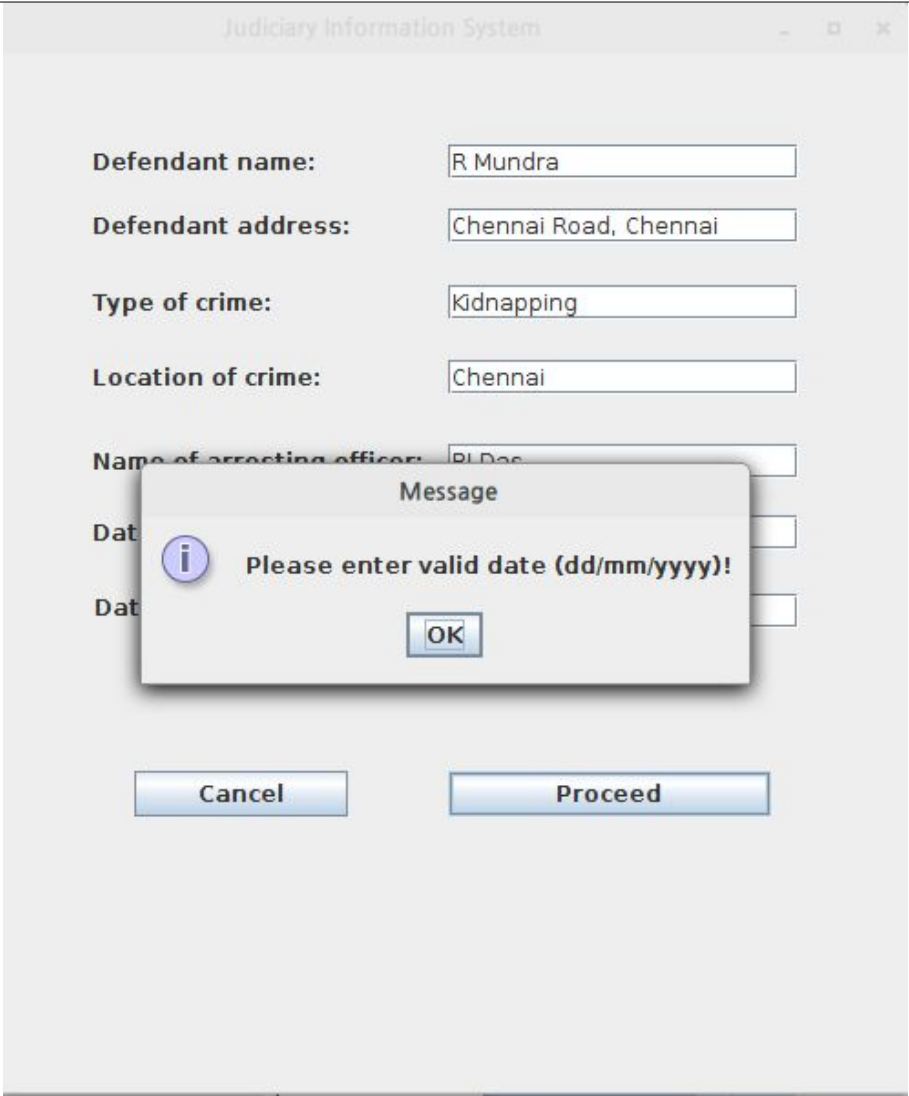
CASE 3 - Date of crime is later than date of arrest

Input	<div><p>Judiciary Information System</p><p>Defendant name: <input type="text" value="M Roy"/></p><p>Defendant address: <input type="text" value="Chennai Road, Chennai"/></p><p>Type of crime: <input type="text" value="Kidnapping"/></p><p>Location of crime: <input type="text" value="Chennai"/></p><p>Name of arresting officer: <input type="text" value="PJ Das"/></p><p>Date of crime: <input type="text" value="21/11/2018"/></p><p>Date of arrest: <input type="text" value="01/02/2017"/></p><p><input type="button" value="Cancel"/> <input type="button" value="Proceed"/></p></div>
Action	'Proceed' button is clicked.
Expected output	Error message, since date of crime cannot be later than date of arrest.

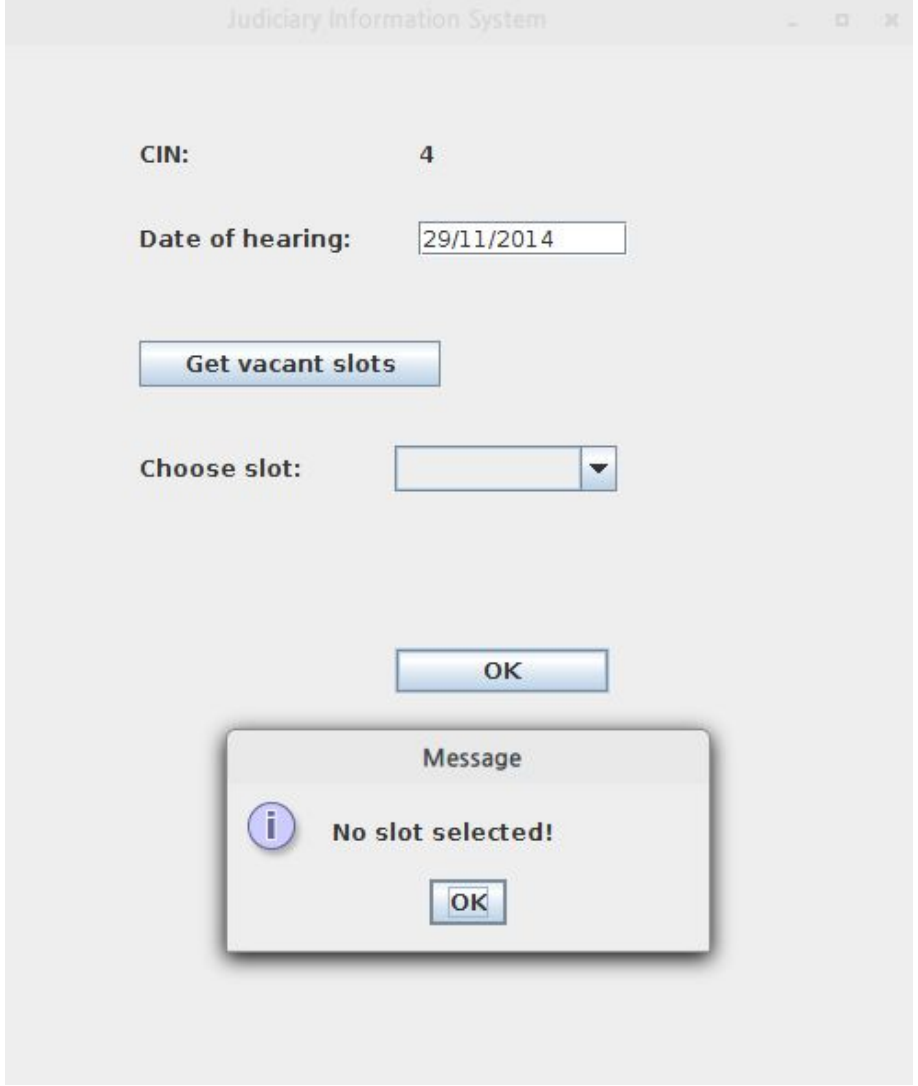
Actual output	 <p>The screenshot shows the 'Judiciary Information System' window. It contains several input fields: 'Defendant name' with 'M Roy', 'Defendant address' with 'Chennai Road, Chennai', 'Type of crime' with 'Kidnapping', 'Location of crime' with 'Chennai', and 'Name of arresting officer' with 'P. Das'. A 'Message' dialog box is overlaid on the window, displaying an information icon and the text 'Date of arrest cannot be earlier than date of crime!'. Below the dialog box are 'Cancel' and 'Proceed' buttons.</p>
Status	Test passed

CASE 4 - A date is invalid/empty

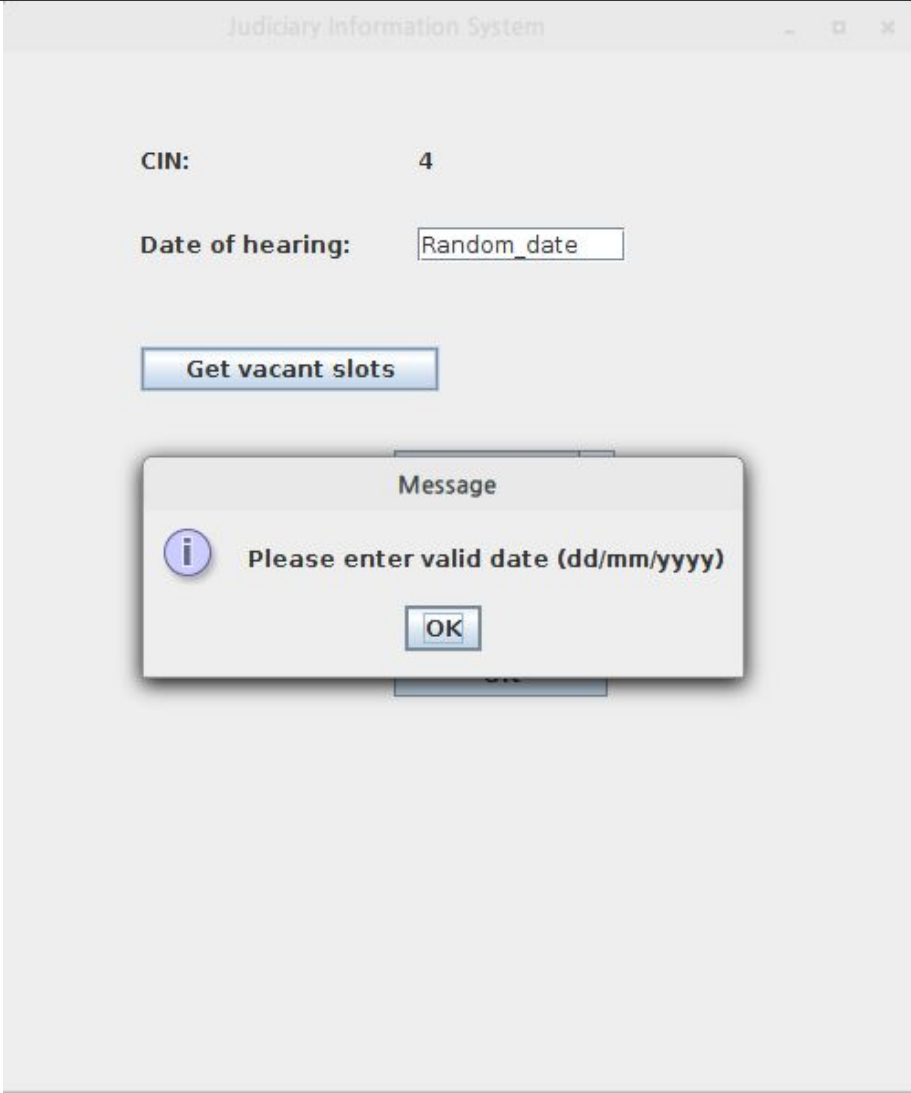
Input	
Action	'Proceed' button is clicked.
Expected output	Error message, since 'not known' is an invalid date

Actual output	
Status	Test passed

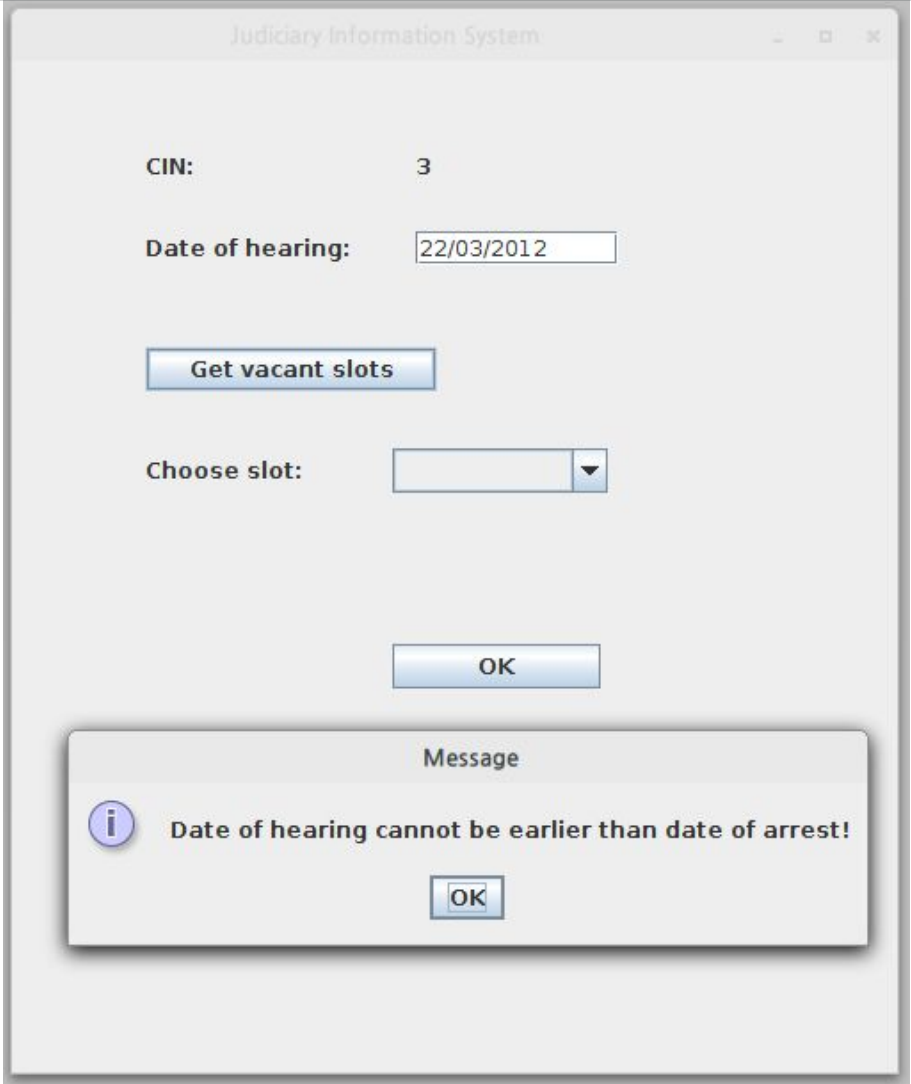
9. BBT for Assigning Date of HearingCASE 1 - No slot is selected

Initial condition	The 'Get vacant slots' has not been clicked, so no slots can be selected yet.
Action	'OK' button is clicked.
Expected output	Error message
Actual output	 <p>The screenshot shows the 'Judiciary Information System' window. It contains a 'CIN:' label with the value '4', a 'Date of hearing:' label with the value '29/11/2014', a 'Get vacant slots' button, and a 'Choose slot:' dropdown menu. An 'OK' button is visible below the dropdown. A modal message box is displayed in the foreground with the title 'Message', an information icon, and the text 'No slot selected!'. The message box has an 'OK' button at the bottom.</p>
Status	Test passed

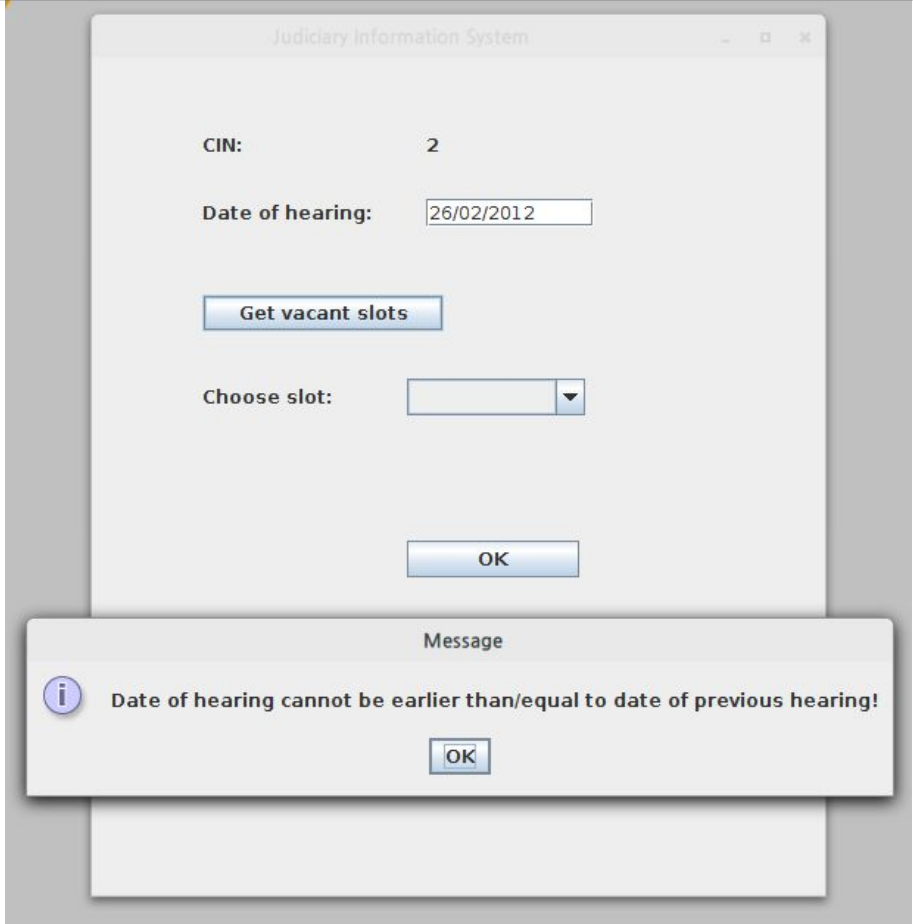
CASE 2 - Invalid date

Date of hearing	Random_date
Action	'Get vacant slots' is clicked.
Expected output	Error message
Actual output	 <p>The screenshot shows a web application window titled 'Judiciary Information System'. Inside, there is a form with a label 'CIN:' followed by the value '4'. Below this is a label 'Date of hearing:' followed by a text input field containing the text 'Random_date'. A blue button labeled 'Get vacant slots' is positioned below the input field. An error message dialog box is displayed in the center of the screen. The dialog box has a title bar 'Message' and contains an information icon (a lowercase 'i' inside a circle) followed by the text 'Please enter valid date (dd/mm/yyyy)'. At the bottom of the dialog box is an 'OK' button.</p>
Status	Test passed

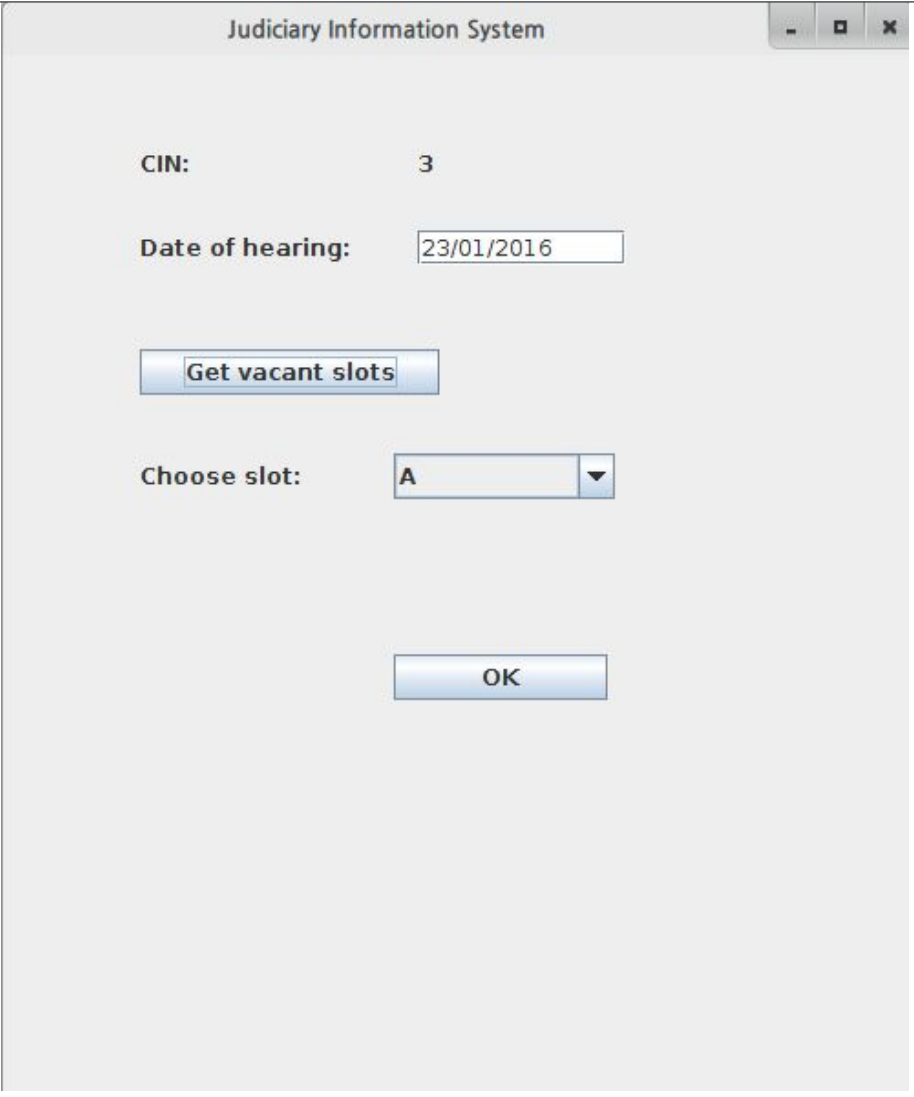
CASE 3 - Date of hearing is earlier than date of arrest

Initial condition	A valid date has been entered. However, the entered date is earlier than the date of arrest.
Action	'Get vacant slots' button is clicked.
Expected output	Error message
Actual output	 <p>The screenshot shows the 'Judiciary Information System' window. It contains the following elements: 'CIN:' followed by the value '3'; 'Date of hearing:' followed by a text box containing '22/03/2012'; a 'Get vacant slots' button; 'Choose slot:' followed by a dropdown menu; and an 'OK' button. An error message dialog box is displayed in the foreground with the title 'Message', an information icon, and the text 'Date of hearing cannot be earlier than date of arrest!'. The dialog box has an 'OK' button.</p>
Status	Test passed

CASE 4 - Date of hearing is earlier than previous date of hearing


Initial condition	A valid date has been entered. However, the entered date is earlier than the previous date of hearing
Action	'Get vacant slots' button is clicked.
Expected output	Error message
Actual output	 The screenshot shows a window titled 'Judiciary Information System'. Inside, there is a form with the following elements: 'CIN:' followed by the value '2'; 'Date of hearing:' followed by a text box containing '26/02/2012'; a 'Get vacant slots' button; 'Choose slot:' followed by a dropdown menu; and an 'OK' button. Overlaid on this window is a 'Message' dialog box with an information icon (i) and the text 'Date of hearing cannot be earlier than/equal to date of previous hearing!'. The dialog box has an 'OK' button at the bottom.
Status	Test passed

CASE 5 - Proper input

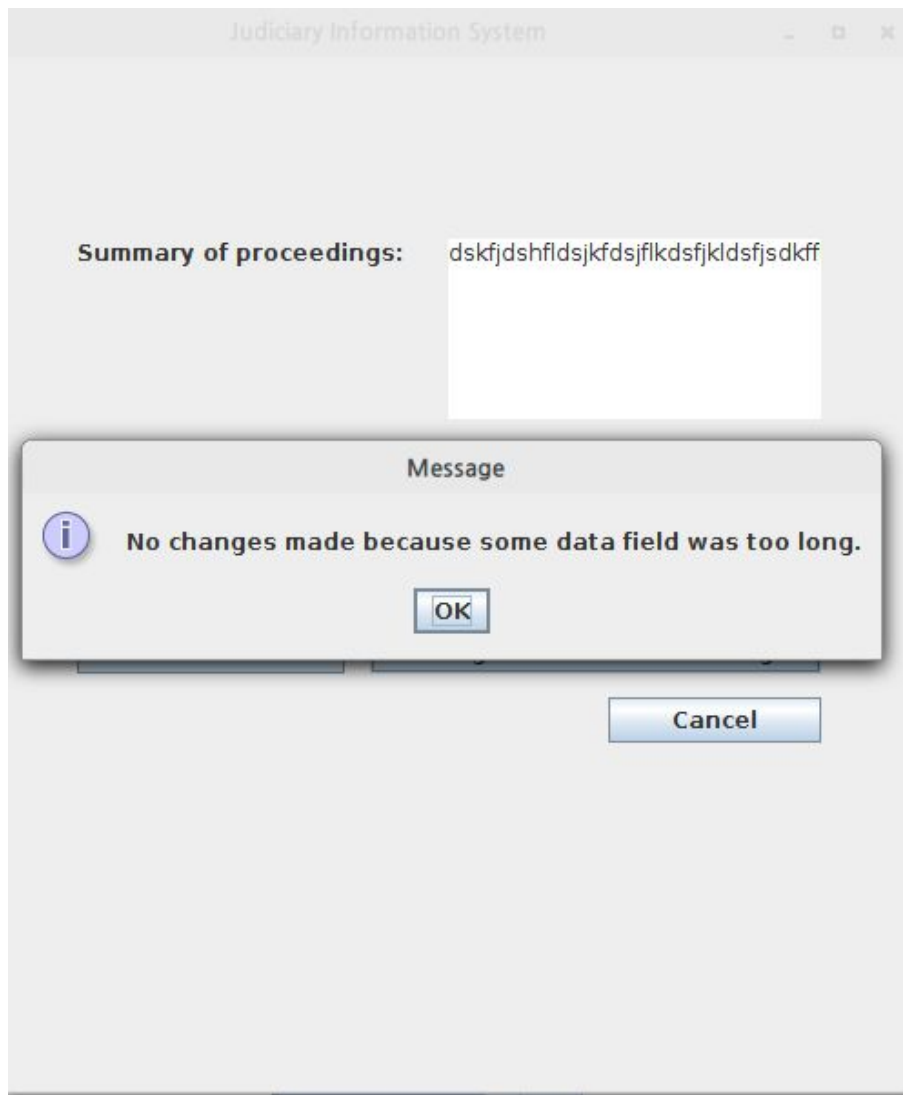
Input	
Action	'OK' button is clicked.
Expected output	Date of hearing set successfully and case home screen is displayed.

Actual output	<div><div>Judiciary Information System</div><div><div>CIN:</div><div>3</div></div><div><div>Defendant name:</div><div>P Gopal</div></div><div><div>Defendant address:</div><div>Hyde Colony, Bangalore</div></div><div><div>Type of crime:</div><div>Robbery</div></div><div><div>Location of crime:</div><div>Bangalore</div></div><div><div>Date of crime:</div><div>20/03/2012</div></div><div><div>Date of arrest:</div><div>24/03/2012</div></div><div><div>Name of arresting officer:</div><div>R Sen</div></div><div><div>Name of presiding judge:</div><div></div></div><div><div>Name of public prosecutor:</div><div></div></div><div><div>Date of starting:</div><div>27/03/2012</div></div><div><div>Expctd date of completion:</div><div></div></div><div><div>Date of next hearing:</div><div>23/01/2016</div></div><div><div>Judgement summary:</div><div></div></div><div><div>Status:</div><div>Pending</div></div><div><div>Save & Back</div><div>Case history</div><div>Update hearing details</div><div>Adjourn hearing</div></div></div>
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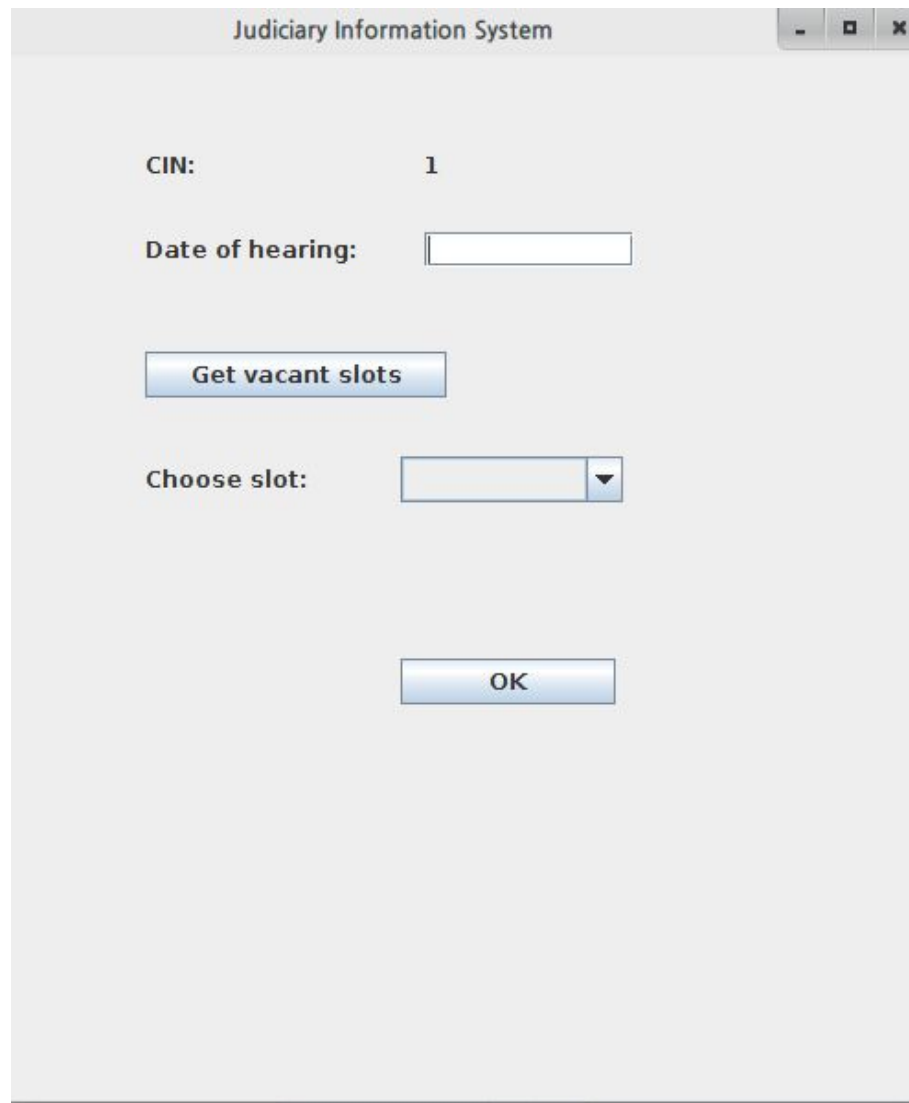
10. BBT for Update Hearing Details:CASE 1 - Entered data is too long

Input	 <p>The screenshot shows a window titled "Judiciary Information System". Inside, there is a label "Summary of proceedings:" followed by a text input field containing a long string of random characters: "dskfjdshfldsjkfdsjflkdsfjkl dsfjsdkff". Below the input field, there are three buttons: "Close case", "Assign date of next hearing", and "Cancel".</p>
Action	'Close case' or 'Assign date of next hearing' is clicked.
Expected output	Error message, and user is allowed to change the input
Actual output	Error message is displayed, however the application moves to the next window, not allowing the user to change the input. Not even a truncated version of the input is saved. The screen shots are below.

(i)the error message



(ii) upon clicking 'OK' in the error message



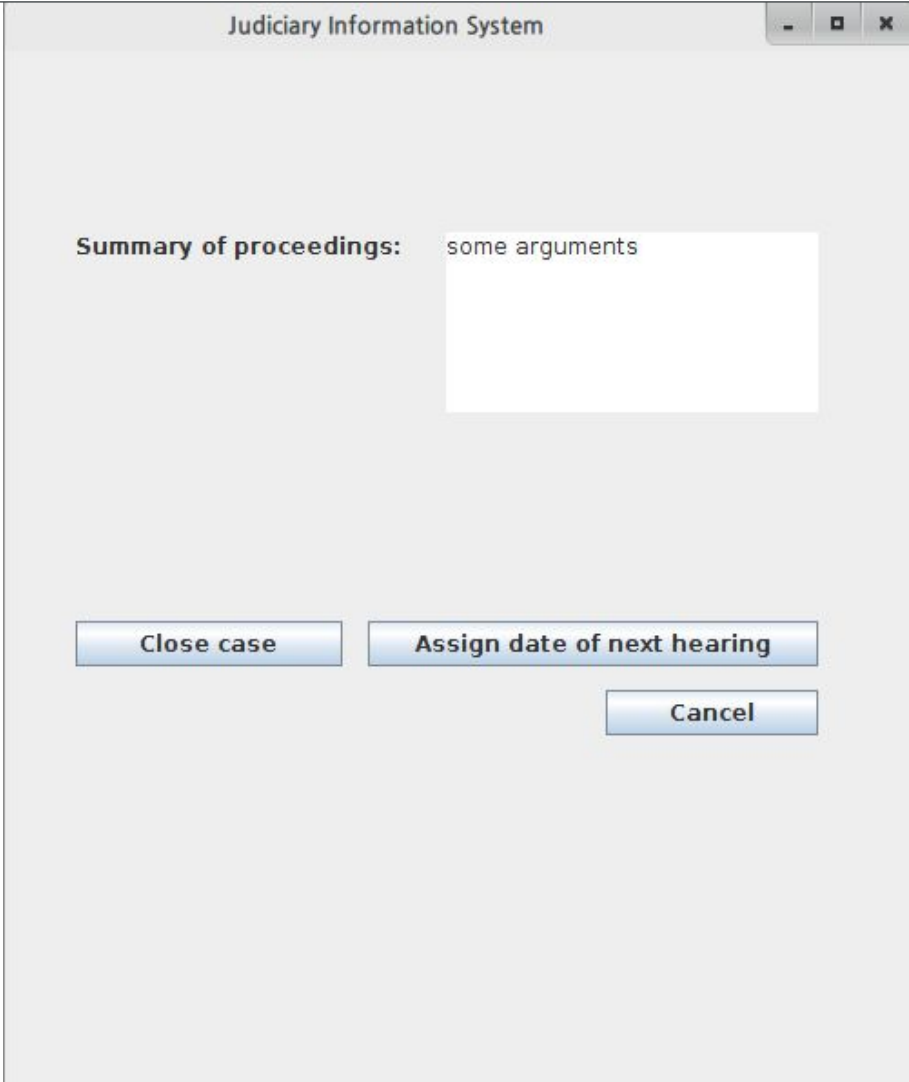
The screenshot shows a window titled "Judiciary Information System" with a standard Windows-style title bar (minimize, maximize, close buttons). The window contains a form with the following elements:


- CIN:** 1
- Date of hearing:** [Empty text box]
- Get vacant slots** [Blue button]
- Choose slot:** [Dropdown menu]
- OK** [Blue button]

Status

Test failed

CASE 2 - Proper input

Input	 <p>The screenshot shows a window titled "Judiciary Information System". Inside, there is a label "Summary of proceedings:" followed by a text input field containing the text "some arguments". Below the input field, there are three buttons: "Close case", "Assign date of next hearing", and "Cancel".</p>
Action	'Close case' or 'Assign date of next hearing' is clicked.
Expected output	Data is saved successfully and the user is allowed to assign the next date of hearing or close the case.

Actual output	 <p>The screenshot displays a window titled "Judiciary Information System". Inside the window, there is a form with the following elements: a label "CIN:" followed by the value "1"; a label "Date of hearing:" followed by an empty text input field; a button labeled "Get vacant slots"; a label "Choose slot:" followed by an empty dropdown menu; and an "OK" button at the bottom center.</p>
Status	Test passed

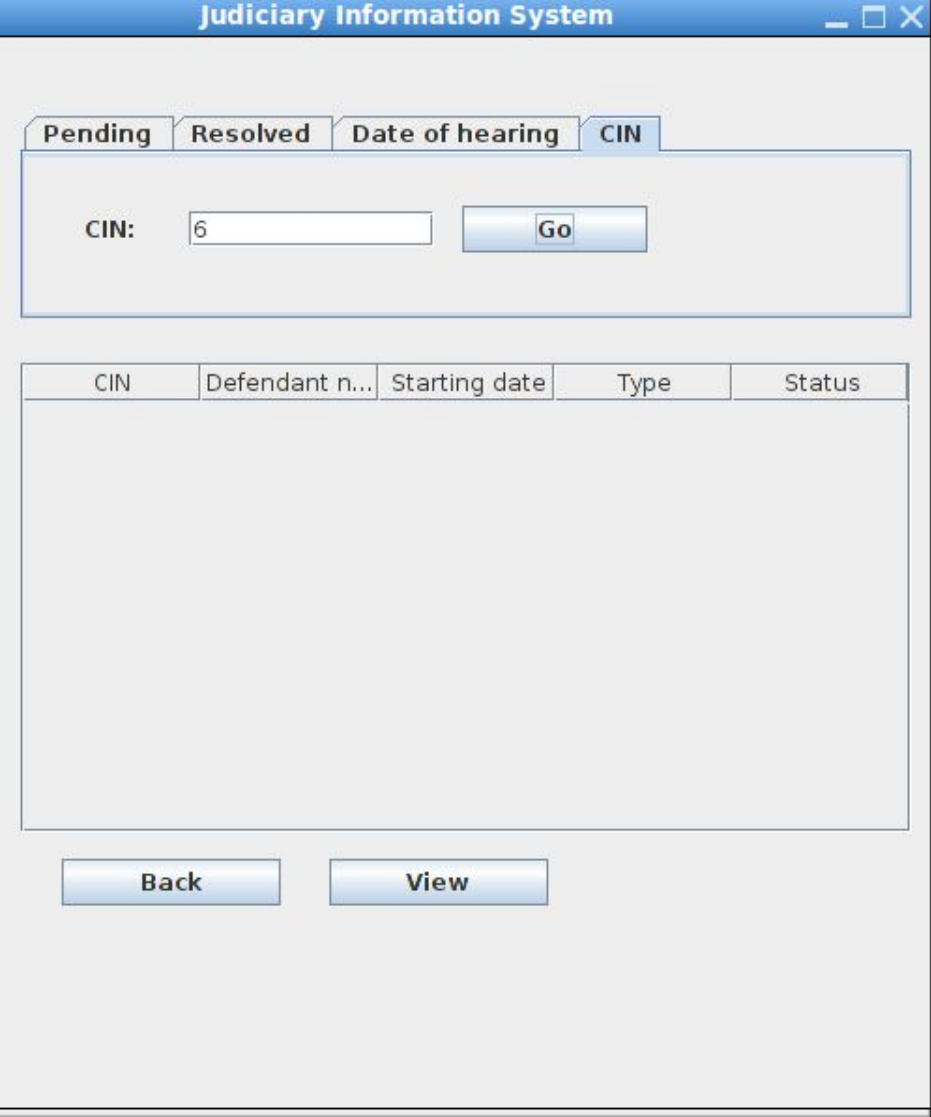
Note

BBT for Adjourn Hearing and Close Case produced exactly the same results as Update Hearing Details, i.e. Failing only when the input (reason for adjournment, or judgment summary) was too long, and passing in all other cases. Hence to prevent the document from becoming unnecessarily lengthy, detailed reports of these two use cases have been omitted here.

The above-documented bug has been well understood and can be corrected by placing checks for length of input data at appropriate places before trying to make any changes in the database. Obviously, this was overlooked in the initial implementation.

11. BBT for Query Cases:**A. Query by CIN**CASE 1 - Invalid CIN

Initial condition	<div><div>Judiciary Information System</div><div>List of cases:</div><table><thead><tr><th>CIN</th><th>Defendant n...</th><th>Starting date</th><th>Type</th><th>Status</th></tr></thead><tbody><tr><td>1</td><td>student</td><td>10/04/2016</td><td>studying</td><td>Pending</td></tr><tr><td>2</td><td>mousam</td><td>04/04/2016</td><td>assignment</td><td>Pending</td></tr><tr><td>3</td><td>blah blah</td><td>02/08/2012</td><td>crime</td><td>Pending</td></tr><tr><td>4</td><td>rohan</td><td>01/01/2015</td><td>air soccer fe...</td><td>Closed</td></tr><tr><td>5</td><td>iitian</td><td>13/04/2016</td><td>General cat...</td><td>Closed</td></tr></tbody></table><div><div>New case</div><div>Edit case</div><div>Back</div><div>Query</div></div></div>	CIN	Defendant n...	Starting date	Type	Status	1	student	10/04/2016	studying	Pending	2	mousam	04/04/2016	assignment	Pending	3	blah blah	02/08/2012	crime	Pending	4	rohan	01/01/2015	air soccer fe...	Closed	5	iitian	13/04/2016	General cat...	Closed
CIN	Defendant n...	Starting date	Type	Status																											
1	student	10/04/2016	studying	Pending																											
2	mousam	04/04/2016	assignment	Pending																											
3	blah blah	02/08/2012	crime	Pending																											
4	rohan	01/01/2015	air soccer fe...	Closed																											
5	iitian	13/04/2016	General cat...	Closed																											
Input CIN	6																														
Expected output	No matching case, since no case in the database has a CIN 6																														

Actual output	
Status	Test passed

CASE 2 - Valid CIN

Initial condition	Same as CASE 1										
Input CIN	2										
Expected output	Details of case with CIN 2 are displayed										
Actual output	<div><div>Judiciary Information System</div><div><div>PendingResolvedDate of hearingCIN</div><div>CIN: <input type="text" value="2"/> <input type="button" value="Go"/></div><table><thead><tr><th>CIN</th><th>Defendant n...</th><th>Starting date</th><th>Type</th><th>Status</th></tr></thead><tbody><tr><td>2</td><td>mousam</td><td>04/04/2016</td><td>assignment</td><td>Pending</td></tr></tbody></table><div><input type="button" value="Back"/><input type="button" value="View"/></div></div></div>	CIN	Defendant n...	Starting date	Type	Status	2	mousam	04/04/2016	assignment	Pending
CIN	Defendant n...	Starting date	Type	Status							
2	mousam	04/04/2016	assignment	Pending							
Status	Test passed										

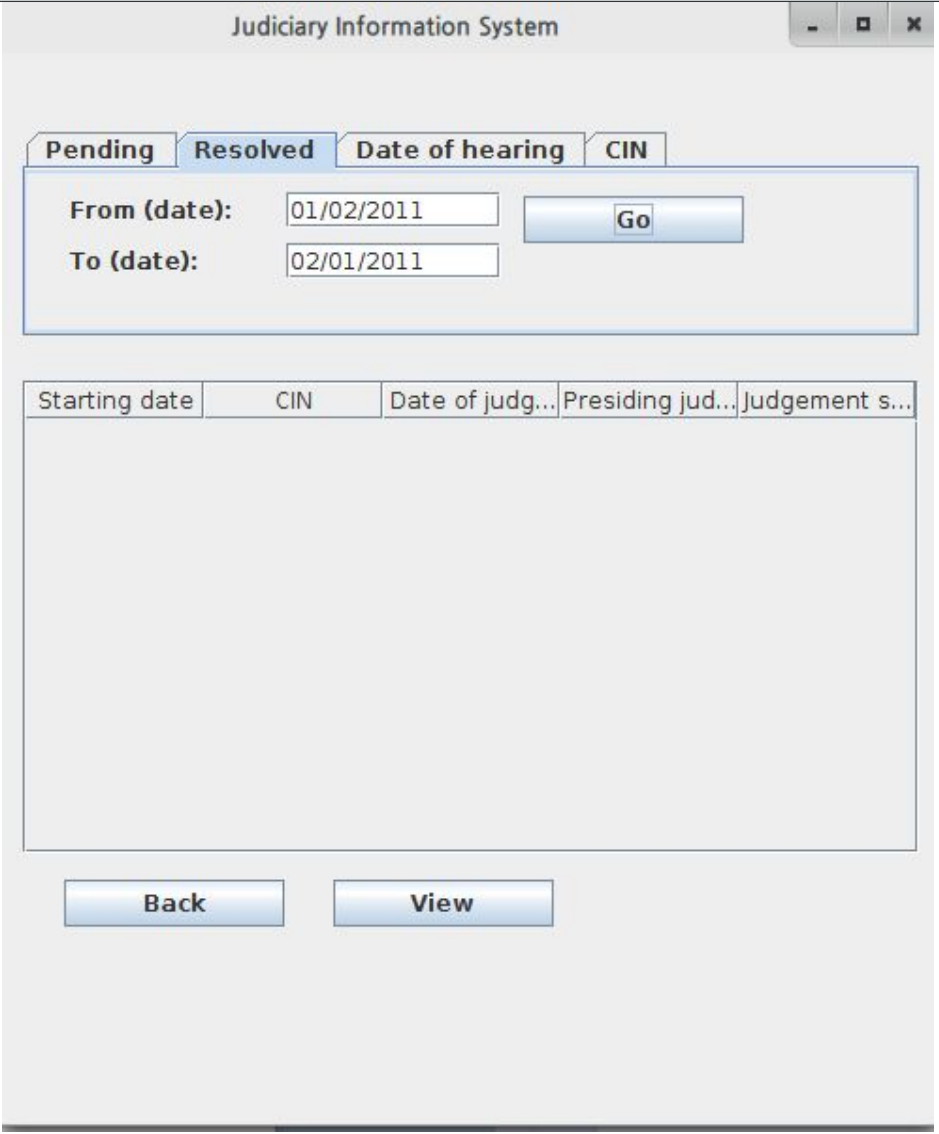
B. Query all Pending Cases

Initial condition	Same as CASE 1 of Part A																
Expected output	Details of all pending cases are displayed in the table																
Actual output	<div><div>Judiciary Information System</div><div><div>PendingResolvedDate of hearingCIN</div><div>All pending cases: <input type="button" value="Go"/></div><table><thead><tr><th>CIN</th><th>Defendant name</th><th>Starting date</th><th>Type</th></tr></thead><tbody><tr><td>1</td><td>student</td><td>10/04/2016</td><td>studying</td></tr><tr><td>2</td><td>mousam</td><td>04/04/2016</td><td>assignment</td></tr><tr><td>3</td><td>blah blah</td><td>02/08/2012</td><td>crime</td></tr></tbody></table><div><input type="button" value="Back"/><input type="button" value="View"/></div></div></div>	CIN	Defendant name	Starting date	Type	1	student	10/04/2016	studying	2	mousam	04/04/2016	assignment	3	blah blah	02/08/2012	crime
CIN	Defendant name	Starting date	Type														
1	student	10/04/2016	studying														
2	mousam	04/04/2016	assignment														
3	blah blah	02/08/2012	crime														
Status	Test passed																

C. Query Resolved Cases by From and To date:CASE 1 - From date <= To date

Initial condition	Same as CASE 1 of Part A										
Expected output	Details of all resolved cases who have a starting date later than or equal to 'From date' and a judgment date earlier than or equal to 'To date'										
Actual output	<div><div>Judiciary Information System</div><div><div>PendingResolvedDate of hearingCIN</div><div><div>From (date):01/04/2016</div><div>Go</div><div>To (date):01/05/2016</div></div><table><tr><th>Starting date</th><th>CIN</th><th>Date of judg...</th><th>Presiding jud...</th><th>Judgement s...</th></tr><tr><td>13/04/2016</td><td>5</td><td>17/04/2016</td><td>PPD</td><td>#I_QUIT</td></tr></table><div><div>Back</div><div>View</div></div></div></div>	Starting date	CIN	Date of judg...	Presiding jud...	Judgement s...	13/04/2016	5	17/04/2016	PPD	#I_QUIT
Starting date	CIN	Date of judg...	Presiding jud...	Judgement s...							
13/04/2016	5	17/04/2016	PPD	#I_QUIT							
Status	Test passed										

CASE 12- From date > To date

Initial condition	Same as CASE 1 of Part A
Expected output	No cases are displayed
Actual output	
Status	Test passed

D. Query by Date of Hearing

Initial condition	Same as CASE 1 of Part A								
Expected output	Details of all cases that had/will have a date of hearing on the specified date								
Actual output	<div><div>Judiciary Information System</div><div><div>PendingResolvedDate of hearingCIN</div><div><div>Date of hearing:02/08/2012Go</div></div><table><thead><tr><th>CIN</th><th>Defendant name</th><th>Type</th><th>Slot</th></tr></thead><tbody><tr><td>3</td><td>blah blah</td><td>02/08/2012</td><td>B</td></tr></tbody></table><div><div>Back</div><div>View</div></div></div></div>	CIN	Defendant name	Type	Slot	3	blah blah	02/08/2012	B
CIN	Defendant name	Type	Slot						
3	blah blah	02/08/2012	B						
Status	Test passed								

INTERFACE TESTING

While testing the Graphical User Interface of the JISS, all the components were found to be working fine except for the following few isolated issues:

1. Text in some data fields does not wrap

Examples:

The first example shows a label 'Summary of proceedings:' followed by a text field containing 'The hearing was very eventful to'. The text is truncated and does not wrap onto the next line. The second example shows a label 'Judgement summary:' followed by a text field containing 'The judge passed a decision fav'. This text is also truncated and does not wrap.

2. Wrong column label

In Query Results table, while querying by Date of Hearing, the column label 'Type' is erroneous and it should be 'Starting date' instead.

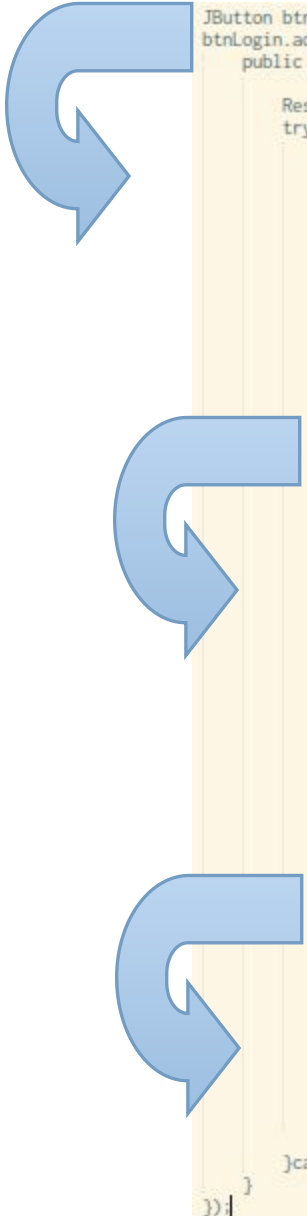
The screenshot shows the JISS interface with tabs for 'Pending', 'Resolved', 'Date of hearing', and 'CIN'. The 'Date of hearing' tab is selected. Below the tabs is a search area with the label 'Date of hearing:' followed by a text input field containing '21/11/2013' and a 'Go' button. Below the search area is a table with the following columns: CIN, Defendant name, Type, and Slot. The first row of data is highlighted in blue and contains the values: 4, AP Singh, 03/11/2013, and A. The 'Type' column label and the value '03/11/2013' are circled in red, indicating the issue.

CIN	Defendant name	Type	Slot
4	AP Singh	03/11/2013	A

WHITE BOX TESTING

In the White Box Testing, we will verify that all the paths in a function are correct through basic path testing.

White box tests for some functions are as following:



```

JButton btnLogin = new JButton("Log in");
btnLogin.addActionListener(new ActionListener() {
    public void actionPerformed(ActionEvent e) {

        ResultSet rs = db.getrs("select * from users where username = \"" + txtUsername.getText() + "\"");
        try{

            if(!rs.next()){
                JOptionPane.showMessageDialog(frame, "Invalid username/password");
                return;
            }

            if(! String.valueOf(txtPassword.getPassword()).equals(rs.getString("password"))){
                JOptionPane.showMessageDialog(frame, "Invalid username/password");
                return;
            }

            char type = rs.getString("type").charAt(0);
            int ch = cmbTypeUser.getSelectedIndex();

            if((type == 'R' && ch != 0) || (type == 'L' && ch != 1) || (type == 'J' && ch != 2)){
                JOptionPane.showMessageDialog(frame, "Invalid username/password");
                return;
            }
            switch(type){
                case 'R':
                    Registrar reg = new Registrar(rs.getString("username"), rs.getString("password"));
                    reg.initPanel(getThis());
                    userPanel = reg.getPanel();

                    break;
                case 'L':
                    Lawyer law = new Lawyer(rs.getString("username"), rs.getString("password"));
                    law.initPanel(getThis());
                    userPanel = law.getPanel();

                    break;
                case 'J':
                    Judge jud = new Judge(rs.getString("username"), rs.getString("password"));
                    jud.initPanel(getThis());
                    userPanel = jud.getPanel();

            }

            frame.getContentPane().add(userPanel);
            userPanel.setVisible(true);
            loginPanel.setVisible(false);

        }catch(Exception ex){}
    }
});
  
```

Clearly all paths in the above functions are executed for different input situations. The white box testing was successful and no blocks of dead code were found in any function of the system.

ENTRY AND EXIT CRITERIA

This section describes the general criteria by which testing commences, temporarily stopped, resumed and completed within each testing phase. Different features/components may have slight variation of their criteria, in which case, those should be mentioned in the feature test plan. The testing phase also maps to the impact level definition when a defect is entered in the bug-tracking phase.

Unit Testing is done at the source or code level for language-specific programming errors such as bad syntax, logic errors, or to test particular functions or code modules. The unit test cases shall be designed to test the validity of the programs correctness.

Black Box Phase

Black box testing typically involves running through every possible input to verify that it results in the right outputs using the software as an end-user would. We will use Error Guessing and Boundary Value Analysis complexity metrics in order to quantifiably determine how many test cases needed to achieve maximum code coverage.

Black Box Entry Criteria

The Black Box Entry Criteria will rely on the component specification, and user interface requirements. Things that must be done on entry to the Black Box stage:

- All functions like creating cases/users, case management, user management, querying cases, updating cases, etc. must either be coded or stubs written.
- The type of Black Box testing Methods will be determined upon entry. We will use Error Guessing, and Boundary Value Analysis.
- Error Guessing included entering garbage string in search field, trying to add the same User name multiple times to the database, closing the server and starting application, entering invalid inputs for different fields.
- Boundary Value Analysis included adding a high number (like 1000) of items to the database, logging a large number of users and updating cases simultaneously.

Black Box Exit Criteria

The Black Box Exit Criteria listed below explains what needs to be completed in-order to exit Black Box phase. To exit the Black Box phase 100% success rate must be achieved. Things that must be done upon exiting the Black Box stage:

- The application showed empty table in case of garbage string.
- If a user name(Assumed to be unique) existing in the database was entered at the time of adding a new User, an error message shown.
- For a very high stress on the database, the response time of the server was increased.
- All code bugs that are exposed were corrected whenever possible.

White Box Phase

The White Box criteria apply for purposes of focusing on internal program structure, and discover all internal program errors. Defects were categorized and the quality of the software was assessed.

White Box Entry Criteria

The White Box Entry Criteria relied on verifying that the major features work separately but not necessarily in combination. The design and human interface were stable. Things that were done on entry to the White Box stage:

- Unit tests were written for as many functions as possible.
- The type of White Box testing Methods that were used were determined upon entry. We used unit testing and test for memory leaks.
- Black Box Testing was in its late stages.

White Box Exit Criteria

The Judiciary Information System in the White Box stage generally had a stable feel to it. White Box testing continued until the Black Box or next milestone criteria were met. To exit the White Box phase 100% success rate was achieved. The following describes the state of the product upon exit from the White Box Stage:

- All functions like creating cases/users, case management, user management, querying cases, updating cases were implemented, operational and tested.
- All test cases were generated. The test cases were generated from the Control Flow diagrams of all functions.
- The graphical interface was reviewed and found to satisfactory and stable, that is, no further changes to dialog boxes or other interface elements were planned. Minor changes were acceptable, but must be arranged with the Development and Test Engineers.
- All code bugs that were exposed were corrected.

Integration Test

There are two modules that will be integrated for Integration Testing. The two modules are The Graphic User Interface module and the Controller (back-end). The two components consists of a mixture of stubs, driver, and fully functional code. The following describes the entry and exit criteria for Integration testing.

Integration Test Entry Criteria

The Integration Test Entry Criteria relies on both modules to be operational. The controller and human interfaces were stable. Things that were done on entry to the Integration Test stage:

- All functions like creating cases/users, case management, user management, querying cases, updating cases were either be coded and/or stubs created.
- The Graphical User Interface was either be coded and/or a driver and stubs were created. The driver was implemented to facilitate test case input and output values.
- Interfaces and interactions between the Controller and the Graphical User Interface was operational.
- A bottom-up Integration Test Strategy was conducted. The low level details of controller and graphical interface were integrated. A driver was written to facilitate test case input and output values. The driver temporarily satisfied high-level details of the input and output values.

Integration Test Exit Criteria

The Integration Test Exit Criteria relied on both modules to be operational. The controller and human interface was stable. To exit the Integration Testing phase 100% success rate was achieved. Things that were done on exit from the Integration Test stage:

- All code bugs that were exposed were corrected.
- The parser and Graphical User Interface Module interacted together with complete accuracy, according to the System Specification Design. All discrepancies were corrected.
- Both Modules were ready for System Testing. Stubs and drivers were replaced with fully functional code.
- Black Box Testing was completed.

System Test

The System Test criteria apply for purposes of categorizing defects and the assessing the quality level of the product. All elements of the Controller and Graphical User Interface were meshed together and tested as a whole. System test focuses on functions and performance, reliability, instillation, behavior during special conditions, and stress testing.

1.3 Shipping or Live Release

The Controller and server testing was scaled down and combined all phases of testing into two phases - Function Complete and Regression testing - and follows the release criteria.

Shipping/Live Release Entry Criteria

The criteria for entering the final stages are as follows:

- All open product defects, regardless of fixed defects, documented, deferred, or otherwise addressed were identified.
- Regression testing on all product defects and the entire product was completed and verified.

Deliverables

- Program function specifications
- Program source code
- Test plan document - this document should address testing objectives, criteria, standards, schedule and assignments, and testing tools.
 - Unit Testing Plan
 - Integration Plan
 - System Testing Plan

Environmental Needs

As the project has been developed in Java, the software works in both Windows and Linux platforms.

MySQL is also required to function to be able to connect to the database.