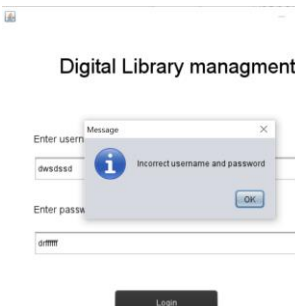
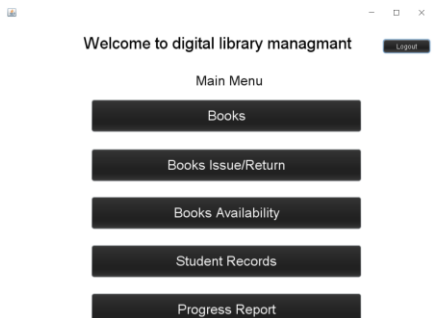


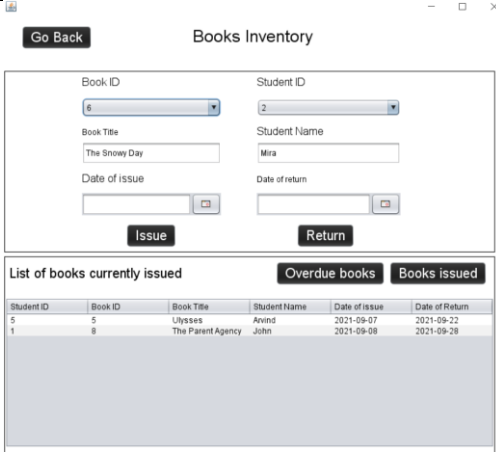
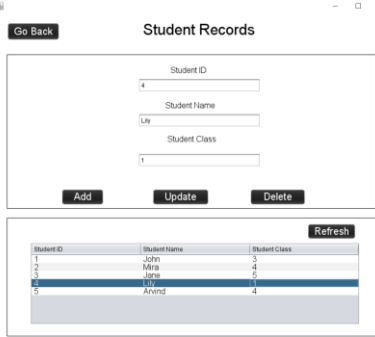
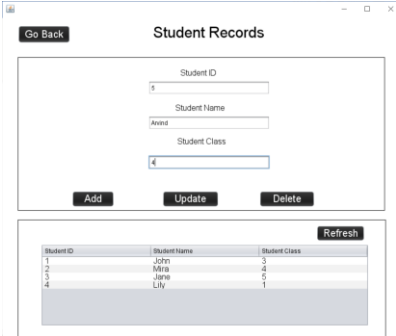
Digital Library management

Criteria E – Evaluation

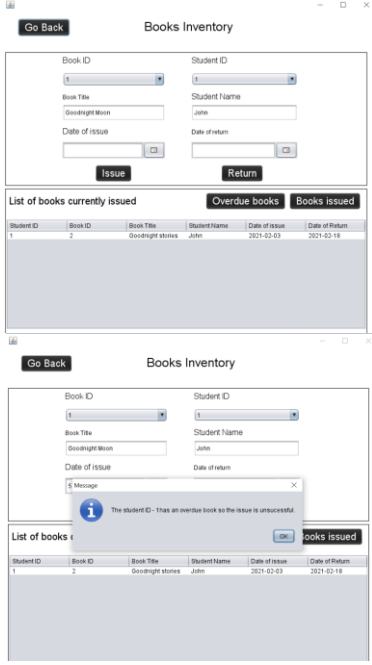
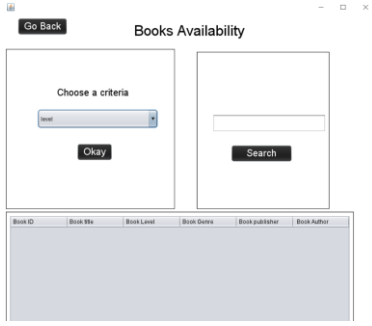
Evaluation

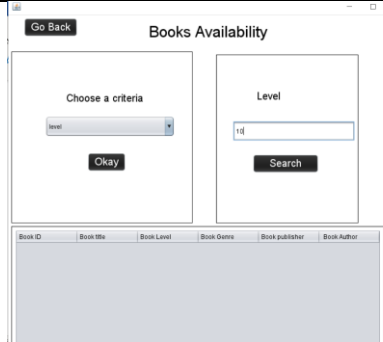
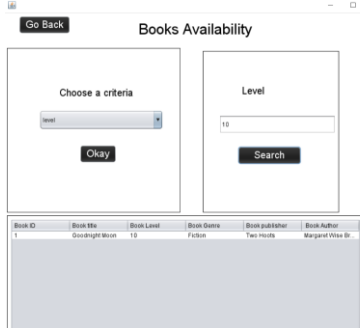
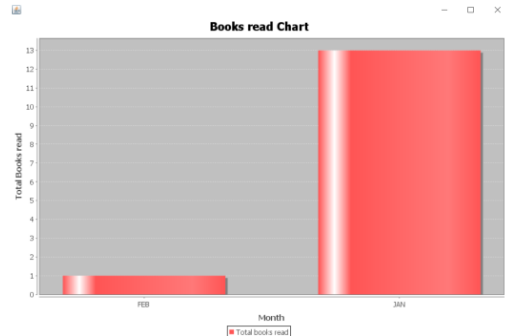
The client believes that the product is easy to operate, nullifies manual intervention and improves efficiency for her. The feedback interview in the appendix is based on which the evaluation and recommendation are mentioned.

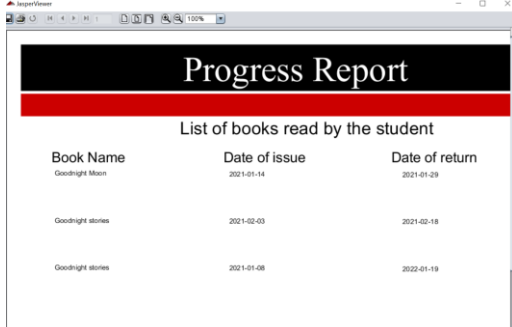
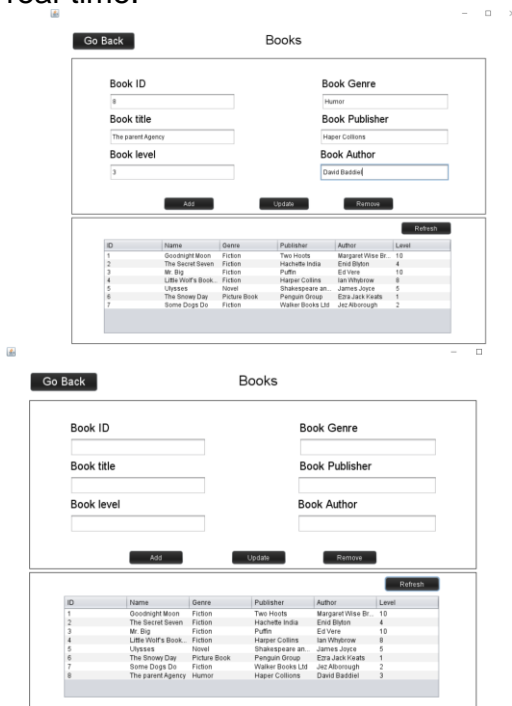
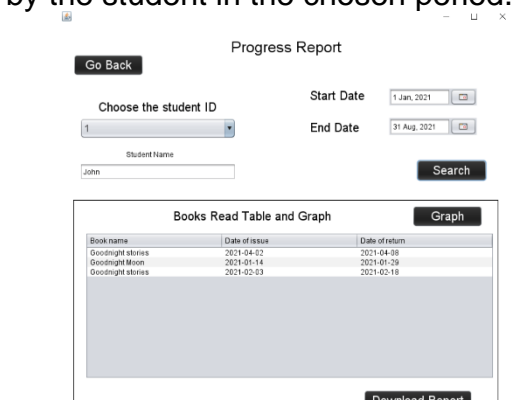
Success Criteria	Met or not?	Description
1) Restrict undesired access to the library management system and provide privacy.	Met	<p>The login form will require credentials to provide access to the software.</p> 
2) A user-friendly desktop application with easy navigation	Met	<p>In the dashboard form, the diligent use of Java features like buttons, forms etc. make the application user friendly and easy to navigate.</p> 
3) Easily accessible data from GUI with pre-populated dropdown fields	Met	<p>In the book inventory form, all the stored student and book details can be retrieved, and we will be choosing the Book ID 6 and student ID 2 from the dropdown and we can see the information related to it is updated in real-time.</p>

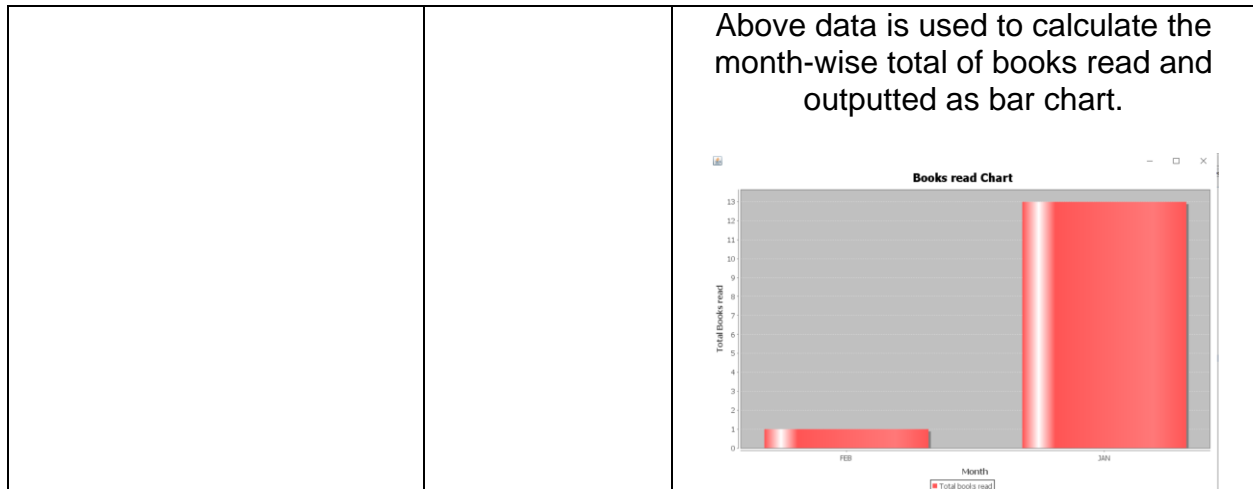
		
4) Avoidance of Data Re-entry at multiple forms like Student form, Book form and hence ease down manual entries	Met	<p>To avoid re-entrance of data entries in various forms, the client can simply click on the records in the table and the data will be copied into the textbox.</p> 
5) Real-Time access to student and book data with a robust supported Database	Met	<p>In the book form, any update in a book record will be reflected on the table below in the same form in real-time and in other forms too.</p> 

		<div><div><div><div><div><div>Go Back</div></div></div><div><div>Student Records</div></div><div><div><div>Student ID</div><div><input type="text"/></div></div><div><div>Student Name</div><div><input type="text"/></div></div><div><div>Student Class</div><div><input type="text"/></div></div></div><div><div>Add</div><div>Update</div><div>Delete</div></div></div><div><div><div>Refresh</div></div><div><table><tr><th>Student ID</th><th>Student Name</th><th>Student Class</th></tr><tr><td>1</td><td>John</td><td>3</td></tr><tr><td>2</td><td>Mina</td><td>4</td></tr><tr><td>3</td><td>Jane</td><td>5</td></tr><tr><td>4</td><td>Lily</td><td>1</td></tr><tr><td>5</td><td>Amynd</td><td>4</td></tr></table></div></div></div></div>	Student ID	Student Name	Student Class	1	John	3	2	Mina	4	3	Jane	5	4	Lily	1	5	Amynd	4						
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5	Amynd	4																								
6) Automatically filtering data from the database to get the desired results from the PostgreSQL	Met	<p>In the book availability form, we can see the use of SQL statements especially “select” to filter out and find all the desired books based on criteria.</p> <div><div><div><div><div><div>Go Back</div></div></div><div><div>Books Availability</div></div><div><div><div>Choose a criteria</div><div><div>level</div></div><div>Okay</div></div><div><div>Level</div><div><input type="text" value="10"/></div><div>Search</div></div></div><div><table><tr><th>Book ID</th><th>Book Title</th><th>Book Level</th><th>Book Genre</th><th>Book publisher</th><th>Book Author</th></tr><tr><td colspan="6"></td></tr></table></div></div></div><div><div><div><div><div><div>Go Back</div></div></div><div><div>Books Availability</div></div><div><div><div>Choose a criteria</div><div><div>level</div></div><div>Okay</div></div><div><div>Level</div><div><input type="text" value="10"/></div><div>Search</div></div></div><div><table><tr><th>Book ID</th><th>Book Title</th><th>Book Level</th><th>Book Genre</th><th>Book publisher</th><th>Book Author</th></tr><tr><td>1</td><td>Goodnight Moon</td><td>10</td><td>Fiction</td><td>Two Hoots</td><td>Margaret Wise B.</td></tr></table></div></div></div></div></div>	Book ID	Book Title	Book Level	Book Genre	Book publisher	Book Author							Book ID	Book Title	Book Level	Book Genre	Book publisher	Book Author	1	Goodnight Moon	10	Fiction	Two Hoots	Margaret Wise B.
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7) List out all the student's names with their details who have overdue books	Met	<p>In the book inventory form, clicking the Book overdue button a list of overdue books will be automatically created.</p> <div><div><div><div><div><div>Go Back</div></div></div><div><div>Books Inventory</div></div><div><div><div><div>Book ID</div><div><div>2</div></div></div><div><div>Student ID</div><div><div>3</div></div></div><div><div>Book Title</div><div><input type="text"/></div></div><div><div>Student Name</div><div><input type="text"/></div></div><div><div>Date of issue</div><div><input type="text"/></div></div><div><div>Date of return</div><div><input type="text" value="31 Jan, 2022"/></div></div></div><div><div>Issue</div><div>Return</div></div></div><div><div><div>List of books currently overdue</div><div>Overdue books</div><div>Books issued</div></div><div><table><tr><th>Student ID</th><th>Book ID</th><th>Book Title</th><th>Student Name</th><th>Date of issue</th><th>Date of Return</th></tr><tr><td>1</td><td>1</td><td>Goodnight Moon</td><td>John</td><td>2020-11-01</td><td>2020-11-30</td></tr></table></div></div></div></div></div>	Student ID	Book ID	Book Title	Student Name	Date of issue	Date of Return	1	1	Goodnight Moon	John	2020-11-01	2020-11-30												
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<p>8) Check whether a book is overdue for a student or not and if there is an overdue book then Automated Warning Generation for Overdue Books and recommended action</p>	<p>Met</p>	<p>In the book inventory form, a robust algorithm is used to verify book overdue for the student and warn when a student is issuing a book how has an overdue book. Just like Student ID 1 below.</p> 
<p>9) Searching available books based on criteria chosen by the client</p>	<p>Met</p>	<p>In the book availability form, the client can search up if a book is available and has not been issued based on pre-defined criteria</p> 

		 
10) Automatically create a Bar Graph depicting the progress of the student over the month chosen by the client	Met	<p>In progress report form, on-click of graph button, a bar chart generates based on the student ID and period chosen</p> 
11) Automatically generating a progress report mentioning the information about the books read by the student and how long has he read the book.	Met	<p>In the progress report form, on-click of the report button a report generates listing all the books read by the student over a period.</p>

		 <p>Progress Report</p> <p>List of books read by the student</p> <table><thead><tr><th>Book Name</th><th>Date of issue</th><th>Date of return</th></tr></thead><tbody><tr><td>Goodnight Moon</td><td>2021-01-14</td><td>2021-01-29</td></tr><tr><td>Goodnight stories</td><td>2021-02-03</td><td>2021-02-18</td></tr><tr><td>Goodnight stories</td><td>2021-01-08</td><td>2022-01-19</td></tr></tbody></table>	Book Name	Date of issue	Date of return	Goodnight Moon	2021-01-14	2021-01-29	Goodnight stories	2021-02-03	2021-02-18	Goodnight stories	2021-01-08	2022-01-19																																										
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12) Forms Refreshed seamlessly to reflect the updated field data	Met	<p>In the book form, on-click of the refresh button, the information is updated in real-time.</p>  <p>Books</p> <p>Book ID: 8, Book Genre: Humor, Book title: The parent Agency, Book Publisher: Harper Collins, Book level: 3, Book Author: David Badstuber</p> <p>Books</p> <table><thead><tr><th>ID</th><th>Name</th><th>Genre</th><th>Publisher</th><th>Author</th><th>Level</th></tr></thead><tbody><tr><td>1</td><td>Goodnight Moon</td><td>Fiction</td><td>Two Hoots</td><td>Margaret Wise Br.</td><td>10</td></tr><tr><td>2</td><td>The Secret Seven</td><td>Fiction</td><td>Hachette India</td><td>Enid Blyton</td><td>4</td></tr><tr><td>3</td><td>Mr. Big</td><td>Fiction</td><td>Puffin</td><td>Ed Vere</td><td>10</td></tr><tr><td>4</td><td>Little Wolf's Book</td><td>Fiction</td><td>Harper Collins</td><td>San Whitlow</td><td>8</td></tr><tr><td>5</td><td>Ulysses</td><td>Novel</td><td>Shakespeare an.</td><td>James Joyce</td><td>5</td></tr><tr><td>6</td><td>The Snowy Day</td><td>Picture Book</td><td>Penguin Group</td><td>Ezra Jack Keats</td><td>1</td></tr><tr><td>7</td><td>Some Dogs Do</td><td>Fiction</td><td>Walker Books Ltd</td><td>Jac Atkinson</td><td>2</td></tr><tr><td>8</td><td>The parent Agency</td><td>Humor</td><td>Harper Collins</td><td>David Badstuber</td><td>3</td></tr></tbody></table>	ID	Name	Genre	Publisher	Author	Level	1	Goodnight Moon	Fiction	Two Hoots	Margaret Wise Br.	10	2	The Secret Seven	Fiction	Hachette India	Enid Blyton	4	3	Mr. Big	Fiction	Puffin	Ed Vere	10	4	Little Wolf's Book	Fiction	Harper Collins	San Whitlow	8	5	Ulysses	Novel	Shakespeare an.	James Joyce	5	6	The Snowy Day	Picture Book	Penguin Group	Ezra Jack Keats	1	7	Some Dogs Do	Fiction	Walker Books Ltd	Jac Atkinson	2	8	The parent Agency	Humor	Harper Collins	David Badstuber	3
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13) Automatic retrieval and reporting the total number of books read in each month per student in graphical format	Met	<p>In the progress report form, the screenshot depicts all the books read by the student in the chosen period.</p>  <p>Progress Report</p> <p>Choose the student ID: 1, Student Name: John</p> <p>Start Date: 1 Jan, 2021, End Date: 31 Aug, 2021</p> <p>Books Read Table and Graph</p> <table><thead><tr><th>Book name</th><th>Date of issue</th><th>Date of return</th></tr></thead><tbody><tr><td>Goodnight stories</td><td>2021-04-22</td><td>2021-04-06</td></tr><tr><td>Goodnight Moon</td><td>2021-01-14</td><td>2021-01-29</td></tr><tr><td>Goodnight stories</td><td>2021-02-03</td><td>2021-02-18</td></tr></tbody></table>	Book name	Date of issue	Date of return	Goodnight stories	2021-04-22	2021-04-06	Goodnight Moon	2021-01-14	2021-01-29	Goodnight stories	2021-02-03	2021-02-18																																										
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Word count: 338

Recommendations for Further Development

Automatic mailing of progress report

The client wants the generated progress report to be mailed directly to the parents of the students with a customized message, so the client doesn't need to manually mail it. To achieve this, a pre-defined email library will be used to mail the progress report with the customized message automatically and the parent email address and name will be recorded when a new student record is added into the system.

Automatic System Backup

The client wants automatic backup of the data in case there is an issue with the system then the data should be present in a Disk drive. To achieve this, the data from the centralized database will be backed up in a Disk drive provided by the client automatically.

Book vendor details

The client wants a record of the vendor details once a new book is bought so the vendor details can be shared with the school authority, so she doesn't need to manually record. To achieve this, in the book form when a book is added then the client can store the vendor details.

Most books read calculation

The client is planning to award students who have read the most books in each grade, therefore, the client wants an additional report is generated which calculate the total number of books. To do this, a button in the progress report form will automatically generate a report calculating which student read the most books.

Word count: 226