



CHAPTER 4

ANALYSIS, PRESENTATION, AND INTERPRETATION OF DATA

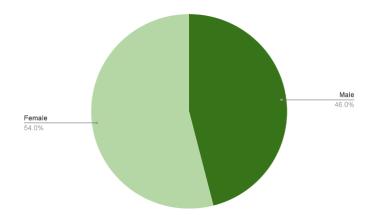
4.1 Demographic Profile of Respondents

Table 1:Role Distribution of the Respondents

ROLE	POPULATION	NO. OF RESPONDENTS
STUDENT	3000	100
TEACHERS	80	10

The table 1 shows the distribution of respondents and the total population for two groups: Students (Population: 3000, Respondents: 100) and Teachers (Population: 80, Respondents: 10). This data suggests that a larger proportion of students participated in the survey compared to teachers.

Gender of Respondents



The pie chart above illustrates the gender distribution of the 100 respondents. A slight gender imbalance is evident, with females comprising a slightly larger proportion of the sample. Fifty-four





percent of the respondents identified as female, while 46% identified as male. This near-equal distribution suggests a balanced representation of both genders in the study.

4.2 STUDENTS

1. The researche Digital Library S						in the LB	ELIB: A	Develop	ment of
PROBLEMS	STRO: AGI	NGLY REE	AGF	REE	DISAGREE (2)		STRONGLY DISAGREE (1)		WEIGHTEI MEAN
	Number	Percent	Number	Percent	Number	Percent	Number	Percent	
1. The researchers are successful in solving the widespread use of paper at Lawang Bato National High School.	4	100%	0	0	0	0	0	0	4
2. The researchers are successful in Digitizing books, research materials, and storing other important documents for school works, books and documents.	4	100%	0	0	0	0	0	0	4
3. The researchers are successful in	4	100%	0	0	0	0	0	0	4





keeping academic achievements safe, helping future research, and preserving the school's academic history.									
4. The researchers are successful in protecting the valuable information in these old books by turning them into digital copies	4	100%	0	0	0	0	0	0	4
GENERAL WEIGHTED MEAN	4 = Strongly Agree								

The data shown above shows the result of Survey Questionnaire 1 for the Students in showing the following problems for the LBELIB: A Development of Digital Library System for Lawang Bato National High School. The General Weighted Mean is 4, which falls in the range of Strongly Agree on the Likert Scale.

(1) With a percentage of 100%, the respondents strongly agree that the researchers succeeded in solving the problem of widespread paper usage at Lawang Bato National High School. This achievement obtained a weighted mean of **4.00**.





- (2) With a percentage of 100%, the respondents strongly agree that the researchers succeeded in digitizing books, research materials, and storing other important documents for school-related purposes. This accomplishment received a weighted mean of **4.00**.
- (3) With a percentage of 100%, the respondents strongly agree that the researchers succeeded in preserving academic achievements, aiding future research, and safeguarding the school's academic history. This success achieved a weighted mean of **4.00**.
- (4) With a percentage of 100%, the respondents strongly agree that the researchers succeeded in protecting valuable information by converting old books into digital copies. This effort obtained a weighted mean of **4.00**.

2. Are the developers are successful in showing the following features in LBELIB: A Development of Digital Library System for Lawang Bato National High School

FOR STUDENTS WEIGHTED **STRONGLY** DISAGREE **STRONGLY AGREE** MEAN **STATEMENT AGREE DISAGREE (3) (2)** 100% 0 0 0 0 4 0 0 1. I am able to log-in and log-out. 4 100% 0 0 0 0 0 4 2. I am able to view the dashboard intended for students. 4 100% 0 0 0 0 0 0 4 3. I am able to search books,







1 1 2									, , , , , , , , , , , , , , , , , , ,
ebooks & research papers.									
4. I am able to filter books, ebooks & research papers.	4	100%	0	0	0	0	0	0	4
5. I am able to view books, ebooks & research papers.	4	100%	0	0	0	0	0	0	4
6. I am able to preview books, ebooks & research papers.	4	100%	0	0	0	0	0	0	4
7. I am able to zoom in & zoom out at the preview page.	4	100%	0	0	0	0	0	0	4
8. I am able to play speech-to-text functionality.	4	100%	0	0	0	0	0	0	4
9. I am able to pause speech-to-spee ch functionality.	4	100%	0	0	0	0	0	0	4







	4	100%	0	0	0	0	0	0	4
10. I am able to stop	-		-				-		-
speech-to-spee									
ch									
functionality.									
11.7. 11	4	100%	0	0	0	0	0	0	4
11. I am able to bookmark									
books, ebooks									
& research									
papers.									
	4	100%	0	0	0	0	0	0	4
12. I am able									
to unbook mark books,									
ebooks &									
research									
papers.									
	4	100%	0	0	0	0	0	0	4
13. I am able	-		-						-
to generate									
APA citations									
for books, ebooks &									
research									
papers.									
	4	100%	0	0	0	0	0	0	4
14. I am able	-	10070	Ü	Ů			Ů	Ů	-
to copy the									
generated APA									
citation for books, ebooks									
& research									
papers.									
	4	100%	0	0	0	0	0	0	4
15. I am able									
to request to borrow viewed									
books, ebooks									
JOOKS, COUCKS		<u> </u>			<u> </u>	<u> </u>			







& research papers.									
16. I am able to bookmark pages.	4	100%	0	0	0	0	0	0	4
17. I am able to view the bookmark page.	4	100%	0	0	0	0	0	0	4
18. I am able to request to borrow viewed books, ebooks & research papers via the bookmark page.	4	100%	0	0	0	0	0	0	4
19. I am able to request to borrow viewed books, ebooks & research papers via the bookmark page.	4	100%	0	0	0	0	0	0	4
20. I am able to preview books, ebooks & research papers via the bookmark page.	4	100%	0	0	0	0	0	0	4





21. I am able to navigate using the book borrow button.	4	100%	0	0	0	0	0	0	4		
22 I am able to view borrowed books.	4	100%	0	0	0	0	0	0	4		
23. I am able to view borrowed history.	4	100%	0	0	0	0	0	0	4		
24. I am able to receive notifications.	4	100%	0	0	0	0	0	0	4		
GENERAL WEIGHTED MEAN		4 = Strongly Agree									

The data shown above shows the result of Survey Questionnaire 2 for the Students in showing the following problems for the LBELIB: A Development of Digital Library System for Lawang Bato National High School. The General Weighted Mean is 4, which falls in the range of Strongly Agree on the Likert Scale.

- (1) With a percentage of 100%, the respondents strongly agree that they are able to log in and log out using the system. This functionality obtained a weighted mean of **4.00**.
- (2) With a percentage of 100%, the respondents strongly agree that they are able to view the dashboard intended for students. This feature obtained a weighted mean of **4.00**.
- (3) With a percentage of 100%, the respondents strongly agree that they are able to search for books, ebooks, and research papers. This capability received a weighted mean of **4.00**.





- (4) With a percentage of 100%, the respondents strongly agree that they are able to filter books, ebooks, and research papers. This functionality obtained a weighted mean of **4.00**.
- (5) With a percentage of 100%, the respondents strongly agree that they are able to view books, ebooks, and research papers. This feature received a weighted mean of **4.00**.
- (6) With a percentage of 100%, the respondents strongly agree that they are able to preview books, ebooks, and research papers. This capability obtained a weighted mean of **4.00**.
- (7) With a percentage of 100%, the respondents strongly agree that they are able to zoom in and zoom out on the preview page. This functionality received a weighted mean of **4.00**.
- (8) With a percentage of 100%, the respondents strongly agree that they are able to play the speech-to-text functionality. This feature obtained a weighted mean of **4.00**.
- (9) With a percentage of 100%, the respondents strongly agree that they are able to pause the speech-to-text functionality. This capability received a weighted mean of **4.00**.
- (10) With a percentage of 100%, the respondents strongly agree that they are able to stop the speech-to-text functionality. This functionality obtained a weighted mean of **4.00**.
- (11) With a percentage of 100%, the respondents strongly agree that they are able to bookmark books, ebooks, and research papers. This feature received a weighted mean of **4.00**.
- (12) With a percentage of 100%, the respondents strongly agree that they are able to unbookmark books, ebooks, and research papers. This capability obtained a weighted mean of **4.00**.
- (13) With a percentage of 100%, the respondents strongly agree that they are able to generate APA citations for books, ebooks, and research papers. This functionality received a weighted mean of **4.00**.





- (14) With a percentage of 100%, the respondents strongly agree that they are able to copy the generated APA citation for books, ebooks, and research papers. This feature obtained a weighted mean of **4.00**.
- (15) With a percentage of 100%, the respondents strongly agree that they are able to request to borrow viewed books, ebooks, and research papers. This capability received a weighted mean of **4.00**.
- (16) With a percentage of 100%, the respondents strongly agree that they are able to bookmark pages. This functionality obtained a weighted mean of **4.00**.
- (17) With a percentage of 100%, the respondents strongly agree that they are able to view the bookmarked pages. This feature received a weighted mean of **4.00**.
- (18) With a percentage of 100%, the respondents strongly agree that they are able to request to borrow viewed books, ebooks, and research papers via the bookmark page. This capability obtained a weighted mean of **4.00**.
- (19) With a percentage of 100%, the respondents strongly agree that they are able to request to borrow viewed books, ebooks, and research papers via the bookmark page. This feature received a weighted mean of **4.00**.
- (20) With a percentage of 100%, the respondents strongly agree that they are able to preview books, ebooks, and research papers via the bookmark page. This functionality obtained a weighted mean of **4.00**.
- (21) With a percentage of 100%, the respondents strongly agree that they are able to navigate using the book borrow button. This feature received a weighted mean of **4.00**.





- (22) With a percentage of 100%, the respondents strongly agree that they are able to view borrowed books. This functionality obtained a weighted mean of **4.00**.
- (23) With a percentage of 100%, the respondents strongly agree that they are able to view their borrowing history. This feature received a weighted mean of **4.00**.
- (24) With a percentage of 100%, the respondents strongly agree that they are able to receive notifications. This functionality obtained a weighted mean of **4.00**.

3. Are the following fac	ctors base	ed on ISC) 25010 s	successfu	lly achie	ved by th	e system	?		
PROBLEMS	AG	STRONGLY AGREE (4)						STRONGLY DISAGREE (1)		WEIGH TED MEAN
	Numbe r	Percent	Numbe r	Percent	Numbe r	Percent	Numbe r	Percent		
		FUN	CTIONA	AL USAI	BILITY					
Accuracy: Information retrieved through searches and citations should be precise and correct.	4	100%	0	0	0	0	0	0	4	
Student: "I was able to view the proper contents of books depending on their title and category"		PERFO	DRMANO	CE EFF	CIENC	Y				
Resource utilization:	4	100%	0	0	0	0	0	0	4	
Degree to which the										



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amounts and types of resources used by a product or system, when performing its functions, meet requirements. Student: "I was able to use bookmarking,"									
search features and									
access to materials									
inside the system with									
fast response time."									
			RELIA	BILITY	7				
	4	100%	0	0	0	0	0	0	4
Maturity: The									
system must function									
consistently and									
dependably to									
guarantee constant									
resource access.									
Student: "I was able to fetch and access books even during high traffic periods (e.g., during exams or project deadlines when many students are searching for books)."									
			USAF	BILITY					
Operability: The system should support users in completing tasks efficiently, such as searching for	4	100%	0	0	0	0	0	0	4







					-		-		
documents, citing									
sources, and									
borrowing materials.									
Student: "I was able									
to easily find books									
or research papers by									
title, author, subject,									
or keywords. Filters."									
			SEC	URITY					
	4	100%	0	0	0	0	0	0	4
Confidentiality:									_
User data and									
borrowing records									
should be kept secure									
and accessible only to									
authorized personnel.									
addiorized personner.									
Student: "My data									
and records such as									
borrow history,									
bookmarks, username									
and password are									
only visible only to									
me."									
me.									
			СОМРА	TIBILIT	Υ				
	4	100%	0	0	0	0	0	0	4
Interoperability:	•	100/0	U	"	"	"	"	"	7
The system should be									
compatible with the									
various web browsers									
and operating									
systems that teachers,									
staff, and students									
· · · · · · · · · · · · · · · · · · ·									
frequently use. To									
ensure access and									
usability across									
multiple platforms									





Student: "I was able to easily access the system on popular web browsers, such as Google Chrome, Mozilla Firefox, Safari, and Microsoft Edge."									
		M	AINTA	INABIL	ITY				
Modifiability: The system architecture and codebase should be designed in a way that makes modifications and updates simple. In order to accommodate future changes and enhancements. Student: "I was able to use different modules such as bookmark, home and the borrow page."	4	100%	0	0	0	0	0	0	4
GENERAL WEIGHTED MEAN	4 = Strongly Agree								

The data shows the result of Survey Questionnaire 3 for **Students** about the following factors based on **ISO 25010** for the **Development of a Web-Based Library System for Lawang Bato National High School**. The **General Weighted Mean** is **4**, which falls in the range of **Strongly Agree** on the Likert Scale.





FUNCTIONAL USABILITY

Accuracy. The system successfully ensures precise and correct information retrieval through searches and citations. According to the student's feedback, they were able to view the proper contents of books based on their title and category. This achievement is supported by a rating of **4.00**, with **100% strongly agreeing**, demonstrating the system's effectiveness in maintaining accuracy.

PERFORMANCE EFFICIENCY

Resource Utilization. The system optimally uses resources to meet user requirements when performing its functions. A student reported that they could efficiently use bookmarking, search features, and access materials with a fast response time. This efficiency is reflected in a weighted mean of **4.00**, with **100% strongly agreeing**, showcasing the system's high performance.

RELIABILITY

Maturity. The system consistently functions dependably, ensuring constant access to resources even during high-traffic periods, such as exams or project deadlines. Students noted their ability to fetch and access books under such conditions. With a weighted mean of 4.00 and 100% strongly agreeing, the system demonstrates its reliability and maturity.

USABILITY

Operability. The system supports users in completing tasks efficiently, including searching for documents, citing sources, and borrowing materials. Feedback indicates that students could easily find books or research papers using titles, authors, subjects, or keywords with filters. This usability aspect





received a weighted mean of **4.00**, with **100% strongly agreeing**, highlighting the system's operability.

SECURITY

Confidentiality. The system safeguards user data and borrowing records, ensuring they are accessible only to authorized personnel. A student confirmed that their data, such as borrow history, bookmarks, username, and password, remained secure and visible only to them. This aspect achieved a weighted mean of 4.00, with 100% strongly agreeing, emphasizing the system's commitment to confidentiality.

COMPATIBILITY

Interoperability. The system is compatible with various web browsers and operating systems frequently used by teachers, staff, and students, ensuring broad accessibility. Students noted that they could easily access the system on browsers like Google Chrome, Mozilla Firefox, Safari, and Microsoft Edge. This compatibility is supported by a weighted mean of **4.00**, with **100% strongly agreeing**.

MAINTAINABILITY

Modifiability. The system's architecture and codebase facilitate easy modifications and updates to accommodate future changes and enhancements. A student reported seamless use of different modules such as bookmarks, home, and the borrow page. This modifiability earned a weighted mean of **4.00**, with **100% strongly agreeing**, showcasing the system's maintainability.



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LIBRARIAN

4. Are the developers are successful in showing the following features in LBELIB: A Development of Digital Library System forLawang Bato National High School

FOR LIBRARIAN

STATEMENT	AG	NGLY REE 4)	AGREE (3)		1	DISAGREE (2)		STRONGLY DISAGREE (1)	
1. I am able to navigate through different pages.	4	100%	0	0	0	0	0	0	4
2. I am able to view the home page.	4	100%	0	0	0	0	0	0	4
3. I am able to view the upload page.	4	100%	0	0	0	0	0	0	4
4. I am able to type, select details about books, ebooks and research.	4	100%	0	0	0	0	0	0	4
5. I am able to upload books, ebooks & research.	4	100%	0	0	0	0	0	0	4
6. I am able to import csv and jpg files.	4	100%	0	0	0	0	0	0	4







7. I am able to view books pages.	4	100%	0	0	0	0	0	0	4
8. I am able to search inside the books page using various search features.	4	100%	0	0	0	0	0	0	4
9. I am able to tag book availability.	4	100%	0	0	0	0	0	0	4
10. I am able to move books to achieve.	4	100%	0	0	0	0	0	0	4
11. I am able to edit book details.	4	100%	0	0	0	0	0	0	4
12. I am able to view books' status.	4	100%	0	0	0	0	0	0	4
13. I am able to view the Borrow Request page and accept or decline a book's request.	4	100%	0	0	0	0	0	0	4
14. I am able to view the	4	100%	0	0	0	0	0	0	4





archive page and view the books moved there.									
15. I am able to delete or restore a book moved to archive.	4	100%	0	0	0	0	0	0	4
16. I am able to Log-in & Log-out.	4	100%	0	0	0	0	0	0	4
GENERAL WEIGHTED MEAN		•		4 =	Strongly	Agree			

The data shown above presents the results of Survey Questionnaire 4 for Librarian, evaluating the features and functionalities of *LBELIB*: A Development of Digital Library System for Lawang Bato National High School. The General Weighted Mean is 4, which falls in the range of **Strongly** Agree on the Likert Scale.

- (1) With a percentage of 100%, students strongly agree that they are able to navigate through different pages. This feature obtained a weighted mean of 4.00.
- (2) With a percentage of 100%, students strongly agree that they are able to view the home page. This feature obtained a weighted mean of 4.00.
- (3) With a percentage of 100%, students strongly agree that they are able to view the upload page. This feature obtained a weighted mean of 4.00.
- (4) With a percentage of 100%, students strongly agree that they are able to type and select details about books, ebooks, and research materials. This feature obtained a weighted mean of 4.00.





- (5) With a percentage of 100%, students strongly agree that they are able to upload books, ebooks, and research materials. This feature obtained a weighted mean of 4.00.
- (6) With a percentage of 100%, students strongly agree that they are able to import CSV and JPG files. This feature obtained a weighted mean of 4.00.
- (7) With a percentage of 100%, students strongly agree that they are able to view book pages. This feature obtained a weighted mean of 4.00.
- (8) With a percentage of 100%, students strongly agree that they are able to search inside the book pages using various search features. This feature obtained a weighted mean of 4.00.
- (9) With a percentage of 100%, students strongly agree that they are able to tag book availability. This feature obtained a weighted mean of 4.00.
- (10) With a percentage of 100%, students strongly agree that they are able to move books to the archive. This feature obtained a weighted mean of 4.00.
- (11) With a percentage of 100%, students strongly agree that they are able to edit book details. This feature obtained a weighted mean of 4.00.
- (12) With a percentage of 100%, students strongly agree that they are able to view the status of books. This feature obtained a weighted mean of 4.00.
- (13) With a percentage of 100%, students strongly agree that they are able to view the Borrow Request page and accept or decline book requests. This feature obtained a weighted mean of 4.00.
- (14) With a percentage of 100%, students strongly agree that they are able to view the archive page and access the books moved there. This feature obtained a weighted mean of 4.00.





- (15) With a percentage of 100%, students strongly agree that they are able to delete or restore a book moved to the archive. This feature obtained a weighted mean of 4.00.
- (16) With a percentage of 100%, students strongly agree that they are able to log in and log out. This feature obtained a weighted mean of 4.00.

5. Are the following fa	ctors bas	ed on ISO	O 25010	successfu	ılly achie	ved by th	ne system	1?	
PROBLEMS	AG	NGLY REE 4)		REE 3)		GREE 2)		NGLY GREE 1)	WEIGH TED MEAN
	Numbe r	Percent	Numbe r	Percent	Numbe r	Percent	Numbe r	Percent	
	1	FUN	•	AL USAI			11		<u> </u>
Accuracy: Information retrieved through searches and citations should be precise and correct. Librarian: "I was able to view the students name and their transactions accurately"	4	100%	0	0	0	0	0	0	4
		PERFO)RMAN	CE EFFI	CIENC'	Y			
Resource utilization: Degree to which the amounts and types of resources used by a product or system, when performing its functions, meet requirements.	4	100%	0	0	0	0	0	0	4



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Librarian: "I was able to handle operations like book search, checkout, and return transactions for users, while ensuring fast response times and minimal resource wastage."									
			RELIA	ABILITY	7				
Maturity: The system must function consistently and dependably to guarantee constant resource access. Librarian: "I was able to check books in and out reliably, without downtime that could disrupt daily operations or prevent patrons from borrowing or returning books."	4	100%	0	0	0	0	0	0	4
			USAI	BILITY					
Operability: The system should support users in completing tasks efficiently, such as searching for documents, citing	4	100%	0	0	0	0	0	0	4







		_	_	_	_	_		_	
sources, and									
borrowing materials.									
Librarian: "I was									
able to easily find									
papers by title,									
author, subject, or									
keywords. Filters."									
			SEC	URITY					
	4	100%	0	0	0	0	0	0	4
Confidentiality:									
User data and									
borrowing records									
should be kept secure									
and accessible only to									
1									
authorized personnel.									
Librarian: "Borrow									
transactions and									
private documents									
are only accessible to									
me"									
			COMPA			<u> </u>			
			COMPA	TIBILIT	Y				
_	4	100%	0	0	0	0	0	0	4
Interoperability:									
The system should be									
compatible with the									
various web browsers									
and operating									
systems that teachers,									
staff, and students									
frequently use. To									
ensure access and									
usability across									
multiple platforms									





Librarian: "I was able to easily access the system on popular web browsers, such as Google Chrome, Mozilla Firefox, Safari, and Microsoft Edge."									
		M	[AINTA]	INABIL	ITY		l	<u> </u>	
Modifiability: The system architecture and codebase should be designed in a way that makes modifications and updates simple. In order to accommodate future changes and enhancements.	4	100%	0	0	0	0	0	0	4
Librarian: "I was able to use different modules such as upload, book status, borrow requests and the delete module."									
GENERAL WEIGHTED MEAN				4 = S	trongly A	Agree		l	

The data shows the result of Survey Questionnaire 5 for Librarian about the following factors based on ISO 25010 for the Development of a Web-Based Library System for Lawang Bato National High School. The General Weighted Mean is 4, which falls in the range of Strongly Agree on the Likert Scale.









FUNCTIONAL USABILITY

Accuracy. The system successfully ensures precise and correct information retrieval through searches and citations. According to the librarian's feedback, they were able to view the students' names and their transactions accurately. This achievement is supported by a rating of **4.00**, with **100% strongly agreeing**, demonstrating the system's effectiveness in maintaining accuracy.

PERFORMANCE EFFICIENCY

Resource Utilization. The system efficiently utilizes resources to meet functional requirements. The librarian noted that they were able to handle operations such as book searches, checkouts, and return transactions for users, ensuring fast response times and minimal resource wastage. This is validated by a rating of **4.00**, with **100% strongly agreeing**, showcasing the system's high performance efficiency.

RELIABILITY

Maturity. The system consistently functions dependably to guarantee constant access to resources. The librarian stated they were able to check books in and out reliably, with no downtime disrupting daily operations or patron transactions. This reliability is reflected in a rating of 4.00, with 100% strongly agreeing, highlighting the system's dependable maturity.

USABILITY

Operability. The system supports efficient task completion, including searching for documents, citing sources, and borrowing materials. The librarian confirmed that they could easily find books or research papers by title, author, subject, or keywords, using filters. This capability is affirmed by a rating of **4.00**, with **100% strongly agreeing**, emphasizing the system's usability.





SECURITY

Confidentiality. The system ensures that user data and borrowing records are kept secure and accessible only to authorized personnel. The librarian confirmed that borrow transactions and private documents were only accessible to them, reinforcing trust in the system's security. This achievement is supported by a rating of 4.00, with 100% strongly agreeing, underlining its effective confidentiality measures.

COMPATIBILITY

Interoperability. The system demonstrates compatibility with various web browsers and operating systems to ensure access and usability across multiple platforms. The librarian noted they could easily access the system on popular web browsers, such as Google Chrome, Mozilla Firefox, Safari, and Microsoft Edge. This is validated by a rating of **4.00**, with **100% strongly agreeing**, highlighting its seamless interoperability.

MAINTAINABILITY

Modifiability. The system architecture and codebase facilitate easy modifications and updates to accommodate future changes and enhancements. The librarian stated they were able to use different modules such as upload, book status, borrow requests, and the delete module efficiently. This adaptability is supported by a rating of **4.00**, with **100% strongly agreeing**, proving the system's maintainability.



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ADMINISTRATOR

6. Are the developers are successful in showing the following features in LBELIB: A Development of Digital Library System forLawang Bato National High School

FOR ADMINISTRATOR

STATEMENT	AG	ONGLY PREE (4)		REE 3)		GREE 2)	STRO DISAC (1	GREE	WEIGHTED MEAN
1. I am able to navigate through different pages.	4	100%	0	0	0	0	0	0	4
2. I am able to view the home page.	4	100%	0	0	0	0	0	0	4
3. I am able to view the upload page.	4	100%	0	0	0	0	0	0	4
4. I am able to type, select details about books, ebooks and research.	4	100%	0	0	0	0	0	0	4
5. I am able to upload books, ebooks & research.	4	100%	0	0	0	0	0	0	4
6. I am able to import csv and jpg files.	4	100%	0	0	0	0	0	0	4







7. I am able to view books pages.	4	100%	0	0	0	0	0	0	4
8. I am able to search inside the books page using various search features.	4	100%	0	0	0	0	0	0	4
9. I am able to tag book availability.	4	100%	0	0	0	0	0	0	4
10. I am able to move books to achieve.	4	100%	0	0	0	0	0	0	4
11. I am able to edit book details.	4	100%	0	0	0	0	0	0	4
12. I am able to view books' status.	4	100%	0	0	0	0	0	0	4
13. I am able to view the Borrow Request page and accept or decline a book's request.	4	100%	0	0	0	0	0	0	4
14. I am able to view the	4	100%	0	0	0	0	0	0	4





archive page and view the books moved there.						
GENERAL WEIGHTED MEAN		4 =	Strongly	Agree		

The data shows the result of Survey Questionnaire 6 represents the results of the Survey Questionnaire conducted for the Librarian in evaluating the features of LBELIB: A Development of Digital Library System for Lawang Bato National High School. The General Weighted Mean is 4, which falls in the range of Strongly Agree on the Likert Scale.

- (1) With a percentage of 100%, the Librarian strongly agrees that they can navigate through different pages. This feature obtained a weighted mean of 4.
- (2) Regarding viewing the home page, the Librarian strongly agrees with a percentage of 100% and a weighted mean of 4.
- (3) The Librarian strongly agrees they can view the upload page, achieving a percentage of 100% and a weighted mean of 4.
- (4) On the ability to type and select details about books, eBooks, and research, the Librarian strongly agrees, with a 100% agreement and a weighted mean of 4.
- (5) The Librarian strongly agrees that they can upload books, eBooks, and research, obtaining a percentage of 100% and a weighted mean of 4.
- (6) For importing CSV and JPG files, the Librarian strongly agrees with a 100% rating and a weighted mean of 4.





- (7) The Librarian strongly agrees they can view book pages, with a percentage of 100% and a weighted mean of 4.
- (8) In terms of searching within the books page using various search features, the Librarian strongly agrees, with a 100% agreement and a weighted mean of 4.
- (9) The Librarian strongly agrees they can tag book availability, achieving 100% agreement and a weighted mean of 4.
- (10) On the ability to move books to the archive, the Librarian strongly agrees, with a 100% rating and a weighted mean of 4.
- (11) The Librarian strongly agrees they can edit book details, obtaining a 100% agreement and a weighted mean of 4.
- (12) Regarding viewing the books' status, the Librarian strongly agrees, with a 100% rating and a weighted mean of 4.
- (13) The Librarian strongly agrees they can view the Borrow Request page and accept or decline a book's request, achieving 100% agreement and a weighted mean of 4.
- (14) Finally, the Librarian strongly agrees they can view the archive page and the books moved there, with a 100% agreement and a weighted mean of 4.

7. Are the following fa	ctors bas	ed on ISC	O 25010 s	successfu	ılly achie	ved by th	ne system	1?			
PROBLEMS		STRONGLY AGREE DISAGREE STRONGLY WEIGH TED DISAGREE MEAN									
	Numbe r	Percent	Numbe r	Percent	Numbe r	Percent	Numbe r	Percent			



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		FUN	CTIONA	AL USAF	BILITY				
Accuracy: Information retrieved through searches and citations should be precise and correct. Admin: "I was able to view reports, batch upload users and content smoothly"	4	100%	0	0	0	0	0	0	4
		PERFO	RMAN(CE EFFI	CIENC	Y			
Resource utilization: Degree to which the amounts and types of resources used by a product or system, when performing its functions, meet requirements. Librarian: "I was able to handle operations like book search, checkout, and return transactions for users, while ensuring fast response times and minimal resource wastage."	4	100%	0	0	0	0	0	0	4
			RELIA	ABILITY	7				
Maturity: The system must function	4	100%	0	0	0	0	0	0	4







consistently and dependably to guarantee constant resource access.									
Admin: "I was able consistently handle bulk imports/exports of data (e.g., uploading a large CSV of new books or users) without failure, ensuring data integrity and smooth execution."									
			USAI	BILITY					
Operability: The system should support users in completing tasks efficiently, such as searching for documents, citing sources, and borrowing materials. Admin: "The admin should be able to easily add, edit, or remove users, and assign roles (e.g., student, librarian)."	4	100%	0	0	0	0	0	0	4
			SEC	URITY					
Confidentiality: User data and borrowing records should be kept secure	4	100%	0	0	0	0	0	0	4



MEAN

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and accessible only to									
authorized personnel.									
_									
Admin: "Viewing									
reports, handling									
data, modifying									
account states and									
bulk uploads can only									
be done by me."									
	•		•	•	•				
		M	IAINTA	INABIL	ITY				
	4	100%	0	0	0	0	0	0	4
Modifiability: The									
system architecture									
and codebase should									
be designed in a way									
that makes									
modifications and									
updates simple. In									
order to									
accommodate future									
changes and									
enhancements.									
Admin: "I was able									
to use different									
modules such as									
overview, activity,									
account creation,									
bulk uploads module.									
GENERAL									
WEIGHTED				4 = S	trongly A	Agree			

The data shows the result of Survey Questionnaire 7 for Administrator about the following factors based on ISO 25010 for the Development of a Web-Based Library System for Lawang Bato National High School. The General Weighted Mean is 4, which falls in the range of Strongly Agree on the Likert Scale.





FUNCTIONAL USABILITY

Accuracy. The Admin's feedback indicates that the system's functionalities fully align with the user's objectives, particularly in the areas of report viewing, batch uploading users and content. The Admin was able to view reports and perform bulk uploads smoothly. With a rating of **4.00** and a percentage of **100%**, the system effectively supports accurate and reliable information retrieval.

PERFORMANCE EFFICIENCY

Resource Utilization. The system's resource utilization was highlighted by the Admin's ability to manage operations such as book search, checkout, and return transactions for users, while ensuring fast response times and minimal resource wastage. This efficiency, supported by a **4.00** rating and a **100%** agreement, reflects the system's performance in meeting the required resource management goals.

RELIABILITY

Maturity. The Admin confirmed that the system functioned consistently and dependably, particularly when handling bulk imports and exports of data, such as uploading large CSV files of new books or users. This reliability is critical to maintaining data integrity and smooth operations, as evidenced by a **4.00** rating and **100%** agreement.

USABILITY

Operability. The Admin emphasized that the system supports efficient task completion, including adding, editing, or removing users and assigning roles (e.g., student, librarian). The Admin's ability to manage users seamlessly aligns with the system's operability goals, earning a **4.00** rating and **100%** agreement.





SECURITY

Confidentiality. The system ensures that sensitive data and reports are kept secure and accessible only to authorized personnel. The Admin confirmed that actions such as viewing reports, modifying account states, and performing bulk uploads are restricted to authorized users only. This strong security feature achieved a **4.00** rating with **100%** agreement.

IT EXPERTS

PROBLEMS	STRONGLY AGREE (4)		AGREE (3)		DISAGREE (2)		STRONGLY DISAGREE (1)		WEIGH TED MEAN
	Numbe r	Percent	Numbe r	Percent	Numbe r	Percent	Numbe	Percent	_
		FUN	CTIONA	AL USAI	BILITY				
Accuracy: Information retrieved through searches and citations should be precise and correct.	4	100%	0	0	0	0	0	0	4
		PERFC)RMAN	CE EFFI	CIENC	Y			
Resource utilization: Degree to which the amounts and types of resources used by a product or system, when performing its functions, meet requirements.	4	100%	0	0	0	0	0	0	4



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			RELIA	BILITY	7				
Maturity: The system must function consistently and dependably to guarantee constant resource access.	4	100%	0	0	0	0	0	0	4
			USAI	BILITY					
Operability: The system should support users in completing tasks efficiently, such as searching for documents, citing sources, and borrowing materials.	4	100%	0	0	0	0	0	0	4
			SEC	URITY					
Confidentiality: User data and borrowing records should be kept secure and accessible only to authorized personnel.	4	100%	0	0	0	0	0	0	4
		M	[AINTA]	INABIL	TY				





	4	100%	0	0	0	0	0	0	4
Modifiability: The									
system architecture									
and codebase should									
be designed in a way									
that makes									
modifications and									
updates simple. In									
order to									
accommodate future									
changes and									
enhancements.									
GENERAL									
WEIGHTED	4 = Strongly Agree								
MEAN									

The data shows the result of Survey Questionnaire 8 for IT Experts about the following factors based on ISO 25010 for the Development of a Web-Based Library System for Lawang Bato National High School. The General Weighted Mean is 4, which falls in the range of Strongly Agree on the Likert Scale.

FUNCTIONAL USABILITY

Accuracy. The IT experts confirm that the system ensures precise and correct information retrieval. With 100% agreement and a **4.00** rating, the system meets the required standards for accuracy in searches and citations.

PERFORMANCE EFFICIENCY

Resource Utilization. The IT experts agree that the system effectively utilizes resources to meet its functional requirements. This was confirmed by the **4.00** rating and **100%** agreement, demonstrating the system's efficiency in managing resource consumption during operations.

RELIABILITY





Maturity. The system consistently functions and guarantees continuous resource access, as confirmed by the IT experts. This high level of reliability is crucial for maintaining system performance under various conditions. The **4.00** rating, with **100%** agreement, indicates that the system performs dependably.

USABILITY

Operability. The IT experts report that the system supports users in efficiently completing tasks such as searching for documents, citing sources, and borrowing materials. With a **4.00** rating and **100%** agreement, the system successfully meets usability standards, ensuring ease of use for all users.

SECURITY

Confidentiality. The IT experts confirmed that the system keeps user data and borrowing records secure and only accessible to authorized personnel. With a 4.00 rating and 100% agreement, the system meets confidentiality requirements to protect sensitive user information.

MAINTAINABILITY

Modifiability. The IT experts highlight that the system's architecture and codebase are designed to accommodate future changes and updates. The ability to easily modify and enhance the system aligns with maintainability standards. This was supported by a **4.00** rating and **100%** agreement.

These results demonstrate that the system has successfully achieved the factors based on the **ISO 25010** standards, with a **General Weighted Mean of 4**, reflecting full satisfaction from the IT experts in all key areas.



