

ReadTrack: A Reading Progress Tracking System for First Year Students of South East Asian Institute of Technology, Inc.

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ABSTRACT

This study focused on evaluating the effectiveness of ReadTrack, a reading progress tracking system designed to enhance the reading proficiency of first-year students at the South East Asian Institute of Technology (SEAIT). The system integrates features such as reading logs, goal setting, reminders, progress dashboards, and analytical feedback to improve students' reading habits, and understanding. A descriptive research design was employed to assess the system's usability, functionality, and impact on reading performance. Data were collected from 100 first-year students through survey questionnaires and feedback forms, and analyzed using descriptive statistics to determine the effectiveness of the ReadTrack system. The findings revealed high levels of functionality, accessibility, accuracy, with an overall System Usability Scale (SUS) score of 62.5%, which indicate good usability. These results indicate that ReadTrack effectively promotes consistent reading practice and supports understanding and fluency development through goal-setting and real-time feedback. In conclusion the study demonstrated that ReadTrack is an effective educational technology platform that improves reading proficiency, among first-year SEAIT students. This research contributed valuable insights into the effective use of ReadTrack system for Enhancing the Reading Proficiency of First-Year Students at SEAIT.

Key Words: Progress Tracking, Reading Proficiency.

1.0 INTRODUCTION

1.1 Background and Context

Particularly in the educational context, this concerns straightforward learning-promoting feedback. Inspired by these fundamentals, ReadTrack is a reading-progress tool personalized for First-Year SEAIT students, which simplifies reading efficiency, offers the goal and reminder setting function, as well as has usable dashboards that provide analytics in an accessible format, charging to show the results across a certain time. Handling ingestion parts (intuitive inputs, unambiguous menus), uplifting consciousness (presentation of progress and reports), as well as supporting self-regulation (streak and time-sensitive prompt), ReadTrack aspires to improve engagement, persistence, and accordingly, reading competency by supplying a concise and straightforward platform in comparison to common teaching systems.

1.2 Research Problem

A majority of learners find it difficult to maintain a consistent reading habit and achieve a higher comprehension level, given the lack of feedback, vocabulary enhancement, and systematic approach to their studies. Ordinary reading generally don't include personalized attention and one-on-one support or guidance. The goal of this investigation is to determine whether the first-year SEAIT students who use ReadTrack, a program with multifold technological features, will show observable progress in their reading capabilities as compared to their counterparts.

1.3 Research Questions and Objectives

1. How does the use of ReadTrack's real-time progress analytics affect the reading proficiency of first-year students?
2. How does the pronunciation corrector with audio feedback influence students' reading fluency and accuracy?
3. How do reading reminders and interactive features improve student motivation and consistency in reading practice?

1.4 Objectives

1. To develop real-time progress analytics in ReadTrack to enhance the monitoring and improvement of students' reading proficiency.
2. To develop a pronunciation corrector with audio feedback to improve students' fluency and pronunciation skills.
3. To develop reading reminders and interactive features to encourage consistent practice and increase student motivation in

reading.

1.5 Justification and Significance

This study targets the ongoing problems of first-year SEAIT students who struggle to form steady reading habits, assess progress, and bridge the gap between practice and performance in comprehension. ReadTrack, a reading-specific habit-tracking system offering customizable goal-setting, timely notifications, comprehension indicators, and clearly visible analytics dashboards, presents a research technique underscoring existing digital learning space frameworks and principles of self-regulated learning. Real-time visualization of development, identification of weaknesses, and adaptation of tactics allow for final goal achievement and the development of reading habits capable of tackling procrastination and motivation issues associated with reading tasks on different devices and environments. In addition to inaccurate results in reading proficiency and engagement levels, the emphasis on a lean, usability-first design that prioritizes actionable feedback over functionality results in a valuable contribution to educational technology by identifying strengths in academic development and outlining future literacy-focused tools.

2.0 LITERATURE REVIEW

2.1 Work-in-Progress — Integrated Reading Assistance in an Immersive Environment

This article presents full details on a development project of a VR reading application that aims to support students when they are studying. Though most of learning processes are based on reading, about 10% of the learners are said to have reading disabilities. Many such students are provided with excellent reading assistance due to digital technologies like Text-To-Speech (TTS), eye tracking, and VR. Iron Concentration Reader combines the technologies named above in its ultimate application to fully harness their undertaking. The article reports on the design of the software and the implementations and shares some preliminary experimental feedback on reading speed improvement as a result of the eye tracking-based reading guides (Yano, K., 2021).

2.2 Examining the Impact of a Digital Reading Progress Tool on Saudi L2 Learner's Reading Aloud Performance and Proficiency

Examining the Impact of a Digital Reading Progress Tool on Saudi L2 Learners' Reading Aloud Performance and Proficiency: Few studies have considered the use of digital reading tools for improving the fluency and proficiency of Saudi learners of English as a second language (ESL). Hence, in this study, the researcher investigated the impact of Microsoft's Digital Reading Progress tool on 30 Saudi ESL learners' reading performance and proficiency. The participants were all at the B1 intermediate English language level in academic ESL, according to the Common European Framework of Reference for Languages (CEFR) English language proficiency test. The students were given one reading passage per week, and the researcher examined their performance in reading aloud over a period of four weeks using the Digital Reading Progress tool. The results showed marked progress in the participants' reading performance, fluency, and accuracy, which was reflected in higher accuracy following the use of the Digital Reading Progress tool, higher scores for all the five measured categories, as well as a decreased number of mispronunciations and omissions. This study contributes to the growing body of research on technology-enhanced language learning by demonstrating the positive impact of the Digital Reading Progress tool on L2 learners' reading performance and proficiency. The findings have practical implications for ESL instructors in integrating digital tools as valuable pedagogical resources for enhancing L2 reading learning and performance (Alahmadi, N.S., 2024).

2.3 Using Mobile Technology for Reading Assessment

Traditionally, assessment of reading and associated complex skills developing has not been ICT-enabled. The present article compares traditional reading assessment protocols with the ReadLet, a platform with a tablet user interface designed for semi-digital monitoring of oral and silent reading abilities in early graders. ReadLet utilizes both cloud and mobile technologies for large-scale data collection, and allows the time alignment of reading behaviour with texts previously tagged through the NLP protocol. Preliminary findings replicate previously established benchmarks from the psycholinguistic literature about reading in children of both typical and atypical development. This year, the application constitutes a unique innovative approach in the evaluation of reading skills.

3.0 METHODOLOGY

3.1 Research Design

This study will use a descriptive research design. The independent and dependent variables utilized in the study include the ReadTrack system as independent variables and reading proficiency, fluency, vocabulary development. It is an appropriate approach for summarizing students' experiences and trends using the system. The analysis of the findings demonstrates the effectiveness of the ReadTrack feature directions, such as real-time reports on progress comparison, vibration for correcting pronunciation, vocabulary builder, reading reminders, and personal reading goals, on improving the students' reading skills.

3.2 Participants

The research will employ a sample size of 100 students who are in their first year of studying at SEAIT, also known as the South East Asia Institute of Technology Inc. The study will evaluate the reading comprehension, fluency, vocabulary, and motivation of first-year students and measure the efficacy of ReadTrack as a tool to improve the reading abilities of first-year students.

3.3 Data Collection

Data in the form of numbers will be collected by using systematic questionnaires in order to explore students' reading performance at identifying the features of ReadTrack. A random sampling technique will be applied to collect the data from the diverse population of SEAIT first-year students, guaranteeing the accuracy and credibility of the research. Data that are gathered will be statistically analyzed, which will help to find out about correlations and relationships between performance in reading and features of ReadTrack such as progress comparison in real time, pronunciation correction, vocabulary builder, reading reminders, and setting of personalized reading goals.

3.4 Data Analysis

Descriptive statistics will be utilized in order to analyze the quantitative data obtained through the use of structured questionnaires. Measures of central tendency and variability, including mean, standard deviations, and ranges, will be applied to all the survey items concerning students' proficiency, fluency, comprehension, vocabulary development, and motivation while employing the ReadTrack system. Therefore, the analyses will provide a succinct summary of the students' responses, which will assist in determining if the ReadTrack system has contributed to the enhancement of reading proficiency amongst SEAIT first-year students.

3.5 Ethical Considerations

The matters concerning confidentiality and security of the data for the persons who are involved in this study will be paid the highest attention to, and from the moment the research begins. Each participant will give an informed consent, and the participant will be granted a right to discontinue participation at any moment, without any punitive consequences. Participants will be assured that there will be no identifying details publicized with the results or the reports concerning the information they provide. To comply with the institutional ethical guidelines that have been set forth, the research team has ensured that nobody participating in the study will be subjected to any discomfort, harm, or any undue persuasion to employ ReadTrack during the study.

4.0 ADVANCED HCI DESIGN

4.1 System Architecture

The ReadTrack system offers a collection of tools intended to improve the reading skills of freshmen by helping track their progress, promote fluency, enhance vocabulary, and encourage re-reading. It comprises a range of core modules that facilitate interrelation, data processing, and interaction with the system.

Key components include:

- *Client-side (User Interface):* This is the top-level compartment with which the students interact, having a straightforward UI operating through any web browser or mobile app. It allows users to create progress reports, learn pronunciations, build vocabulary, make reading objectives, and create reminders.
- *Progress Analytics Module:* This module gathers its information from the act of reading - reporting on the correctness, the time spent reading, and the rating of comprehension - it supervises the reading performance in real time with the corresponding logged activities that the students have. Essentially, it fulfills the roles of providing analytic reports and graphics on the reading skills progress that are being monitored by the students and the instructor.
- *Pronunciation Corrector Module:* This system supplies audio information gleaned from the speech of students while they are reading and recorded in a speech recording session. In detail, it displays the misspelling errors and gives suggestions of their correction alongside the practice offer provided by its interactive version.
- *Vocabulary Builder:* This part is the database of the vocabulary that a student encounters on a daily basis. It builds vocabulary by providing meaning, sample sentences, and activities involving new words.
- *Backend Database:* This contains the core of the system, where the users' information, progress, pronunciation, vocabulary, reminders, and logs are safely held and keyed. It ensures that the data entered is completely accurate for processing and printing.

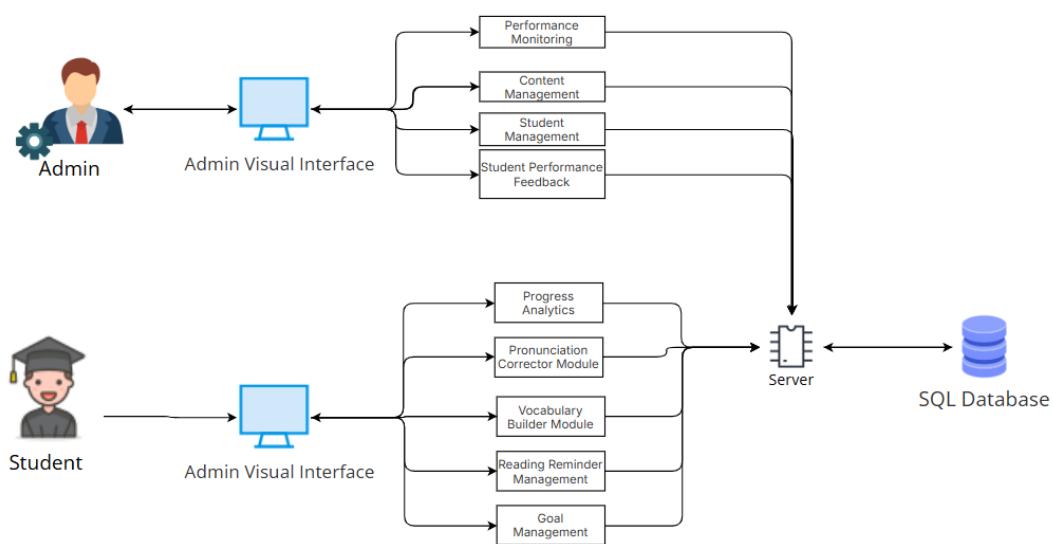


Figure 4.1.1 The diagram illustrates the Student Language Learning System, connecting admins, teachers, and students through performance management, content management, student management, and feedback management with learning modules covering progress, pronunciation, vocabulary, reminders, and goals. The User Interface (UI) for admins and students communicates with the SQL Database and Server to ensure that data is synchronized and handled efficiently.

Software Engineering Methodology

The Incremental Process Model was implemented for these ReadTrack research objectives through several brief cycling iterations (as shown in Figure 2). The first increments were delivered and refinement performed for Objective 1 (real-time progress analytics) so that accuracy and responsiveness of analytics could be verified among first-year SEAIT students with survey feedback and tuned to improve their experience with dashboards, logging, and exportable reports. The second increments were staged to develop the interface for Objective 2 (pronunciation corrector with audio feedback) so that targeted usability tests could be conducted on fluency and accuracy. Stability, onboarding issues, and integration with related modules were fixed as required. For Objective 3 (reading reminders and interactive features), warm demand was attracted by introducing the reminders, streaks, vocabulary builder, and personalized goals for each ReadTrack user in stages. Trading volume, engagement, and motivation metrics were tracked each cycle to fine-tune notification and goal-setting workflows. In all three cases, short Build–Measure–Learn iterative cycles underpinned these incremental processes: a minimal feature slice was deployed, functionality and usability/accessibility metrics were collected (e.g., reliability of analytics and their disaggregate information in reports, navigability of the ReadTrack interface, and accessibility heuristics), and improvements were made iteratively with integrations across modules (User Profiles, Reading Assessments, and Reading Reports) before expanding the scope. This incremental process kept the evolution of the ReadTrack system tightly bound to the targeted research objectives of boosting student proficiency, fluency, and sustained reading practices while balancing product quality with user satisfaction and measurable impact on motivation to encourage participation.

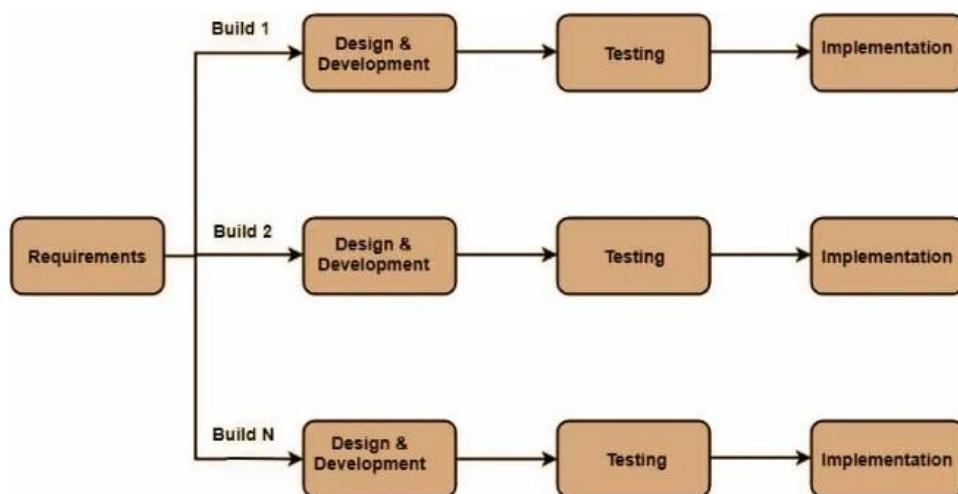


Figure 2: Software Engineering Methodology using Incremental Process Model

4.2 Features and Functionalities

The features and functionalities of ReadTrack System are the following:

Real-time Progress Analytics

Tracks and displays students' reading performance through detailed reports.

Pronunciation Corrector with Audio Feedback

Gives feedback within seconds to help students in enhancing their fluency and accuracy in pronouncing words.

Vocabulary Builder

Functions as a tool that keeps the new words to ensure proper understanding and interpretation.

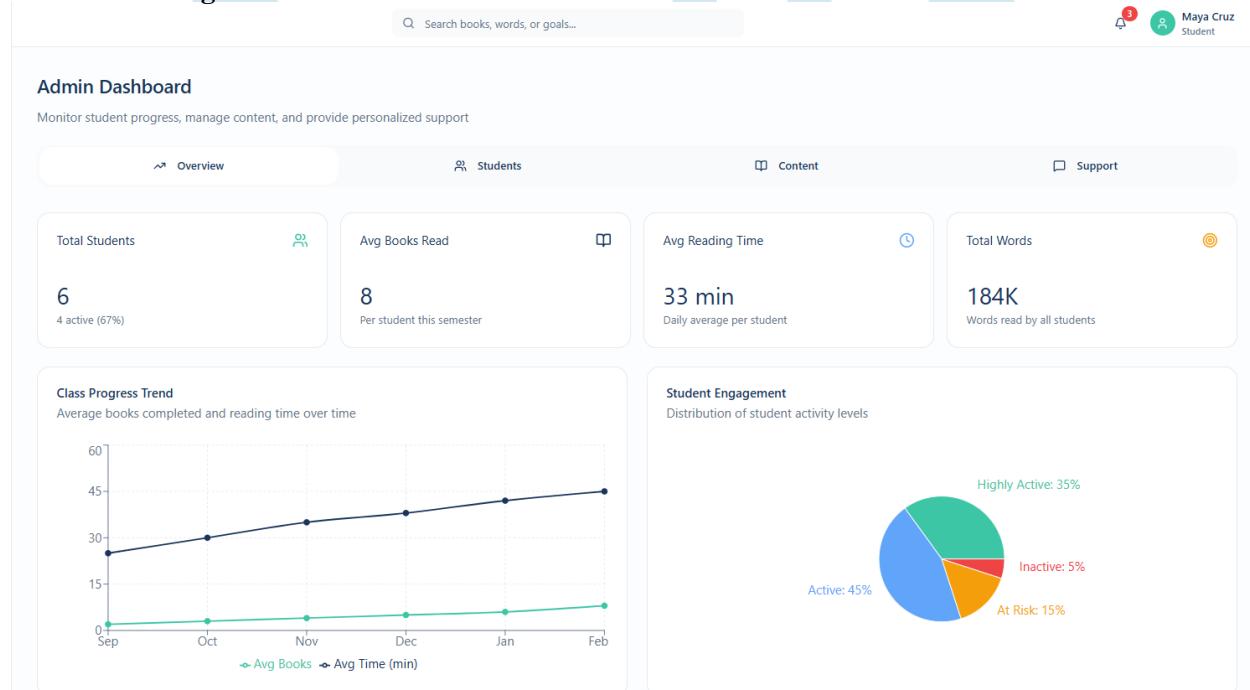
Reading Reminders

Sends out notifications to remind and encourage that reading should be practiced daily.

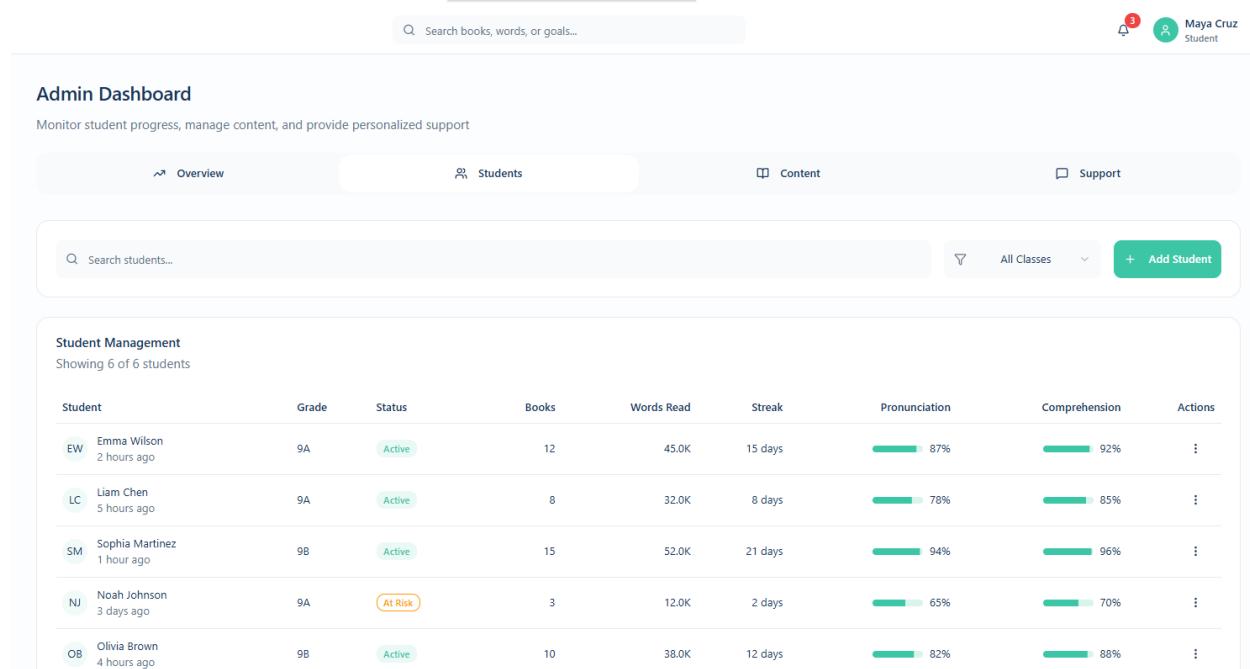
Personalized Reading Goals

Gives students an opportunity to define their own reading goals based on their level of competence.

4.3 User Interface Design



In this figure, it shows the admin dashboard page of the ReadTrack System.



In this figure, it shows the student management page of the ReadTrack System.

Admin Dashboard

Monitor student progress, manage content, and provide personalized support

[Overview](#)
[Students](#)
[Content](#)
[Support](#)
[Upload Reading Materials](#)

Add custom content for students including PDFs, articles, or stories



Drag and drop files here, or click to browse

Supported formats: PDF, EPUB, TXT (Max 10MB)

[Choose Files](#)

In this figure, it shows the content management page of the ReadTrack System.

Admin Dashboard

Monitor student progress, manage content, and provide personalized support

[Overview](#)
[Students](#)
[Content](#)
[Support](#)
[Send Personalized Feedback](#)

Provide individual feedback and encouragement to students

Select Student

Choose a student

Feedback Type

Select feedback type

Message

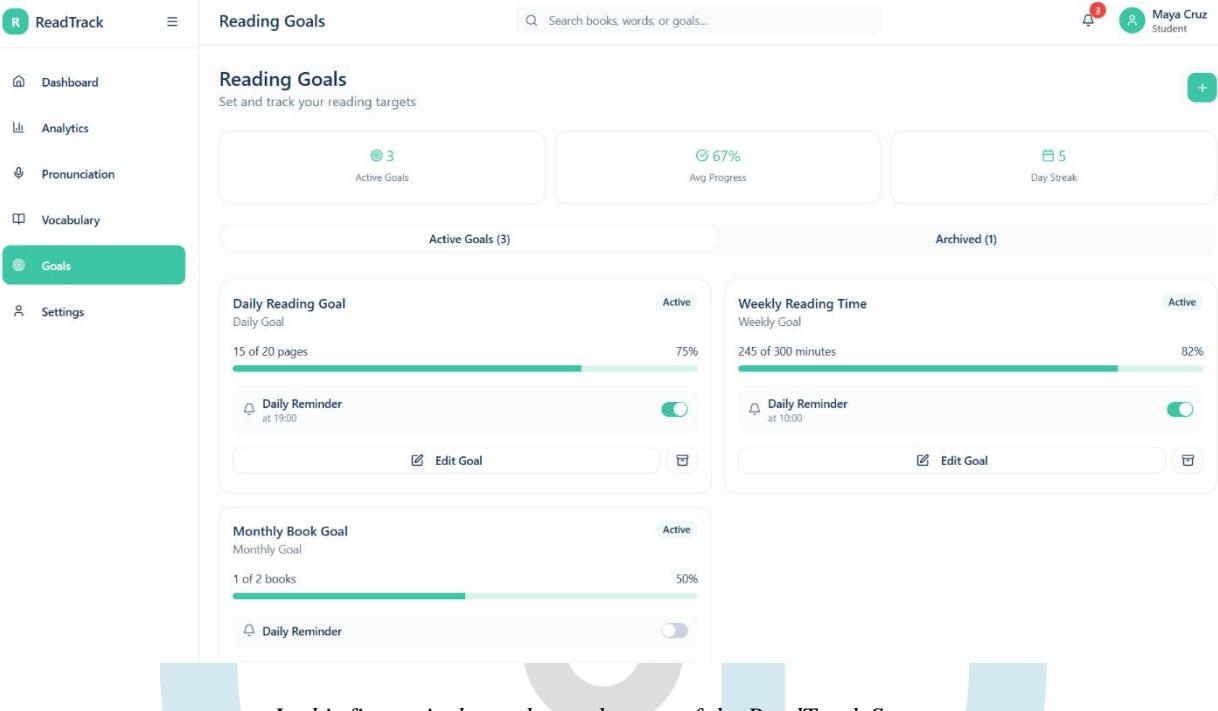
Write your personalized feedback here...

[Send Feedback](#)

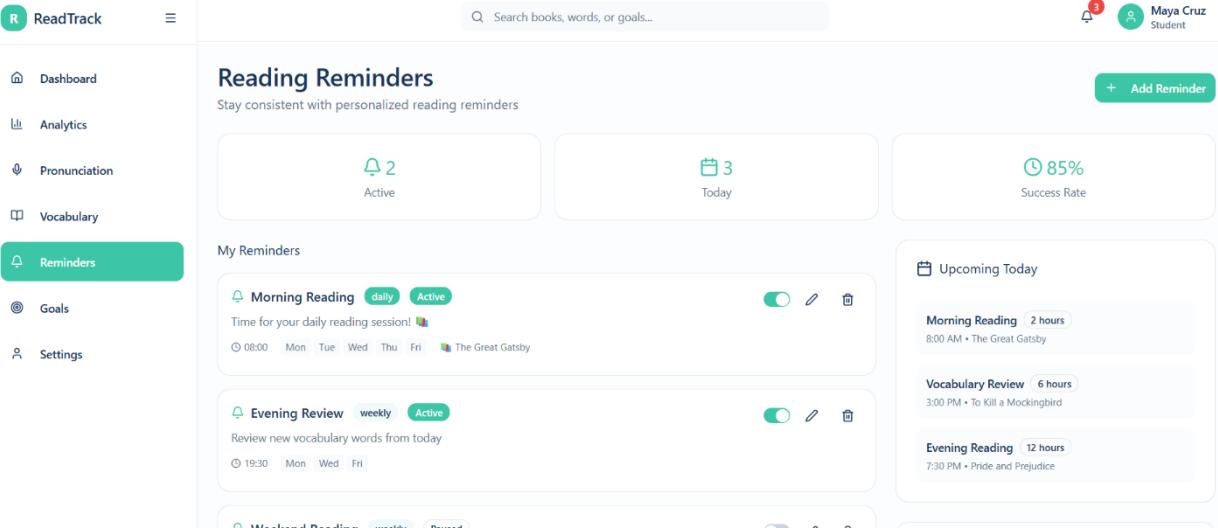
In this figure, it shows the student performance feedback page of the ReadTrack System.

In this figure, it shows the student dashboard page of the ReadTrack System.

In this figure, it shows the analytics page of the ReadTrack System.



The screenshot shows the 'Goals' page of the ReadTrack system. On the left, a sidebar menu includes 'Dashboard', 'Analytics', 'Pronunciation', 'Vocabulary', 'Goals' (which is selected and highlighted in green), and 'Settings'. The main content area is titled 'Reading Goals' and displays three summary cards: 'Active Goals' (3), 'Avg Progress' (67%), and 'Day Streak' (5). Below these are sections for 'Active Goals (3)' and 'Archived (1)'. Each goal card includes a title, description, progress bar, and a 'Daily Reminder' toggle switch. The 'Daily Reading Goal' card shows '15 of 20 pages' at 75% progress. The 'Weekly Reading Time' card shows '245 of 300 minutes' at 82% progress. The 'Monthly Book Goal' card shows '1 of 2 books' at 50% progress. A central text overlay reads: 'In this figure, it shows the goals page of the ReadTrack System.'



The screenshot shows the 'Reminders' page of the ReadTrack system. The sidebar menu is identical to the previous page. The main content area is titled 'Reading Reminders' and includes a 'Search' bar. It features three summary cards: 'Active' (2), 'Today' (3), and 'Success Rate' (85%). Below this is a section titled 'My Reminders' with three reminder cards: 'Morning Reading' (daily, Active), 'Evening Review' (weekly, Active), and 'Weekend Reading' (weekly, Paused). To the right, a section titled 'Upcoming Today' lists three events: 'Morning Reading' (2 hours, 8:00 AM, The Great Gatsby), 'Vocabulary Review' (6 hours, 3:00 PM, To Kill a Mockingbird), and 'Evening Reading' (12 hours, 7:30 PM, Pride and Prejudice). A central text overlay reads: 'In this figure, it shows the reading reminders page of the ReadTrack System.'

ReadTrack 

Vocabulary Builder

Search books, words, or goals... 

  **Maya Cruz**
Student

 **Dashboard**

 **Analytics**

 **Pronunciation**

 **Vocabulary**

 **Goals**

 **Settings**

Vocabulary Builder
Expand your word knowledge

Search words or definitions... 

All Levels  All Categories 

Total Words 4 **Mastered** 1 **Progress** 25% **Learning** 3 **Added Today** 2

Learning (3) **Mastered (1)**

ephemeral ★   
/ɪ'femərəl/
Lasting for a very short time; transitory
"The ephemeral beauty of cherry blossoms is cherished in Japanese culture."
 

catalyst ★   
/kə'təlist/
A person or thing that precipitates an event or change
"The new policy served as a catalyst for organizational change."
 

ubiquitous ★   
/ɪn.'hjuːrətəs/
In this figure, it shows the vocabulary builder page of the ReadTrack System.

ReadTrack 

Pronunciation Practice

Search books, words, or goals... 

  **Maya Cruz**
Student

Pronunciation Practice
Perfect your pronunciation

Practice Text 

The **ephemeral** nature of autumn leaves reminds us that beauty often lies in transience. Each **catalyst** for change brings new opportunities to embrace life's **pragmatic** lessons.

Tap on highlighted words to see pronunciation guidance

Audio Recording   

Tap the microphone to start recording

Pronunciation Feedback

Needs Practice **ephemeral**
Silent 'h' not pronounced
Correct pronunciation: /ɪ'femərəl/

Needs Practice **catalyst**
Stress on first syllable
Correct pronunciation: /kə'təlist/

Needs Practice **pragmatic**

In this figure, it shows the pronunciation corrector page of the ReadTrack System.

In this figure, it shows the student profile page of the ReadTrack System.

5.0 EVALUATION AND RESULTS

5.1 Usability Testing

The user-interface design was rated high by students (2.83 or 70.75%). At the same time, students agreed that such interface provides them with appropriate understanding of reading materials both at the moment and in the future (2.88 or 72%). The participation level was increased when ReadTrack was involved in the study (2.86 or 71.5). Overall, the total mean is 2.50, which is 62.5% of the maximum suggesting good usability.

Table 5.1.1 Usability Result Table

Questions	Mean
1. I can see myself using this system on a regular basis.	3.02
2. The system feels more complicated than it needs to be.	2.16
3. The controls and workflows are straightforward.	2.92
4. I would likely require help from a specialist to operate this system.	2.07
5. Features work together in a clear way.	2.88
6. Behaviors and layouts are inconsistent across the system.	2.11
7. Most people could learn to use this quickly.	2.86
8. Interacting with the system feels awkward and heavy.	2.09
9. I feel in control and confident when using the system.	2.83
10. There is too much to learn before I can be productive.	2.08
TOTAL MEAN	2.50

5.2 Performance Metrics

The ReadTrack performance metrics evaluate the system's impact on reading motivation, engagement, and skills of first-year students at SEAIT. The metrics reflect ReadTrack effectiveness of the system's utility (goal setting, progress tracking, analytics), usability and accessibility, and support for reading understanding and study skills. The approach finds out if ReadTrack is effective on the whole and user-friendly, and if the tool aids in student knowledge and improved reading success.

Accessibility: 2.47 – ReadTrack was usable or functioning. It had a higher rating in keyboard navigation (2.94), scalable text size and color contrast (2.92), screen-reader support (2.86), form and control labels (2.86), and caption/transcript support for comprehension (2.80). However, concerns were found in the application of color for conveying essential elements (2.03), small targets or drags (2.05), timebound or auto-refreshes (2.05), motion/animation comfort (2.07), and error message clarity (2.12). The analysis shows that a variety of basic accessibility mechanisms do exist, but minimizing the employment of colors, enlarging targets, loosening time limits, and improving feedback and assistance material would make the user experience even better.

Table 5.2.1 Accessibility Result Table

Questions	Mean
1. I can navigate the system using keyboard only.	2.94
2. The system works well with screen readers (e.g., clear reading order, alt text).	2.86
3. Text size and color contrast are comfortable and easy to adjust.	2.92
4. Captions/transcripts make audio and video content understandable.	2.80
5. Forms and controls are clearly labeled and easy to understand.	2.86
6. Important information is conveyed only by color or visuals.	2.03
7. Small targets or drag gestures make the interface hard to use.	2.05
8. Time limits or auto-refreshes interfere with completing tasks.	2.05
9. Animations or motion effects make content hard to read or cause discomfort.	2.07
10. Error messages are unclear or don't explain how to fix problems.	2.12
TOTAL MEAN	2.47

Functionality: 2.49 – In general, ReadTrack achieved, and its positive features fielded the users. The essential features, which were performing needed functions, received a 2.96 rating, while the analytics were deemed accurate and reliable and scored a decent 2.90; the system, responsive under normal workload, scored a nice 2.86, while the integration across the modules got a 2.80 rating, and the error messages, which helped, were with the reported recovery options and scored a 2.76. On the other hand, counterproductive issues appeared, such as bugs or crashes in essential features (2.09), unpredictable behavior (2.13), slowdowns/timeouts (2.15), missing or incomplete functionality (e.g., exporting, offline logging, goal setting; 2.15), and risks of data loss during typical actions (2.12). Ultimately, key capabilities may have been recognized, but stability considerations, necessity of compulsory functionalities' completion, and valued performance optimization would rise remarkably and thus level the overall functionality satisfaction.

Table 5.2.2 Functionality Result Table

Questions	Mean
1. ReadTrack's core features (e.g., reading logs, goals, reports) perform the tasks I need.	2.96
2. I often encounter bugs or crashes when using essential ReadTrack features.	2.09
3. Results and analytics produced by ReadTrack are accurate and reliable.	2.90
4. Some ReadTrack features behave unpredictably or give inconsistent results.	2.13
5. ReadTrack is responsive and handles typical student workloads (logging, syncing, viewing reports) well.	2.86
6. Slowdowns or timeouts in ReadTrack prevent me from completing my tasks.	2.15
7. ReadTrack's features integrate well with each other and with related modules (profiles, assessments, reports).	2.80
8. Required functionality in ReadTrack (e.g., exporting, offline logging, goal setting) is missing or incomplete.	2.15
9. Error messages and recovery options in ReadTrack help me resolve issues quickly.	2.76
10. Data is lost or corrupted in ReadTrack when performing common actions like saving logs or updating progress.	2.12
TOTAL MEAN	2.49

5.3 Comparative Analysis

This research aimed to find out how ReadTrack compares with other reading and learning tools among first-year students at SEAIT. From the student perspective, ReadTrack was more explicit and directional compared to other systems used for the purposes of progress tracking. Students commended ReadTrack's policy of simple reports, clear goals, and monitoring process, which was not downloadable as opposed to paperwork or previously practiced LMS tools. The ReadTrack application was credited for its more exact and inspiring analytics level that pushes students to regularly engage in reading activities when compared to other apps.

5.4 Results and Findings

Summary for ReadTrack Met Its Objectives:

- Usability – 2.50
- Accessibility – 2.47

- Functionality – 2.49

SUS results: ReadTrack scored excellently in parts concerning functionality, usability, and accessibility, so the platform seemed satisfying to the students during the engagement process. It helped participants list the tool as helpful and easy-to-use for them in fostering their concentration and involvement in reading.

6.0 DISCUSSION

6.1 Interpretation of Findings

This study denotes that ReadTrack has demonstrated proficiency in setting goals, tracking progress, and providing simple data analysis all contributing significant value specifically in first-year students' motivation, engagement, and self-regulation reading practices. Reactions from users, such as the observation that strategic marketing approaches can further boost reading frequency when combined with an exceptionally designed interface, repetition, and customized reports all serve as catalysts for improvement. Usability and accessibility trends were quite encouraging, as they show that there are no issues in easy navigation and user-friendly design that paved the way for learning, which seems to be founded on these premises. Student comments highlighted the following areas for improvement: direction of getting started, interface uniformity, and performance/stability. These should be addressed and lead ultimately to higher results in learning and clarity of satisfaction with ReadTrack.

Table 6.1.1 Descriptive Survey Result Table

Questions	Mean	Standard Deviation
1. To what extent do ReadTrack's features (e.g., reading goals, streaks, progress reports) increase your motivation to read?	2.77	1.10
2. How often do you participate more actively in reading activities when ReadTrack is used?	2.86	1.15
3. How would you rate the user-interface design of ReadTrack (e.g., layout, icons, colors)?	3.25	1.10
4. How much do you agree with the following statement: "ReadTrack helps me understand and retain what I read better."	3.21	0.93
5. How satisfied are you with your overall reading experience when using ReadTrack?	3.16	0.89
TOTAL MEAN	3.05	1.03

RQ1: *How does the use of ReadTrack's real-time progress analytics affect the reading proficiency of first-year students?*

Based on the results, ReadTrack's real-time analytics contributes to a deeper level of understanding and a generally positive experience because students appreciated the fact that it is useful and beneficial for them to comprehend and memorize up to a certain extent to go through ReadTrack (mean 3.21 or 80.25%). These findings indicate students should be given feedback and catch-how-progress cues in class activities as they serve as a means of helping students improve their reading proficiency.

RQ2: *How does the pronunciation corrector with audio feedback influence students' reading fluency and accuracy?*

While the table does not directly measure pronunciation, the significant clarity of interface (mean 3.25 or 81.25%) as well as the contentment (mean 3.21 or 80.25%) with ReadTrack's ability to increase understanding and retention suggests that clear instructions along with immediate results can aid to better practice in the interface. These indicators imply that an integrated pronunciation corrector with the audio feedback would most likely ensure the quality of practice and the positive impact of fluency and accuracy by showing clear steps for practice and actionable feedback.

RQ3: *How do reading reminders and interactive features improve student motivation and consistency in reading practice?*

Evaluation results show modest gains in motivation (mean 2.77 or 69.25%) and more active participation when using ReadTrack (mean 2.86 or 71.5%), alongside favorable overall satisfaction (mean 3.16 or 79%). Together, these results suggest that reminders and interactions serve as support and result in steady and more consistent reading actions, such that students are helped to maintain their practice over time.

6.2 Contributions and Innovation

The research highlights simplicity and clarity as desirable EdTech characteristics. ReadTrack's strength is not in the number of features but in their tight scope, simple reading logs, goals with reminders, and clear progress reports—that helps students stay on target. The system's focus reduces distraction and cognitive friction, enabling learners to track progress, revise goals within seconds, and get back to reading with minimum effort. ReadTrack serves as a prototype for additional platforms that succeed by focusing on transparent feedback and straightforward user flow instead of applying convoluted low-value functionality; a constant stream of immediate, interpretable insights can help retain attention and contribute to specific, measurable literacy targets.

6.3 Limitations and Future Work

The study was based on a small number of first-year SEAIT students and survey data that failed to reflect more improvements in proficiency. Experiences may also have been formed by variable device performance and unstable internet service. Future studies should include increased participation across programs and year levels; longer observation periods with additional comparison groups; performance carried out on low-spec devices; and enhanced onboarding and accessibility to aid first-time use and support a wider range of capacities.

7.0 CONCLUSION

7.1 Summary of Key Findings

ReadTrack received usability and support of instruction. The easy-to-navigate interface, the features used for setting reading objectives, and the progress display proved useful in determining what to read, enhancing understanding, and motivating readership among the students. Respondents saw the usability as correct, and the entirety as being mixed. Motivation whatsoever was scored as "good" and was deemed to be one of the features that could be enhanced. On the flip side, access weaknesses were attributable to unreasoned use of colors, the unsuitable size of tap-targets, and the lack of easily understandable guidance in situation of wrong entries. These findings therefore highlight the presence of clear feedback game-lines and user-based designs as essential tools in the reading troubles.

7.2 Final Remarks

ReadTrack provides an example of how a simple platform, logs, goals, and visible outcomes—can make a significant difference in the first-year reading experience and reading efficiency. Limited tweaks in onboarding, stability, speed, and accessibility can continue to improve the system's usability and its effectiveness. Continuous iteration based on a wider pool of students can help maintain engagement, improve learning, and direct future revisions.

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APENDICES

Appendix A: System Usability Scale (SUS) Likert Scale Survey Questionnaire

Functionality

Questions	Ratings			
	1	2	3	4
1. ReadTrack's core features (e.g., reading logs, goals, reports) perform the tasks I need.	1	2	3	4
2. I often encounter bugs or crashes when using essential ReadTrack features.	1	2	3	4
3. Results and analytics produced by ReadTrack are accurate and reliable.	1	2	3	4
4. Some ReadTrack features behave unpredictably or give inconsistent results.	1	2	3	4
5. ReadTrack is responsive and handles typical student workloads (logging, syncing, viewing reports) well.	1	2	3	4
6. Slowdowns or timeouts in ReadTrack prevent me from completing my tasks.	1	2	3	4
7. ReadTrack's features integrate well with each other and with related modules (profiles, assessments, reports).	1	2	3	4
8. Required functionality in ReadTrack (e.g., exporting, offline logging, goal setting) is missing or incomplete.	1	2	3	4
9. Error messages and recovery options in ReadTrack help me resolve issues quickly.	1	2	3	4
10. Data is lost or corrupted in ReadTrack when performing common actions like saving logs or updating progress.	1	2	3	4

Accuracy

Questions	Ratings			
	1	2	3	4
1. I can see myself using this system on a regular basis.	1	2	3	4
2. The system feels more complicated than it needs to be.	1	2	3	4
3. The controls and workflows are straightforward.	1	2	3	4
4. I would likely require help from a specialist to operate this system.	1	2	3	4
5. Features work together in a coherent way.	1	2	3	4
6. Behaviors and layouts are inconsistent across the system.	1	2	3	4
7. Most people could learn to use this quickly.	1	2	3	4
8. Interacting with the system feels awkward and heavy.	1	2	3	4
9. I feel in control and confident when using the system.	1	2	3	4
10. There is too much to learn before I can be productive.	1	2	3	4

Accessibility

Questions	Ratings			
	1	2	3	4
1. I can navigate the system using keyboard only.	1	2	3	4
2. The system works well with screen readers (e.g., clear reading order, alt text).	1	2	3	4
3. Text size and color contrast are comfortable and easy to adjust.	1	2	3	4
4. Captions/transcripts make audio and video content understandable.	1	2	3	4
5. Forms and controls are clearly labeled and easy to understand.	1	2	3	4
6. Important information is conveyed only by color or visuals.	1	2	3	4
7. Small targets or drag gestures make the interface hard to use.	1	2	3	4
8. Time limits or auto-refreshes interfere with completing tasks.	1	2	3	4
9. Animations or motion effects make content hard to read or cause discomfort.	1	2	3	4
10. Error messages are unclear or don't explain how to fix problems.	1	2	3	4

Appendix B: Descriptive Survey Questionnaire**ReadTrack: A Reading Progress Tracking System for First Year Students of South East Asian Institute of Technology, Inc.**

1. To what extent do ReadTrack's features (e.g., reading goals, streaks, progress reports) increase your motivation to read?

Not At All Slightly Very Much Extremely

2. How often do you participate more actively in reading activities when ReadTrack is used?

Never Rarely Often Always

3. How would you rate the user-interface design of ReadTrack (e.g., layout, icons, colors)?

Very Poor Poor Good Excellent

4. How much do you agree with the following statement: "ReadTrack helps me understand and retain what I read better."

Strongly Disagree Disagree Agree Strongly Agree

5. How satisfied are you with your overall reading experience when using ReadTrack?

Very Dissatisfied Dissatisfied Satisfied Very Satisfied