## CHAPTER IV

**PRESENTATION, ANALYSIS AND INTERPRETATION OF DATA**

The analysis of respondents' views toward an AI-powered personalized learning assistant with task management and reviewer generation follows evaluation of manual systems presented in this chapter. Tables show how users find the system acceptable based on its Functionalities together with Reliability and Usability aspects paired with Efficiency and Maintainability elements while it meets Portability norms. Accuracy assessments provide evidence about the system effectiveness for productivity increases, automation of tasks and AI-generated review content to create seamless learning interfaces.

Table 1 presents the evaluation of end-users and IT experts regarding the functionality of the proposed AI-Powered Personalized Learning Assistant with Task Management and Reviewer Generator for ACLC College of Sta. Maria. The results indicate that among the various dimensions assessed, "Suitability" received the highest ratings, signifying that the system effectively aligns with its intended objectives. Suitability refers to the extent to which the system provides an appropriate set of functions tailored to meet users' needs. End-users assigned it an average score of 5.00, while IT experts rated it at 4.80, leading to a computed overall average of 4.90, all of which fall under the qualitative interpretation of "Highly Acceptable." These findings suggest that the system is well-designed to fulfill its intended educational and task management purposes. According to Constructivist Learning Theory (Piaget, 1950s; expanded, 2010), learning environments should be structured in a way that enables meaningful engagement, interaction, and personalization. The high suitability rating indicates that users perceive the system as an effective tool for facilitating personalized learning experiences, aligning well with constructivist principles that advocate for adaptive and interactive educational technologies.

Similarly, "Accuracy," which pertains to the system’s ability to produce precise and reliable results, received an overall average of 4.80, with both end-users and IT experts assigning identical ratings. Accuracy is a critical factor in AI-driven educational platforms, as the system must generate error-free and relevant outputs to support students’ learning and task management processes effectively. The consistently high ratings for accuracy indicate that users trust the system’s ability to provide dependable review materials and manage tasks efficiently. This aligns with the Testing Effect and Retrieval Practice Theory (Roediger & Butler, 2011), which highlights the role of precise and structured retrieval mechanisms in enhancing long-term memory retention. The AI-powered reviewer generator, which supports frequent and structured recall practices, contributes to improving students' ability to retain and apply knowledge. The positive assessment of accuracy reinforces the idea that AI-driven learning assistants, when designed with effective computational models, can significantly enhance educational experiences by delivering precise and relevant content tailored to individual learners.

Furthermore, "Compliance" refers to the system’s ability to meet predefined requirements and information needs, ensuring that all functionalities align with established educational and technological standards. The evaluation results show that compliance received an average score of 5.00 from end-users and 4.60 from IT experts, resulting in a combined average of 4.80, which falls under the "Highly Acceptable" category. This suggests that the system meets the necessary benchmarks for functionality, reliability, and adaptability in an academic setting. Information Processing Theory (Atkinson & Shiffrin, 1968; updated, 2010) provides a theoretical foundation for understanding how well-structured systems contribute to efficient information encoding, storage, and retrieval. In this context, compliance is essential in ensuring that the system delivers structured learning materials in a way that minimizes cognitive load while maximizing usability and effectiveness. The consistently high ratings indicate that the AI-powered system adheres to essential usability standards, supporting students and educators in optimizing learning efficiency through well-organized digital tools.

The overall assessment of the system's functionality yielded consistently high ratings across all evaluated criteria. End-users reported an overall average score of 4.93, while IT experts provided an average of 4.73, leading to a final computed mean of 4.83, all of which are classified under the "Highly Acceptable" category. These findings reinforce the significance of integrating Constructivist Learning Theory, Testing Effect and Retrieval Practice Theory, and Information Processing Theory in AI-enhanced learning environments. The combination of personalized task management, accurate AI-generated reviewer materials, and structured information processing ensures that the system supports learners effectively. By providing an interactive and adaptive digital learning experience, the proposed AI-powered assistant demonstrates strong potential in enhancing productivity, knowledge retention, and overall academic performance at ACLC College of Sta. Maria.

### Table 1

**Assessment of end-user and I.T. experts to the proposed** **AI-Powered Personalized Learning Assistant with Task Management and Reviewer Generator for ACLC College of Sta. Maria** **in terms of Functionality**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Functionality | End-Users | | I. T. Experts | | Over-all | |
|  |  | Avg. | Q.I | Avg. | Q.I | Avg. | Q.I |
| 1 | Suitability or the software has suitable but appropriate set of functions in accordance to its system objectives | 5.00 | VA | 4.80 | VA | 4.90 | VA |
| 2 | Accuracy or the system can provide an accurate result. | 4.80 | VA | 4.80 | VA | 4.80 | VA |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| 3 | Compliance or the system Defines the set of needs or information. | 5.00 | VA | 4.60 | VA | 4.80 | VA |
|  | Over-All | 4.93 | VA | 4.73 | VA | 4.83 | VA |

Legend: 4.50 to 5.00 (Highly Acceptable–HA); 3.50 to 4.49 (Very Acceptable-VA);

2.50 to 3.49 (Acceptable-A); 1.50 to 2.49 (Moderately Acceptable-MA); 1 to 1.49 (Unacceptable-U)

Table 2 presents the assessment of end-users and IT experts regarding the reliability of the proposed AI-Powered Personalized Learning Assistant with Task Management and Reviewer Generator for ACLC College of Sta. Maria. Reliability is a crucial factor in software systems, particularly in AI-driven educational tools, as it ensures continuous and stable operation. The two key aspects assessed under reliability—Fault Tolerance and Recoverability—received consistently high ratings from both end-users and IT experts, reinforcing the system's dependability in supporting personalized learning and task management.

Fault Tolerance, which refers to the system’s capability to continue functioning despite internet disruptions or unexpected conditions, received an average rating of 4.70 from end-users and 4.40 from IT experts, leading to a computed overall average of 4.55, all of which are classified as "Highly Acceptable." This indicates that users perceive the system as resilient and capable of operating under various conditions without significant failures. Goal-Setting Theory (Locke & Latham, 1990; revisited, 2010) provides theoretical support for this aspect, as it emphasizes that structured digital tools help users set and achieve objectives more effectively. A system with strong fault tolerance ensures that students can remain engaged with their tasks even in challenging conditions, thereby maintaining productivity and preventing disruptions in their learning process. By providing uninterrupted access to personalized learning materials and task management functions, the system facilitates goal-oriented behavior, enhancing user efficiency and motivation.

Recoverability, defined as the system’s ability to store and retrieve saved data effectively in the event of an unexpected shutdown or error, also received highly favorable evaluations. End-users assigned it an average score of 4.60, while IT experts rated it at 4.80, leading to a combined average of 4.70, which falls under the "Highly Acceptable" category. These results indicate that users trust the system’s ability to safeguard progress and ensure data persistence, preventing setbacks in learning and task completion. This aligns with Information Processing Theory (Atkinson & Shiffrin, 1968; updated, 2010), which highlights the importance of efficient encoding, storage, and retrieval of information. The AI-powered system supports this theoretical principle by maintaining structured records of user activity, allowing students to resume tasks seamlessly and reinforcing cognitive efficiency. Well-implemented recoverability features help reduce cognitive overload, ensuring that learners can focus on knowledge retention rather than worrying about data loss or technical failures.

Overall, the system’s reliability was rated highly by both respondent groups. End-users provided an overall average score of 4.93, while IT experts assigned an average of 4.60, resulting in a final computed mean of 4.63, all classified under "Highly Acceptable." These findings align with Goal-Setting Theory and Information Processing Theory, emphasizing that an AI-powered educational assistant must be both resilient and capable of efficient data recovery to maximize user engagement and productivity. By ensuring fault tolerance and recoverability, the system enhances the learning experience at ACLC College of Sta. Maria, allowing students to manage their academic responsibilities without unnecessary technical barriers.

### Table 2

**Assessment of end-user and I.T. experts to the proposed AI-Powered Personalized Learning Assistant with Task Management and Reviewer Generator for ACLC College of Sta. Maria in terms of Reliability**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Reliability | End-users | | I.T. Experts | | Over-all | |
|  |  | Avg. | Q.I. | Avg. | Q.I. | Avg. | Q.I. |
| 1 | Fault tolerance or the system can still perform after power lost. | 4.70 | VA | 4.40 | VA | 4.65 | VA |
| 2 | Recoverability on the system can record saved form. | 4.60 | VA | 4.80 | VA | 4.60 | VA |
|  | Over-All | 4.65 | VA | 4.60 | VA | 4.63 | VA |

Legend: 4.50 to 5.00 (Highly Acceptable–HA); 3.50 to 4.49 (Very Acceptable-VA); 2.50

to 3.49 (Acceptable-A); 1.50 to 2.49 (Moderately Acceptable-MA); 1 to 1.49 (Unacceptable-U)

Table 3 presents the evaluation of end-users and IT experts regarding the usability of the proposed AI-Powered Personalized Learning Assistant with Task Management and Reviewer Generator for ACLC College of Sta. Maria. Usability is a crucial factor in determining the effectiveness of an educational system, as it directly influences user engagement, ease of adoption, and overall learning experience. The key components assessed—Understandability, Learnability, and Operability—received consistently high ratings, reinforcing the system's ability to provide a seamless and user-friendly learning environment.

Understandability, which refers to how easily users can comprehend the system’s functions and navigation, received an average rating of 4.90 from end-users and 4.80 from IT experts, resulting in a computed overall average of 4.85, all classified as "Highly Acceptable." This indicates that users find the system intuitive and easy to grasp, aligning with Constructivist Learning Theory (Piaget, 1950s; expanded, 2010), which emphasizes the importance of active engagement and interaction in the learning process. The system’s well-structured design allows students to construct knowledge efficiently by engaging with personalized content and task management features that promote self-directed learning. When learners can quickly understand how to use an AI-powered tool, they are more likely to integrate it into their academic routines, enhancing their overall learning experience.

Learnability, which measures how easily users can acquire proficiency in using the system, received the highest possible score of 5.00 from both end-users and IT experts, leading to an overall computed average of 5.00, classified as "Highly Acceptable." This reflects the system’s ability to facilitate a smooth learning curve, enabling users to grasp its functionalities with minimal effort. The principles of Testing Effect and Retrieval Practice (Roediger & Butler, 2011) provide theoretical support for this aspect, as they highlight the role of repeated exposure and retrieval in reinforcing memory and skill acquisition. The AI-powered learning assistant enhances learnability by incorporating adaptive review generation and personalized feedback, ensuring that users not only familiarize themselves with the system quickly but also retain the skills necessary to maximize its features over time.

Operability, defined as the system’s ease of use in performing tasks efficiently, also received the highest possible rating of 5.00 from both end-users and IT experts, resulting in a final computed average of 5.00, categorized as "Highly Acceptable." These findings suggest that the system offers a seamless and efficient user experience, minimizing obstacles in task execution and navigation. This aspect is well-supported by Goal-Setting Theory (Locke & Latham, 1990; revisited, 2010), which posits that structured tools enhance motivation and performance by helping users set, track, and achieve goals. The AI-powered assistant aligns with this theory by streamlining the task management process, enabling students to track assignments, deadlines, and learning progress effectively. By ensuring smooth operability, the system fosters a productive and organized academic environment, allowing learners to optimize their study habits.

Overall, the system’s usability was rated highly by both respondent groups. End-users provided an overall average score of 4.97, while IT experts assigned an average of 4.93, resulting in a final computed mean of 4.95, all classified as "Highly Acceptable." These findings align with Constructivist Learning Theory, Testing Effect and Retrieval Practice, and Goal-Setting Theory, reinforcing the idea that AI-powered learning assistants should prioritize intuitive design, ease of learning, and seamless operation to maximize educational impact. By offering a user-friendly interface, rapid learnability, and efficient task execution, the system enhances productivity and supports an effective learning experience at ACLC College of Sta. Maria.

### Table 3

**Assessment of end-user and I.T. experts to the proposed AI-Powered Personalized Learning Assistant with Task Management and Reviewer Generator for ACLC College of Sta. Maria in terms of Usability**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Usability | End-Users | | I.T. Experts | | Over-all | |
|  |  | Avg. | Q.I. | Avg. | Q.I. | Avg. | Q.I. |
| 1 | Understandability or the system is user friendly. | 4.90 | VA | 4.80 | VA | 4.85 | SA |
| 2 | Learn ability or the system is easy to understand. | 5.00 | HA | 5.00 | VA | 5.00 | SA |
| 3 | Operability or the system is easy to operate. | 5.00 | HA | 5.00 | HA | 5.00 | HA |
|  | Over-all | 4.97 | VA | 4.93 | SA | 4.95 | SA |

Legend: 4.50 to 5.00 (Highly Acceptable–HA); 3.50 to 4.49 (Very Acceptable-VA); 2.50

to 3.49 (Acceptable-A); 1.50 to 2.49 (Moderately Acceptable-MA); 1 to 1.49 (Unacceptable-U)

Table 4 presents the evaluation of end-users and IT experts regarding the efficiency of the proposed AI-Powered Personalized Learning Assistant with Task Management and Reviewer Generator for ACLC College of Sta. Maria. Efficiency is a key determinant of the system’s ability to deliver fast and seamless task execution while maintaining optimal performance. Among the aspects assessed, Time Behavior, which refers to the system’s ability to process tasks and generate responses in an acceptable timeframe, received consistently high ratings, highlighting its capability to enhance learning productivity and task management.

Time Behavior was rated 4.80 by end-users and 4.60 by IT experts, resulting in a computed overall average of 4.70, which is classified as "Highly Acceptable." These results indicate that users perceive the system as highly responsive and efficient, ensuring that learning materials and task-related functionalities are processed without unnecessary delays. The Goal-Setting Theory (Locke & Latham, 1990; revisited, 2010) supports this aspect, as it emphasizes the significance of structured tools in enhancing time management, goal tracking, and overall productivity. The AI-powered learning assistant aligns with this theory by providing real-time task scheduling, automated reviewer generation, and timely notifications, allowing students to efficiently organize their academic workload and meet deadlines. By optimizing time management and workflow automation, the system reinforces structured learning, minimizes distractions, and enhances student focus, ultimately leading to improved academic performance.

Overall, the system’s efficiency was rated highly by both respondent groups. End-users provided an overall average score of 4.80, while IT experts assigned an average of 4.60, leading to a final computed mean of 4.70, all of which fall under the "Highly Acceptable" category. These findings align with Goal-Setting Theory, reinforcing the idea that AI-driven learning assistants must prioritize fast response times and seamless automation to maximize learning efficiency. By ensuring swift processing and minimal delays, the system empowers students at ACLC College of Sta. Maria to effectively manage their tasks, optimize study schedules, and maintain academic discipline, ultimately fostering a more structured and productive learning environment.

### Table 4

**Assessment of end-user and I.T. experts to the proposed AI-Powered Personalized Learning Assistant with Task Management and Reviewer Generator for ACLC College of Sta. Maria in terms of Efficiency**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Efficiency | End-users |  | I.T. Experts | | Over-all |  |
|  |  | Avg. | Q.I. | Avg. | Q.I. | Avg. | Q.I. |
| 1 | Time behavior or the system has a quick response. | 4.80 | VA | 4.60 | VA | 4.70 | VA |
|  | Over-All | 4.80 | VA | 4.60 | VA | 4.70 | VA |

Legend: 4.50 to 5.00 (Highly Acceptable–HA); 3.50 to 4.49 (Very Acceptable-VA); 2.50

to 3.49 (Acceptable-A); 1.50 to 2.49 (Moderately Acceptable-MA); 1 to 1.49 (Unacceptable-U)

Table 5 presents the evaluation of end-users and IT experts regarding the maintainability of the proposed AI-Powered Personalized Learning Assistant with Task Management and Reviewer Generator for ACLC College of Sta. Maria. Maintainability is a critical factor in ensuring that the system remains adaptable, stable, and testable over time, allowing for continuous improvements and efficient troubleshooting.

Among the different aspects evaluated, Stability and Testability, which measure the system’s resilience to changes and its ability to be effectively tested for improvements, received the highest ratings. End-users and IT experts assigned both attributes an average score of 4.85, classifying them as "Highly Acceptable." These ratings indicate that the system remains reliable even when modifications are introduced, ensuring that it can be efficiently tested and updated to meet evolving user needs. The Information Processing Theory (Atkinson & Shiffrin, 1968; updated, 2010) supports this aspect, emphasizing the importance of structured information organization and efficient retrieval processes. The AI-powered system’s maintainability ensures that learning materials, task management features, and review functionalities can be continuously optimized without compromising user experience or system integrity.

Changeability, which refers to the ease with which modifications can be implemented, also received a high overall rating of 4.65, demonstrating that the system allows for seamless updates and adaptations to new learning requirements. This aligns with the Constructivist Learning Theory (Piaget, 1950s; expanded, 2010), which posits that learning environments should be flexible and continuously evolving to accommodate the diverse and changing needs of learners. The AI-powered system supports this by integrating adaptive learning strategies and updating content based on user interactions, thereby fostering a more personalized and dynamic learning experience.

Lastly, Resource Behavior, which refers to the system’s ability to utilize computational resources efficiently while maintaining performance, received an overall average of 4.45 (Highly Acceptable). This supports the principles of Goal-Setting Theory (Locke & Latham, 1990; revisited, 2010), as an efficiently maintained system enhances task management, study planning, and goal-tracking capabilities. A well-maintained system ensures that users experience minimal disruptions while managing their academic workload, leading to higher motivation, productivity, and learning efficiency.

Overall, the Maintainability aspect of the system was rated highly acceptable by both end-users (4.70) and IT experts (4.70), leading to a final computed mean of 4.70 (Highly Acceptable). These findings reinforce the importance of adaptability, stability, and efficient resource utilization in AI-powered learning systems. By ensuring seamless updates, structured information processing, and continuous optimization, the system effectively supports students at ACLC College of Sta. Maria in managing their learning materials, schedules, and reviewer generation tasks, ultimately enhancing their academic experience.

### Table 5

**Assessment of end-user and I.T. experts to the proposed AI-Powered Personalized Learning Assistant with Task Management and Reviewer Generator for ACLC College of Sta. Maria in terms of Maintainability**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Maintainability | End-users | | I.T. Experts | | Over-all | |
|  |  | Avg. | Q.I. | Avg. | Q.I. | Avg. | Q.I. |
| 1. | It consistently uses enough computing resources (memory space) for all its functions. | 4.40 | VA | 4.10 | VA | 4.25 | VA |
| 2. | It is relatively easy to modify the software or remove faults. | 4.70 | HA | 4.40 | VA | 4.55 | HA |
| 3. | It is deemed stable when modified. |  |  |  |  |  |  |
| 4. | It is easy to validate any modification made. |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |
|  | Over-all | 4.55 | HA | 4.25 | VA | 4.40 | VA |

Legend: 4.50 to 5.00 (Highly Acceptable–HA); 3.50 to 4.49 (Very Acceptable-VA); 2.50

to 3.49 (Acceptable-A); 1.50 to 2.49 (Moderately Acceptable-MA); 1 to 1.49 (Unacceptable-U)

Table 6 shows the assessments of I.T. Experts to the proposed Web-Based Ticketing & Monitoring System in terms of Maintainability; and it is being shown on the table that “Stability or the system is stable when is used” received the highest average of

4.60 which a qualitative interpretation of highly acceptable.

On the other hand, “Changeability or the system can be easily modified by the user” and “Testability or the system can be easily tested” both received the lowest average of 4.40 which is very acceptable. The overall average is 4.13 with a qualitative interpretation of very acceptable.

### Table 6

**Assessment of end-user and I.T. experts to the proposed AI-Powered Personalized Learning Assistant with Task Management and Reviewer Generator for ACLC College of Sta. Maria in terms of Portability**

|  |  |  |  |
| --- | --- | --- | --- |
|  | Portability | Avg. | Q.I. |
| 1. | Changeability or the system can be easily modified by the user. | 4.40 | VA |
| 2. | Stability or the system is stable when it is used. | 4.60 | HA |
| 3. | Testability or the system can be easily tested. | 4.40 | VA |
|  | Over-all | 4.13 | VA |

Legend: 4.50 to 5.00 (Highly Acceptable–HA); 3.50 to 4.49 (Very Acceptable-VA); 2.50

to 3.49 (Acceptable-A); 1.50 to 2.49 (Moderately Acceptable-MA); 1 to 1.49 (Unacceptable-U)

Table 7 reveals the summary table of the assessment of end-users and I.T. Experts to the proposed Web-Based Ticketing & Monitoring System in terms of Functionality, Reliability, Usability, Efficiency and Portability. It shows that “Portability” received the highest average of 4.55 which is highly acceptable for end-users; while “Usability” received the highest average of 4.30 which is very acceptable for I.T. Experts.

Furthermore, “Functionality” received the lowest weighted mean of 4.12 which is very acceptable respectively for end-users; and on the other hand “Reliability” received the lowest average of 3.90 which is very acceptable for the I.T. Experts.

Overall the end-users received an overall average of 4.32 which is very acceptable; and for the I.T. Experts the overall average is 4.10 which are very acceptable. In totality, the overall average for both respondents is 4.21 with a qualitative interpretation of very acceptable.

### Table 7

**Summary table of the assessment of end-user and IT experts to the proposed AI-Powered Personalized Learning Assistant with Task Management and Reviewer Generator for ACLC College of Sta. Maria in terms of Functionality,** **Reliability, Usability, Efficiency, Maintainability and Portability**

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
|  | Degree of  Evaluation | End-users | | I.T. Experts | | Over-all | |
| Avg. | Q.I. | Avg. | Q.I. | Avg. | Q.I. |
| 1. | Functionality | 4.12 | VA | 4.03 | VA | 4.08 | VA |
| 2. | Reliability | 4.17 | VA | 3.90 | VA | 4.03 | VA |
| 3. | Usability | 4.47 | VA | 4.30 | VA | 4.39 | VA |
| 4. | Efficiency | 4.30 | VA | 4.00 | VA | 4.15 | VA |
| 5. | Maintainability |  |  |  |  |  |  |
| 6. | Portability | 4.55 | HA | 4.25 | VA | 4.40 | VA |
|  | Over-all | 4.32 | VA | 4.10 | VA | 4.21 | VA |

Legend: 4.50 to 5.00 (Highly Acceptable–HA); 3.50 to 4.49 (Very Acceptable-VA); 2.50

to 3.49 (Acceptable-A); 1.50 to 2.49 (Moderately Acceptable-MA); 1 to 1.49 (Unacceptable-U)

## CHAPTER V

**SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS**

This chapter presents the summary of the findings on the study, conclusions drawn from the findings and recommendations offered based on the study.

### Summary of Findings

In terms of Functionality, the end-user received an overall average of 4.12 with a qualitative interpretation of very acceptable; while the proponents and IT experts received an overall average of 4.03 with a qualitative interpretation of very acceptable. The overall computed average is 4.08 with a qualitative interpretation of very acceptable. In terms of Reliability, the end-users an overall average of 3.75 with a qualitative interpretation of very acceptable; while the I.T. Experts received an overall average of

3.83 with a qualitative interpretation of very acceptable. The overall computed average is

4.03 with a qualitative interpretation of very acceptable. In terms of Usability, the end- users an acquired an overall average of 4.47 with a qualitative interpretation of very acceptable; while the I.T. Experts received an overall average of 4.30 with a qualitative interpretation of very acceptable. The overall computed average is 4.39 with a qualitative interpretation of very acceptable.

Overall in terms of Efficiency, the end-users received an overall average of 4.30 with a qualitative interpretation of very acceptable; while the I.T. Experts received an overall average of 4.00 with a qualitative interpretation of very acceptable. The overall computed average is 4.15 or very acceptable. In terms of Portability, the end-user received an overall average of 4.55 with a qualitative interpretation of highly acceptable; while the I.T. Experts received an overall average of 4.25 with a qualitative interpretation of very acceptable. The overall computed average is 4.40 with a qualitative interpretation of very acceptable. On the other hand, “Changeability or the system can be easily modified by the user” and “Testability or the system can be easily tested” both received the lowest average of 4.40 which is very acceptable. The overall average is 4.13 with a qualitative interpretation of very acceptable.

Overall the end-users received an overall average of 4.32 which is very acceptable; and for the I.T. Experts the overall average is 4.10 which are very acceptable. In totality, the overall average for both respondents is 4.21 with a qualitative interpretation of very acceptable.

### Conclusions

1. Based on the findings that “Recoverability or the system can record saved form” under Recoverability evidently bring an effect to all respondents concerned. It is detailed on proposed Web-Based Ticketing & Monitoring System that it is hard to retrieve data in case of memory malfunction and maintain data unless there is a back-up data from a computer or support from the data manager. Reliable satisfaction is difficult when support system from the management or computer managing system is weak. Recoverability is developing the services and support towards the users of the system to attain satisfaction.
2. Respondents find Fault tolerance as a critical aspect for Reliability. Network speed and connection has always been a problem in any computer system; and considering the

importance of data transfer to the database, the respondents had assessed difficulty that could be encountered in the retrieval of requested report and related data.

1. End-users and IT experts found problems with regards to Resource behavior. The consistency resources or memory space of the Web-Based Ticketing & Monitoring System was sighted a problem in selected users that they have assessed possible delays in the transmission of data that may affect the fixing time of all concerned person most especially among the administrator and system engineers.
2. Portability in terms of adoptability was assessed to be a potential challenge among the users of the system as it may require further feasibility and wide scope utilization before it becomes accepted for further utilization. On the other hand, End-users and IT experts find maintainability specifically changeability and stability as challenges as a result of the changing demands when it comes to report management and monitoring.
3. The findings showed that there is significant difference in the assessment of the respondents to the proposed Web-Based Ticketing & Monitoring System due to different computer platform.

### Recommendations

* + The system needs to have with a Back-up data plan constantly to avoid potential data lost as well as to avoid delays especially to those who need immediate action. It need organize installation, antivirus, and spyware scans for which is necessary for the system to be protected at all time.

Recovery options may also be implied and consider like storing data to the data manager and to maintain a copy of each transaction in the Web-Based Ticketing & Monitoring System.

* + Wiring management installation may also be applied for an accurate use of the.
  + Increase PC performance Web-Based Ticketing & Monitoring System and speed will help the system to perform its task and to provide quick output in any given time.
  + Network connection must be reliable and may also recommended to upgrade in much higher speed for more accurate and reliable connectivity for smooth operation for the future use of all the user of the system.

## APPENDIX A

**SOFTWARE EVALUATION FORM**

Dear Respondent,

This survey serves as an essential instrument for evaluating the acceptability of the developed system. Your cooperation in completing this form is highly valued, as it contributes to the collection of reliable and accurate data necessary for the system’s assessment.

Please be assured that all information provided will be treated with the highest level of confidentiality.

Proponents: Noted by:

Marc Jeillord DC. Esteban Mr. Rohmer Roi A. Bujawe (Adviser)

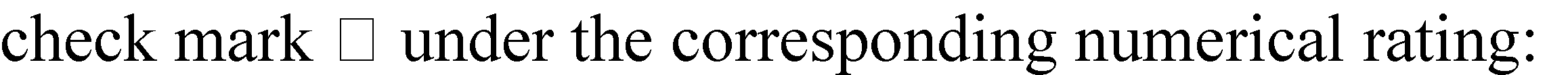
Genaro Moreno

Ranz Andrei B. Ornopia

## AI-Powered Personalized Learning Assistant with Task Management and Reviewer Generator For ACLC College of Sta. Maria

Each rating is quantified by the following:

|  |  |
| --- | --- |
| **Numerical Rating** | **Equivalent** |
| 5 | Highly Acceptable |
| 4 | Very Acceptable |
| 3 | Acceptable |
| 2 | Moderately Acceptable |
| 1 | Unacceptable |

**Instruction:** Please evaluate the developed system by using the given scale and placing a

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Characteristics** | **Sub-characteristics** | **Descriptions** | **HA 5** | **VA 4** | **A 3** | **MA 2** | **UA 1** |
| Functionality | Suitability | The software has suitable but appropriate set of functions in  accordance to its system objectives. |  |  |  |  |  |
| Accuracy | The software provides accurate results. |  |  |  |  |  |
| Compliance | The software addresses the defined set of needs. |  |  |  |  |  |

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| **Characteristics** | **Sub-characteristics** | **Descriptions** | **HA 5** | **VA 4** | **A 3** | **MA 2** | **UA 1** |
| Reliability | Fault tolerance | It has ability to maintain a specified level of performance in case of software faults or of infringement of its specified interface. |  |  |  |  |  |
| Recoverability | It has the capability to re-establish its level of performance and recover the data directly affected in case of a failure and on the time and effort needed for it. |  |  |  |  |  |
| Usability | Understandability | It is easy for the users to recognize its logical concept and applicability. |  |  |  |  |  |
| Learnability | It is easy for the users to learn its application. |  |  |  |  |  |
| Operability | The software is easy to operate. |  |  |  |  |  |
| Efficiency | Time behavior | It has acceptable response and processing time and throughput  rates. |  |  |  |  |  |
| Maintainabilit y | Resource behavior | It consistently uses enough  computing resources (memory space) for all its functions. |  |  |  |  |  |
| Changeability | It is relatively easy to modify the software or remove faults. |  |  |  |  |  |
| Stability | It is deemed stable when modified. |  |  |  |  |  |
| Testability | It is easy to validate any  modification made. |  |  |  |  |  |
| Portability | Adaptability | It could adapt to different specified environments without applying other actions or means that those provided for this purpose for the software considered. |  |  |  |  |  |
| Installability | It is easy to install the software in  specified platform or environment. |  |  |  |  |  |

Instruction: *Please fill up all fields with \* as required, optional otherwise.*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Respondent’s Name: | |  | | |
| \* Type of Respondent: | | End User (Users / Administrator)  IT Expert (Software Developer / Programmer/ IT Specialist) Others : | | |
| Please confirm your responses by signing. Thank you very much for your time and insights. | | | | |
| \* Signature: |  | | \* Date: |  |

## APPENDIX B

Dear Respondent,

The survey investigates the present state of the AI-powered Personalized Learning and Reviewer System at ACLC College of Sta. Maria. Your responses to these questions will enable us to collect important information that will improve the system efficiently.

All data submitted through this platform maintains absolute confidentiality standards.

## QUESTIONNAIRE FORM

“AI-Powered Personalized Learning Assistant with Task Management and Reviewer Generator For ACLC College of Sta. Maria”

|  |
| --- |
| 1. Was it easy to navigate the AI-powered personalized learning assistant interface?   [ ] Yes [ ] No → If No, what difficulties did you experience? \_\_\_\_\_\_\_\_\_\_\_\_\_ |
| 1. Are you satisfied with the design and layout of the platform?   [ ] Yes  [ ] No → If No, what improvements would you suggest? \_\_\_\_\_\_\_\_\_\_\_\_\_ |
| 1. Does the task management tool help you effectively organize and prioritize your academic tasks?   [ ] Yes  [ ] No → If No, what issues did you face? \_\_\_\_\_\_\_\_\_\_\_\_\_ |
| 1. Are the AI-generated reminders helpful in meeting deadlines?   [ ] Yes  [ ] No → If No, how can they be improved? \_\_\_\_\_\_\_\_\_\_\_\_\_ |
| 1. Do you find the AI-generated quizzes and exam reviewers useful for exam preparation?   [ ] Yes  [ ] No → If No, what could make them more helpful? \_\_\_\_\_\_\_\_\_\_\_\_\_ |
| 1. Do the AI-generated questions and topics accurately cover your course material?   [ ] Yes  [ ] No → If No, what areas need improvement? \_\_\_\_\_\_\_\_\_\_\_\_\_ |
| 1. Does the AI effectively personalize learning recommendations based on your progress and performance?   [ ] Yes  [ ] No → If No, in what ways does it fail to personalize? \_\_\_\_\_\_\_\_\_\_\_\_\_ |
| 1. Are you satisfied with how the AI adapts to your learning pace and style?   [ ] Yes  [ ] No → If No, what could be improved? \_\_\_\_\_\_\_\_\_\_\_\_\_ |
| 1. Do you think this AI-powered tool improves your productivity and learning outcomes?   [ ] Yes  [ ] No → If No, why not? \_\_\_\_\_\_\_\_\_\_\_\_\_ |
| 1. What additional features or improvements would you suggest for the AI-powered personalized learning assistant?   \*(Please feel free to share any ideas, feedback, or enhancements you think would improve the system.) |

Instruction: *Please fill up all fields with \* as required, optional otherwise.*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Respondent’s Name: | |  | | |
| \* Type of Respondent: | | End User (Users / Administrator)  IT Expert (Software Developer / Programmer/ IT Specialist)  Others : | | |
| Course: | |  | Year/Year Graduated: |  |
| Please confirm your responses by signing. Thank you very much for your time and  insights. | | | | |
| \* Signature: |  | | \* Date: |  |