Tracker Software Report

Hacker Goltware	ixch	Oi t
A time/task tracker tool for students and workers of all kind.		

Authors: Ismail Mert Tarihci, James Mugambi, Warren Monteiro, Yahia Elmasry

CM2020-Agile Software Projects

Module Leader: Dr. Sean McGrath

Introduction	2
Concept	2
Aims and Objectives	3
Stakeholders	3
Scope	4
Project Boundaries	4
Constraints	4
Reason for selecting Study Tracker Platform	5
SWOT Analysis	5
Strengths:	5
Weaknesses:	5
Opportunities:	5
Threats:	6
PESTLE Analysis	6
Political Factors	6
Technological factors	6
Social factors	6
Economic factors	6
Legal factors	6
Environmental factors	7
Market Research	7
MyHomework Student Planner:	7
MyStudyLife:	7
Notion:	9
Clockify:	9
Design Modelling	10
Initial Prototype	10
Low-fidelity	10
First iteration	10
Second iteration	10
High-fidelity	10
Colour Scheme	10
Main Inspirations	10
User Testing	10
First Iteration	11
Second Iteration	11
Conclusion for user testing	11
Data:	11
Heuristic Evaluation	11
Technical and Functional Specification	11
Purpose	11
System Overview	11
Functional Requirements	11
User Authentication	11

Dashboard	12
Assignment Tracking	12
Revision Scheduling	12
Resource Management	12
Task Timer	12
Progress Analytics	12
Reminders and Notifications	12
User Feedback Mechanism	12
Cross-Platform Accessibility	13
Data Privacy and Security	13
Non-Functional Requirements:	13
1. Security	13
2. Scalability:	13
3. Reliability:	13
4. Usability:	13
7. Compliance:	14
8. Community Support:	14
User Acceptance Criteria	14
Performance Analysis	16
Planning - Project schedule	16
Conclusion	17

Introduction

This report aims to meticulously detail our gathered information and the methods we employed in thoroughly exploring our application concept. We will start by defining the concept, thereby explaining our goals, objectives, and the extent of our project. This will be followed by an in-depth analysis of market research, along with iterative testing of initial, basic prototypes. We will then discuss a heuristic evaluation, the technical and functional specifications of our project, concluding with a detailed analysis of the entire process's performance.

Concept

The Study Tracker Platform is an application designed to enhance the user's ability to effectively manage and track their academic progress, study plans, and learning resources.

In our platform, users will interact with an intuitive and straightforward interface tailored to avoid overwhelming them with excessive data. It will be friendly for beginners, yet offer in-depth tools and features for advanced users who choose to utilize them.

The core of the Study Tracker Platform is its comprehensive analytical tools, which will track and present the correlation between study habits, revision schedules, and academic performance. For instance, the platform will provide insights into how different study techniques or schedules have impacted academic results in the past. This feature aims to help students understand the most effective ways to study and prepare for exams by examining patterns in their own academic journey. Additionally, the main goal of our platform is to give our users meaningful plans to achieve their goals.

Aims and Objectives

Main Aim: Our primary goal is to develop a comprehensive Study Tracker Platform. This platform will cater not only to individual learners but also to educators and institutions, facilitating the organization and analysis of various study-related activities and resources. **Objectives:**

- Supportive Research: Establish a foundational basis for the Study Tracker Platform by exploring existing research on effective study methods and digital learning tools. This will involve analyzing scholarly articles and existing educational platforms to identify their strengths and weaknesses.
- Market Analysis: Perform detailed market research to identify potential competitors in the educational technology space. Examine their offerings, particularly focusing on study management tools, to understand their limitations and opportunities for improvement.
- Prototype Development: Construct an initial prototype of the Study Tracker Platform.
 This prototype will showcase key features such as assignment tracking, revision scheduling, and resource management. Each feature will be designed with user-friendliness and efficiency in mind and accompanied by a rationale for its inclusion.
- User Testing: Conduct comprehensive user testing, employing both quantitative metrics (such as user engagement levels) and qualitative feedback (like user satisfaction surveys). This will help in identifying areas where the current design may fall short in addressing the needs of our diverse user base.
- Design Refinement: Based on the insights gained from user testing, iteratively refine the platform's design. This step will involve enhancing user interfaces, streamlining functionalities, and addressing any identified gaps or flaws.
- Evaluation and Improvement: Write a detailed evaluation of the project, highlighting
 any discrepancies between the intended and actual outcomes. Propose potential
 improvements and future development directions for the Study Tracker Platform,
 ensuring it remains adaptable and relevant to evolving educational needs.

Stakeholders

The primary stakeholders of the Study Tracker Platform are students and learners who are looking for organized and effective ways to manage their studies or their tasks, regardless of their academic backgrounds. This includes individuals seeking structured methods to track their assignments, revision schedules, and study plans, but who may not have prior experience in using digital study tools.

Educators and academic professionals, as well as any type of professional doing work that can be quantified by time also form a significant part of our stakeholders. They will benefit from the platform's capabilities in planning any kind of work that needs to be completed overtime.

In later stages of development, educational institutions, such as schools and universities, become key stakeholders. They can utilize the platform for broader educational management, tracking overall student performance, and integrating the platform's functionalities into their existing educational systems.

Additionally, companies specializing in educational technology and digital learning tools are potential stakeholders. They can collaborate to enhance the platform's features, integrate advanced technologies, and expand its outreach.

Scope

This platform is designed primarily for learners who seek to understand various aspects of their study process, including managing assignments, revisions, and planning their studies efficiently. The platform can also serve educators and professionals in every sector, offering them valuable insights into students' progress and resource management.

Contrastingly, the Study Tracker Platform does not aim to replace traditional educational methods or provide personalized tutoring services. It is a tool to enhance and organize the learning experience, not a substitute for direct educational instruction or a comprehensive learning management system.

However, the Study Tracker Platform can be a tool for any kind of person completing any kind of task.

Project Deliverables

- Supportive research documentation.
- Comprehensive market analysis report.
- Prototype of the Study Tracker Platform with key features.
- User testing results, including quantitative metrics and qualitative feedback.
- Refined platform design based on user testing insights.
- Evaluation report highlighting project outcomes and proposed improvements.

Project Boundaries

- The project scope is limited to the development of the Study Tracker Platform prototype.
- Hardware development and integration are excluded from this project.

Constraints

- Adherence to the specified timeline for each project phase and a hard Project end date of 08-Mar-2024.
- Budget constraints may influence the solution functionality.

Assumptions

- The project team possesses the necessary skills for research, development, and testing.
- Stakeholders will provide timely feedback during milestone reviews.

Reason for selecting Study Tracker Platform

The choice to focus on educational content and sentiment analysis for the Study Tracker Platform is driven by the principles of behavioral learning. This approach recognizes that students' academic performance is influenced by their psychological state and the educational materials they engage with. By connecting their psychological expectations with realistic goals, we can improve how a student finishes their tasks in a more timely manner.

In analyzing educational trends, the platform acknowledges the unpredictable nature of the relationship between educational content and learning outcomes. While positive portrayals of a subject are important, they don't always directly correlate with immediate improvement in learning outcomes. Therefore, the platform will concentrate on capturing and reflecting immediate educational trends and resources, making the tool more relevant and effective for its users.

SWOT Analysis

Strengths:

The Study Tracker Platform's principal strength lies in its user-friendly interface, simplifying how a user studies. The platform can also help with actually measuring the study time directly on different tasks, taking the weight of timing and recording the time spent on different tasks from the users.

Weaknesses:

Currently, the platform's primary weakness is the absence of a fully developed software model, posing risks of underperformance or functionality issues upon implementation. Additionally, the team's limited experience in advanced software development may present challenges in realizing the platform's full potential. Another concern is the accuracy of sentiment analysis in educational content, which may not always reflect the true nature of learning materials or educational trends, leading to potential inaccuracies in the platform's insights.

Opportunities:

The Study Tracker Platform is positioned in a burgeoning market, with increasing demand for innovative educational tools and resources. It stands out from competitors by offering statistical data for educational purposes, rather than acting as a personal academic advisor. This approach reduces reliance on the platform for direct educational outcomes, allowing room for technical improvements and adaptation based on user feedback. The growing trend towards digital learning tools presents a significant opportunity for the platform's adoption and growth.

Threats:

Unforeseen events, such as global crises or sudden shifts in educational trends, pose a threat to the platform's relevance and effectiveness. Additionally, the emergence of competing platforms developed by larger organizations with more resources and potentially superior technology or features represents a significant competitive challenge. Such developments could lead to a shift in user preference towards these more established or innovative alternatives.

PESTLE Analysis

The factors below will help the Study tracker platform anticipate and adapt to external influences that will be considered in strategic planning for the product.

Political Factors

Government Regulations: Different countries have different government regulations regarding data privacy and could impact platform operations and user data handling. Education Policies: Changes in education policies and the ways of studying may influence the demand for educational tools affecting the market. For example if universities choose to use platforms like coursera to deliver learning then the need for the tool may not be appealing to subscribers.

Technological factors

<u>Advancements in technology</u>: Rapid technological advancements provide opportunities for improving the platform's features and functionalities.

<u>Integration of AI:</u> The integration of Artificial intelligence can enhance the accuracy of sentiment analysis and overall user experience. For example the availability of AI models from companies such as Microsoft, Open AI and amazon provide a quick way to include functionalities that could only be imagined.

Social factors

<u>Digital Literacy:</u> The platform success is dependent on the digital literacy of the target audience, the more conversant and comfortable the users are with the digital products the easier it is to get them to adapt to the service.

<u>Changing Learning habits:</u> The evolving social attitudes towards learning and studying habits will have an impact on the platform's features and end user engagement.

Economic factors

<u>Pricing sensitivity:</u> Economic downturns in many countries will influence the users willingness to pay for educational tools, which will lead us to finding ways of providing flexible pricing strategies and consideration of having it as a free service paid through advertising.

<u>Economic conditions:</u> Economic downturns may impact funding for educational initiatives which may affect the adoption and growth of the study tracker platform.

Legal factors

<u>Data Protection laws:</u> Compliance with data protection laws is crucial to ensure user privacy and avoid legal implications.

<u>Intellectual property Rights:</u> Protection of the intellectual property rights is essential to prevent unauthorized use of the features or replication of its features.

Environmental factors

<u>Sustainability concerns:</u> Increasing awareness of the environmental issues may influence user preference towards eco-friendly and sustainable platforms.

<u>Carbon footprint:</u> The platform's environmental impact, such as energy consumption may become a consideration for environmental conscious users.

Market Research

In the realm of study/time tracking applications, several popular options cater to specific needs, yet no single app currently encompasses all features necessary to maximize the user experience comprehensively.

MyHomework Student Planner:

Sign In - myHomework

The MyHomework Student Planner is designed to offer a streamlined and user-friendly interface, specifically tailored for tracking homework and assignments. Central to its functionality is the Planner/Dashboard, which integrates classes and homework into a cohesive system. Users have the ability to import homework from various educational platforms such as Canvas, D2L, and Google, through an ICS URL. This integration ensures that classes are seamlessly added to both the dashboard and calendar, enhancing organization and planning. The system allows for setting priority levels and reminders for each task, aiding students in managing their workload effectively.

Additionally, there's a dedicated section for Teachers, facilitating a space where students can easily find their instructors or where teachers can add themselves, fostering better communication. This is complemented by a feature for Announcements from teachers, which serves as a vital tool for conveying important information and updates directly to students.

Despite its strengths in organization and simplicity, the planner does have a notable limitation: it lacks progress tracking for assignments. It is primarily focused on outlining what needs to be done, rather than monitoring the progression or completion stages of these tasks. This might be a downside for users who require more comprehensive tracking features.

MyStudyLife:

MyStudyLife

My Study Life is a comprehensive all-in-one student planner app designed to meet the organizational needs of students. It excels in integrating various aspects of academic life, effectively combining a calendar with homework and exam tracking functionalities. The dashboard is the central feature where students can view their classes, exams, and tasks in one place. The calendar function is comprehensive, encompassing all exams, classes, and tasks, ensuring that students have a clear overview of their academic commitments.

Tasks within the app are intricately linked to exams, with the option to categorize them as assignments, revisions, or reminders. However, it is important to note that the app does not provide notification alerts for these tasks. Setting up exams and class schedules is mandatory for effective use of the app, and there is also the

functionality to add exams in a dedicated exam section and create specific tasks for each exam.

While My Study Life offers cloud synchronization for accessibility across multiple devices, and the ability to manage classes, tasks, and exams from a unified platform, it does have some limitations. One significant drawback is the absence of automatic reminders and detailed breakdowns of tasks. The app requires users to manually break down tasks, although it does allow for progress tracking through a percent completion slider. However, there is no time integration for tracking the duration spent on tasks, nor prompts for setting task completion, which might be a hindrance for some users.

IStudiezPro:

<u>iStudiez Pro for Windows – Best App for Students</u>

iStudiez Pro is a sophisticated student planner app that targets higher education students with its mature interface and advanced features. It stands out with detailed scheduling options, assignment tracking, and grade monitoring capabilities. A key feature of iStudiez Pro is its integration with other calendar apps, such as Android and iOS calendar apps, allowing for easy sharing and real-time scheduling updates across devices.

iStudiez Pro's planner feature is particularly notable for managing class details, instructor information, locations, grades, and holidays. The homework scheduler simplifies managing assignment due dates, and the real-time mode scheduler offers a color-coded overview of class schedules and tasks. Another standout feature is the GPA calculator, which calculates grade points in letters, points, or percentages, accompanied by a Grades Graph feature to visually track progress.

However, there are some limitations. Users cannot mark an assignment as complete without deleting it, leading to a lack of satisfaction with the assignment management aspect. Similar to MyHomework Student Planner, iStudiezPro lacks progress tracking and time tracking.

Notion:

Best School Templates from Notion

Popular applications like Notion(https://www.notion.so/), while versatile and widely used, do not inherently offer dedicated study tracking features for students. Instead, Notion relies heavily on its users to create and share their own templates (https://www.notion.so/templates/category/school). This user-generated approach to functionality means that templates for study tracking can vary significantly in quality and effectiveness. They may lack the tailored features, streamlined design, and specific educational focus found in dedicated study tracking applications.

Consequently, students using Notion for study purposes might not experience the

same level of efficiency and effectiveness as they would with specialized study tracking tools.

Clockify:

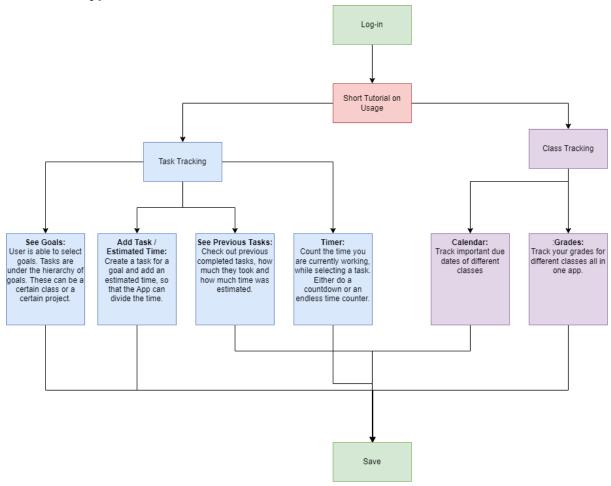
Log In - Clockify

Clockify (https://app.clockify.me/) is an application primarily designed for professionals to track the time spent on projects or assignments, often for billing purposes. While it includes features like a calendar and a time sheet, it does not directly monitor the progress of the work itself. This focus on time management for billing clients makes it more suited for professional environments. However, the core concept of time tracking could be adapted for a student study tracking platform, offering students the ability to monitor and optimize their study time efficiently.

In conclusion, while each of these apps offers valuable features for their respective audiences, none currently combines all the essential elements - such as dedicated study tracking, efficient task management, progress tracking, time management, and a tailored user interface - that would create an ideal, all-encompassing study tracking experience. This gap in the market presents an opportunity for the development of a more holistic study tracking application that addresses these varied needs comprehensively.

Design Modelling

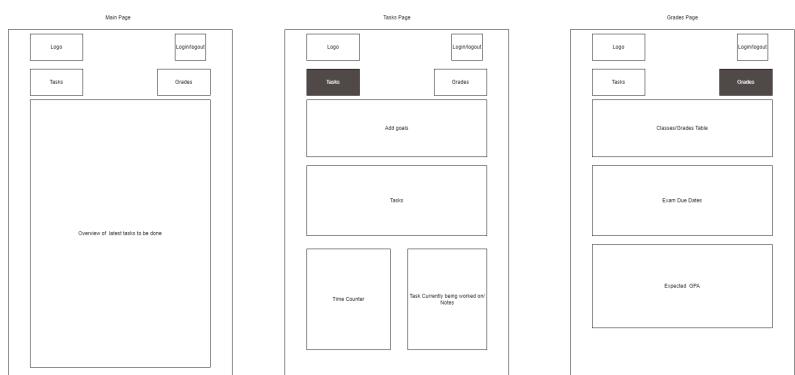
Initial Prototype



We wanted to create a very basic and high level user flow for the app. This is then later used for describing the app to stakeholders.

Wireframes

As the first iteration of the website, it was too early to choose a certain color scheme and we wanted to do a grayscale low fidelity wireframe to present to our users. We used these wireframes for describing our UI to users.



For the current phase of our development, we have not yet settled on a certain color scheme. Our main goal is to build the functionality.

User Testing

For our user testing, we asked our users some questions with the wireframes and diagrammes previously shown attached. Our design of a user study is the following:

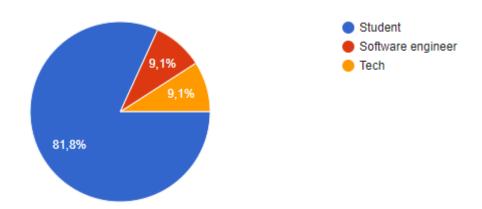
- 1- Show users the way our websites will feel.
- 2- Ask participants to complete a few questions regarding their usual habits and what they think of the website's features.
- 3- Ask participants some open ended questions to see how prospective users imagine such a platform.

For the test, we used Google Forms. Here are the questions we asked for this study:

Question	Answer Type	Reason for Ask
What is your profession?	Open-ended	Get a general idea on what type of users
How useful do you find the Task Tracking feature?	Rating(1-5)	Tracking feature feedback
How likely are you to use the 'Add Task / Estimated Time' feature?	Rating(1-5)	Tracking feature feedback
Rate the usefulness of the 'Timer' feature for your productivity.	Rating(1-5)	Tracking feature feedback
How beneficial is the 'Calendar' feature for managing your class schedules?	Rating(1-5)	Tracking feature feedback
How helpful would it be to track your 'Grades' within the app?	Rating(1-5)	Tracking feature feedback
Would you need tutorials to use this app effectively?	Yes/No	Tracking usability
What improvements or additional features would you suggest?	Rating(1-5)	Collect extra user needs
Any other comments you would like to give?	Rating(1-5)	Collect any extra feedback

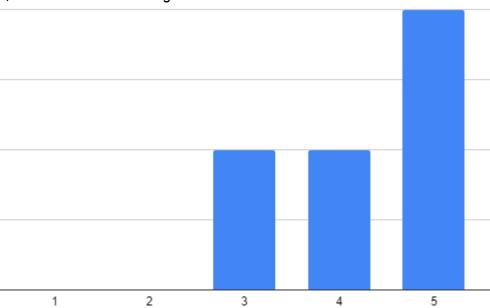
Conclusion for user testing

Question 1 - User Profession



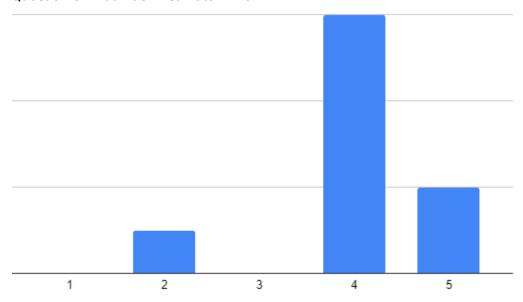
We can see that most of our answers came from students, so we can gauge our answers fit for student stakeholders.

Question 2 - Task Tracking Feature

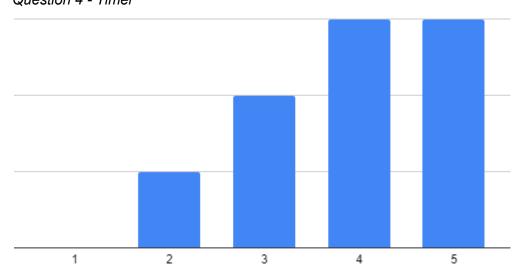


We can see that most of our users like the Task Tracking feature.

Question 3 - Add Task/Estimate Time

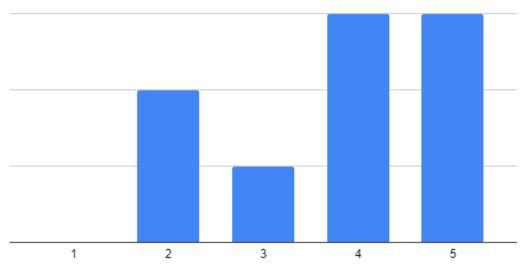


While our users also like this feature, the feedback is mixed. Question 4 - Timer

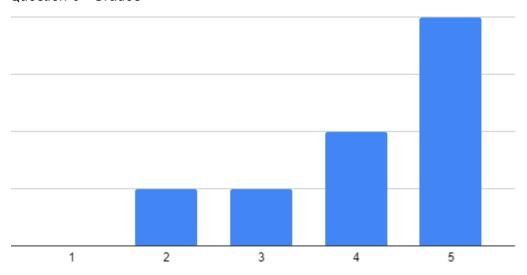


Most of our potential users like this feature

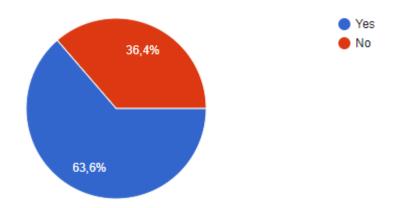
Question 5 - Calendar



Most of our users also like the Calendar idea, while some don't value it too high. *Question 6 - Grades*



Most of our users also like the grade traction idea. Question 7 - Tutorials



Most of our users would like to have a tutorial presented to them to help them use the app.

Question 8 - Suggestions

Our users suggested three main items with them centering around analysis tools:

- 1- An analysis on our expected time to complete a task and actual completion time with the difference.
- 2- Grades and tasks completed.
- 3- Reminders for assignments and exams.

Overall Conclusion

There is a large enough percentage of our users that like the current app proposal. We may want to add a tutorial for our users to look at.

Technical and Functional Specification

Purpose

This application is a study/task tracker for any kind of work that can be quantified into targets that can be calculated with an estimated time. Expectation of this project is to make sure that the expectations and scoping of tasks students/workers set out for themselves are easily visual to the user, as well as their progress.

System Overview

We have decided that this project will be a web application, since this is the type of technology that fits best with our already existing skill set. The technologies that fit best with these are Next.js and Node.js

We have decided to use Next.js, a superset of React.js for the frontend development for the following reasons:

- Next.js provides and easy way to do server management by hosting your app on the cloud and ensuring proper performance
- Next.js can create components that can live on the server or on the client itself, making it easy to create lightweight applications that can also be served to the search engines easily, as opposed to React.js where everything is server side.
- Next.js uses a file based routing system, making it easy for developers to visualize their websites navigation.
- As mentioned, it benefits SEO greatly, making it easier for the website to have large access.

We will use Node.js in the backend because of the following reasons:

- It is highly comparable with Next.js as it uses Javascript as a language, thus making it easy for developers to stay in 1 language and not have to context switch too much.
- It has a huge community, making it easy to access help when needed
- Javascript has a lot of ways to deal with server specific functionality.

For storing user data, we will use a non-relational database called Firebase because:

- It can integrate with Next.js easily for real time data handling
- Firebase Authentication can simplify user management.
- It has cloud storage as well as access to tech like CDN, SSL for free.

Functional Requirements

User Authentication

Requirement 1: Users must be able to create accounts and log in securely.

Rationale: This feature ensures personalized experiences, allowing users to access their study data securely and track their progress over time.

Dashboard

Requirement 2: An intuitive dashboard displaying key information, such as upcoming assignments, revision schedule, and progress metrics.

Rationale: The dashboard provides a quick overview, helping users stay organized and focused on their current and upcoming tasks.

Assignment Tracking

Requirement 3: Users can add, edit, and delete assignments with details like due date, subject, and priority.

Rationale: This feature assists in managing and prioritizing tasks, ensuring users are aware of upcoming assignments and deadlines.

Revision Scheduling

Requirement 4: A calendar feature allowing users to schedule and track revision sessions for different subjects/topics.

Rationale: Effective revision planning enhances retention and understanding, promoting a systematic approach to studying.

Resource Management

Requirement 5: A centralized repository for storing and organizing study materials, including notes, documents, and links.

Rationale: Easy access to study materials promotes efficiency and reduces time spent searching for resources, contributing to a more effective study routine.

Task Timer

Requirement 6: A timer associated with each task to record and display the time spent on assignments and revision.

Rationale: This feature helps users track study time, providing insights into their study habits and helping them manage time effectively.

Progress Analytics

Requirement 7: Visual representations (graphs, charts) showcasing task completion, revision progress, and overall academic performance.

Rationale: Analyzing progress motivates users, providing a sense of achievement and helping them identify areas for improvement.

Reminders and Notifications

Requirement 8: Customizable reminders and notifications for upcoming assignments, revision sessions, and study breaks.

Rationale: Timely reminders keep users on track and ensure they do not miss important deadlines or study sessions.

User Feedback Mechanism

Requirement 9: A feedback form or mechanism for users to provide suggestions or report issues.

Rationale: Continuous improvement is crucial; user feedback helps identify areas for enhancement and refinement.

Cross-Platform Accessibility

Requirement 10: Compatibility across multiple devices and platforms (web, mobile app). Rationale: Ensures flexibility and accessibility, allowing users to engage with the platform seamlessly from different devices.

Data Privacy and Security

Requirement 11: Robust data encryption, secure storage, and adherence to data protection regulations.

Rationale: Protects user privacy and builds trust by ensuring the confidentiality and security of user data.

Non-Functional Requirements:

1. Security

- <u>Data Encryption</u>: User data must be encrypted during transmission and storage, utilizing industry-standard encryption protocols like SSL.
- Authentication Security: The platform should implement secure authentication mechanisms, protecting user credentials from unauthorized access.
- <u>Audit Trail:</u> A comprehensive audit trail must be maintained, logging all user actions and system events for security monitoring and analysis.

2. Scalability:

- <u>User Scalability</u>: The system should support a scalable user base, with the ability to handle a minimum of 10,000 simultaneous users without significant degradation in performance.
- <u>Data Scalability</u>: The database architecture must be scalable to accommodate increasing volumes of user data and study materials over time.

3. Reliability:

- <u>System Uptime</u>: The application should aim for a minimum of 99.9% uptime, ensuring reliable access for users.
- <u>Backup and Recovery</u>: Regular automated backups of user data must be performed, with a reliable recovery mechanism in place to restore data in case of system failures.

4. Usability:

- <u>Intuitive Design</u>: The user interface must be intuitive and user-friendly, minimizing the learning curve for users of varying technical backgrounds.
- <u>Accessibility</u>: The platform should adhere to accessibility standards, ensuring it is usable by individuals with diverse abilities and disabilities.

5. Compatibility:

 <u>Browser Compatibility</u>: The platform should be compatible with major web browsers (Chrome, Firefox, Safari, Edge) to provide a consistent experience across different browser environments.

6. Maintainability:

- <u>Code Maintainability</u>: Code should be well-documented, following best practices and coding standards to facilitate future maintenance and updates.
- <u>Modular Architecture</u>: The system should be designed with a modular architecture to allow for easy integration of new features and updates.

7. Compliance:

• <u>Data Protection Regulations</u>: The platform must adhere to relevant data protection regulations and privacy laws in the regions where it operates.

• <u>Security Standards</u>: The development and deployment should follow industry security standards, incorporating best practices for secure web applications.

8. Community Support:

- <u>Community Engagement:</u> Regular engagement with the user community to gather feedback and address concerns for continuous improvement.
- <u>Support and Documentation</u>: Provide comprehensive documentation for users and maintain responsive support channels for prompt issue resolution.

User Acceptance Criteria

Key Feature	Acceptance criteria
User Authentication	 Users should be able to create a new account with a valid email address and password. Users must receive a verification email for account activation. Users should securely log in using valid credentials.
Dashboard	 The dashboard must display upcoming assignments with due dates and priorities. Users should see a clear representation of their revision schedule on the dashboard. Progress metrics, such as completed tasks and overall academic performance, must be visible.
Assignment Tracking	 Users can successfully add new assignments with details such as due date, subject, and priority. Users can edit assignment details, including due date and priority. Deletion of assignments should be possible without affecting other data.
Revision Scheduling	 The calendar feature allows users to schedule and track revision sessions for different subjects. Users can edit or delete revision sessions as needed. Revision sessions should be visually distinguishable on the calendar.
Resource Management	 Users can upload and organize study materials, including notes, documents, and links The platform supports easy retrieval of study materials based on categories or tags. Users can delete or update uploaded study materials.

Key Feature	Acceptance criteria
User Authentication	 Users should be able to create a new account with a valid email address and password. Users must receive a verification email for account activation. Users should securely log in using valid credentials.
Task Timer	 Users can start, pause, and stop the timer associated with each task. The timer accurately records and displays the time spent on assignments and revision. Users can review the historical record of time spent on tasks.
Progress Analytics	 Visual representations (graphs, charts) accurately reflect task completion and revision progress. Users can customize the time frame for progress analytics. Overall academic performance metrics are displayed clearly.
Reminders and Notifications	 Users can customize reminders for assignments, revision sessions, and study breaks. Notifications are delivered promptly through preferred channels (email, push notifications).
User Feedback Mechanism	 Users can easily access and submit feedback through a dedicated form or mechanism. The feedback form includes fields for suggestions, issues, and optional contact information. Confirmation of successful feedback submission is provided to the user
Cross-Platform Accessibility	 The platform functions seamlessly across web and mobile app platforms. Users can access and use all features consistently on different devices.
Data Privacy and Security	 User data is encrypted during transmission and storage. The platform complies with relevant data protection regulations. Users have clear information on how their data is handled and protected.

Performance Analysis

Planning - Project schedule

This section details the completed tasks in the Project Initiation Stage and outlines a comprehensive plan for the Planning, Setup, and Development Phase, as well as the subsequent Refinement, Testing, and Deployment Phase as below;

- 1. **Project Initiation Stage (Completed):** The initial phase encompassed idea conceptualization, meticulous project selection, and the creation of UI wireframes and mockups for the study tracker platform. These foundational steps have laid the groundwork for the subsequent phases.
- 2. Planning, Setup, and Development Phase: Beginning immediately post-proposal submission, this phase kicks off with a collaborative project initiation meeting. Features will be defined, and tasks will be assigned to team members. The technological feasibility will be thoroughly examined, leading to the setup of development environments, configuration of Git repositories, and the establishment of a robust database. Front-end and back-end development will continue until the targeted completion date of 16/02/2024.
- 3. Refinement, Testing, and Deployment Phase: Set to commence on 19-02-2024, this phase will focus on refining the study tracker platform by integrating lower priority functionalities, such as a user feedback mechanism and progress analytics. Simultaneously, user acceptance testing will be conducted to ensure the platform meets the highest standards. Documentation and report submission are scheduled for completion by 08-03-2024, marking the conclusion of the refinement, testing, and deployment phase.

The table below shows the systematic approach to developing the study tracker platform, ensuring a meticulous execution of tasks. The outlined timeline underscores our commitment to delivering a high-quality product aligned with the academic community's needs. We are confident that this comprehensive plan will lead to the successful completion of the study tracker platform, providing an invaluable tool for users to track and optimize their academic endeavors.

Task Name	Duration	Start	Finish
Project Initiation	15 days	Mon 18/12/23	Fri 05/01/24
Conceptualize	1 wk	Mon 18/12/23	Fri 22/12/23
Requirements	1 wk	Mon 25/12/23	Fri 29/12/23
Design	1 wk	Mon 01/01/24	Fri 05/01/24
Project Proposal	0 days	Fri 05/01/24	Fri 05/01/24
Planning, Setup and Development	30 days	Mon 08/01/24	Fri 16/02/24

Task Name	Duration	Start	Finish
Project Kickoff and Planning	1 wk	Mon 08/01/24	Fri 12/01/24
Technology Setup and Database Integration	1 wk	Mon 15/01/24	Fri 19/01/24
Frontend and Backend Development	3 wks	Mon 22/01/24	Fri 09/02/24
Task Timer Implementation and Basic Testing	1 wk	Mon 12/02/24	Fri 16/02/24
Refinement, Testing, and Deployment	15 days	Mon 19/02/24	Fri 08/03/24
Progress Analytics and Notifications	1 wk	Mon 19/02/24	Fri 23/02/24
User Feedback Mechanism and Cross-Platform Accessibility	1 wk	Mon 26/02/24	Fri 01/03/24
Security Measures and Advanced Testing	1 wk	Mon 04/03/24	Fri 08/03/24
Documentation and Deployment Preparation	1 wk	Mon 19/02/24	Fri 23/02/24
Final Testing, User Acceptance, and Launch	1 wk	Mon 26/02/24	Fri 01/03/24
Final Product & Report	0 days	Fri 08/03/24	Fri 08/03/24

Conclusion

Thoughout this report, we have conducted research and in the process came up with a report that we consider fullfills all the necessary needs for our project to come to fruition. This included a project proposal, making SWOT and PESTLE analysis, doing extensive market research, coming up with a base structure for the tech stack, doing user questionnaires to clear up market needs while making sure that we keep our project specific scope concerns on the forefront.

Looking ahead, the planning phase has been a revelation in its complexity and depth. Our anticipation for the project's future is twofold: to refine our platform to meet and exceed user expectations fully, and to delve deeper into the implications for design, which is central to developing the rest of the app.

Throughout our research, we were able to understand the user needs for such a software, how other similar apps work and what we need to do to have a viable product. We were able to develop core skills teaching us how product management process and how agile software development might work in a project of this scale.