

IT 320 Course Project
Semester-2, 1446H



Software Product Release

مُنْجَز | Monjez

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Phase1-Proposal

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Chapter 1: Introduction

In a fast-paced world, task management and organization have become essential for maintaining productivity. This project falls under the field of digital task management and assistive technology, aiming to facilitate planning and prioritization effectively. With the increasing reliance on digital solutions, the need for specialized platforms to manage tasks and shopping lists has become more critical than ever. Many people struggle to keep track of their daily activities and complete them on time, leading to task accumulation or forgetfulness. Additionally, inefficient shopping list management can result in forgetting essential items or purchasing unnecessary products, emphasizing the need for a digital solution that provides a structured and flexible environment to help users manage their tasks and requirements efficiently.

Technological solutions play a key role in providing a more efficient alternative to traditional methods, such as using pen and paper, by reducing clutter and enhancing personal planning. Globally, task management platforms contribute to increased productivity for individuals and businesses alike while supporting the transition to a more sustainable digital environment. Locally, providing a platform that meets users' specific needs enables them to streamline their daily lives more effectively, allowing for better decision-making regarding tasks and purchases.

In this document, we will explore the challenges people face in organizing their daily activities, and introduce the proposed solution: **Monjez**, a platform designed to enhance these processes and boost productivity. We will provide a brief overview of the platform's features and user experience, which will be outlined through the objectives. Additionally, we will present the product vision, roadmap, and scope, which will define the boundaries of the platform. Finally, we will introduce the scrum team responsible for its development.

In the next section, we will define the problem and discuss the existing gaps that highlight the need for a more efficient and flexible platform like **Monjez**.

1.4 The Problem

Many people struggle with managing and organizing their daily tasks efficiently, often finding it difficult to prioritize their responsibilities and complete tasks on time. Many still rely on the traditional method of using pen and paper to jot down their tasks, which can be inconvenient and inefficient. This method lacks structure and engagement, making it easy for users to forget tasks or lose track of their progress. For example, a stay-at-home parent juggling multiple household responsibilities may find it challenging to keep track of daily chores and important errands. Similarly, a university student may struggle to keep track of assignment deadlines, causing tasks to pile up and be completed at the last minute. Therefore, there is a growing need for a platform that helps users digitally organize their tasks, stay motivated, and increase their productivity with ease. In the next section, we will explore how **Monjez** provides an intelligent and effective solution to enhance the task management experience.

1.5 The Solution

The solution we propose to the discussed problem is a website called **Monjez**, designed to simplify task management and help users stay organized and productive. The website provides a streamlined experience that enables individuals to track their tasks, set priorities, and stay committed to their responsibilities without feeling overwhelmed or distracted. **Monjez** focuses on making task management more flexible and motivating, helping users avoid forgetting important tasks and achieve their goals efficiently. By offering tools that support time organization and productivity enhancement, the website becomes an effective way for users to manage their daily responsibilities with clarity and ease. Additionally, **Monjez** includes a dedicated shopping list section that allows users to track items, specify quantities, and manage purchases easily, providing a more structured shopping experience unlike relying on pen and paper. This feature ensures users can efficiently handle both their daily tasks and shopping needs in one place.

In the next section, we will present the product vision for **Monjez**, outlining its objectives and how it aims to improve the user experience in task management.

1.6 The Product

1.6.1 Product Vision

For all people **who** want to organize and arrange their tasks and the items they need to buy in one place where they can easily find them, **The Monjez** is a website **that** helps users stay organized, motivated, and productive. It provides an intuitive and engaging task management experience, including a dedicated shopping list section to track items, specify quantities, and manage purchases easily. **Unlike** a “to-do” application. **Our product** offers a more flexible and motivating approach, incorporating productivity-enhancing tools and a seamless shopping list feature to ensure users stay committed to their responsibilities with ease and clarity.

In the next section, we will present the Product Roadmap for **Monjez** that outlines the key milestones and timeline for the development and deployment of the website.

1.6.2 Product Roadmap

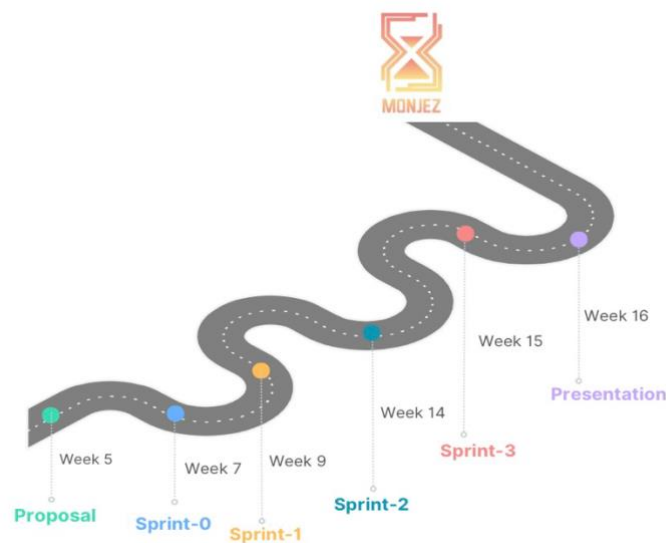


Figure 1 Product Roadmap

In this section, we will show the Roadmap of **Monjez** website, which demonstrates how the website will be built and delivered over time, as shown in figure 1-1

In the next section, we will present the Objectives of Monjez that outline the specific goals that the project aims to achieve.

1.6.3 Objectives

In this section, we will give a detailed breakdown of our objectives during our journey in developing **Monjez** website project across three levels: Product, Project, and Learning.

Product Objectives (Customer Focus - Value):

- **User Account Creation:** Allow user to create an account to sign in the website and log in/out whenever they want
- **User-friendly Interface:** Design an intuitive and visually appealing interface for seamless navigation.
- **Task Management:** Allow users to create, edit, delete tasks effortlessly, and search and view all the added tasks.
- **Due Dates:** Enable users to set due dates to stay on track.
- **Priority Levels:** Provide options to categorize tasks by priority (low, medium, high) to aid in task management.
- **Progress Tracking:** Offer visual indicators or charts to help users track their task completion rates.
- **Customization Options:** Allow users to customize themes and layouts to enhance user experience.
- **Shopping List Categorization and Quantity Management:** Allow users to add items and specify their quantities and organize these items into categories.

Project Objectives (Solution Focus - Plan):

- **Market Research:** Conduct surveys and interviews to understand user needs and preferences.
- **Define Requirements:** Write detailed specifications for features based on user feedback.
- **Design UI/UX:** Create wireframes and prototypes for the website interface.
- **Develop Frontend:** Build the user interface.
- **Develop Backend.**
- **Testing and Quality Assurance:** Conduct user acceptance testing.
- **Gather Feedback:** Collect user feedback post-launch for future improvements.

Learning Objectives (Student Focus):

- **Agile Methodology:** Experience working in an agile development environment, including sprints.
- **Testing Strategies:** Learn various testing methodologies and tools to ensure code quality.
- **User-Centric Design:** Develop skills in gathering and analyzing user feedback to drive product improvements.
- **New Programming Language:** Gain proficiency in a programming language (XML).
- **Integrated Development Environments (IDEs):** Gain proficiency in using an IDE (Visual studio).

In the next section, we will present the Scope for **Monjez** that will define the work required for achieving our projects goals.

1.6.4 Scope

In this section, we will define the limitations of our website and what is outside our scope, which will be considered for future work.

Monjez is a website compatible with all operating systems that support modern web browsers. It is designed to simplify task management and boost productivity. The website supports English and offers features such as task prioritization, adding, editing, deleting, viewing, searching, and a dedicated shopping list for easy tracking. **Monjez** provides an engaging and efficient way to stay organized effortlessly. Smart reminders or notifications are out of scope for this website, and it does not support multiple languages.

Scrum Team	
Product Owner:	Layal Alghamdi
Developers:	Njoud Alduraibi Nuran Alosaimi Alhanouf Alkhudhayri Layal Alghamdi
Scrum Master (SM):	Dr. Reem Alqifari
Stakeholders:	Dr. Reem Alqifari

Table 1 Define the scrum team.

2 Chapter2: Domain Analysis

2.1 Background

Before using **Monjez**, a to-do website with a specialized shopping feature, users must understand certain key concepts to make the most of its functionalities. **Monjez** is designed to help individuals efficiently manage both their daily tasks and shopping needs within a single platform.

Domain Knowledge

Monjez operates at the intersection of task management and shopping list organization. To fully utilize the platform, users should be familiar with the following key areas:

- **Task Management Systems:**

- A to-do list is a type of task management system that helps individuals organize their time effectively.
- Users can create tasks, set deadlines, categorize tasks, and prioritize them based on urgency or importance.
- A bar chart is provided to help users track their progress and visualize the amount of work they have completed, offering a clear overview of their achievements.

- **Shopping List Management:**

- A shopping list is a collection of items that a user plans to purchase.
- Users can categorize shopping list items by store to streamline their shopping experience.
- Organizing a shopping list efficiently helps prevent forgotten purchases and reduces unnecessary spending.

- **Interface Navigation:**

- **Monjez** is designed to be user-friendly, with an intuitive layout that allows users to quickly add, edit, and delete tasks or shopping items.
- Understanding how to navigate menus, buttons, and settings will enhance usability.

Problem Domain

Many individuals struggle with keeping track of both their daily tasks and shopping needs. Existing task management tools primarily focus on general to-do lists, requiring users to switch between separate apps for shopping lists and other planning tasks. This fragmentation leads to inefficiencies and disorganization.

Monjez addresses this problem by combining to-do lists and shopping lists into a unified system. Users no longer need to use multiple apps; instead, they can efficiently manage both types of lists within one platform. The ability to categorize shopping items makes the shopping experience smoother and more organized.

Solution Domain

To effectively use **Monjez**, users should have some foundational knowledge about managing tasks and shopping lists efficiently. Understanding the following concepts will help users make the most of the platform:

- **Task Creation and Prioritization:** Users should understand how to create tasks, assign priority levels (high, medium, low), and set deadlines to ensure timely completion.
- **Shopping List Organization:** Users should be familiar with categorizing shopping items by category which helps streamline their shopping experience and avoid forgotten purchases.
- **Navigation and Customization:** Familiarity with basic website navigation, such as adding, editing, and deleting items, as well as customizing categories, will enhance usability.

Important Definitions

- **To-Do List:** A tool used to track and organize tasks that need to be completed. It often includes prioritization, deadlines.
- **Shopping List:** A list of items a person intends to purchase, organized by category for efficiency.
- **Task Management:** The process of organizing and tracking tasks to improve productivity and ensure completion.

By understanding these concepts, users can leverage **Monjez** to optimize their daily planning, improve efficiency, and maintain an organized workflow for both their personal and shopping-related tasks.

2.2 Literature Review

Before developing **Monjez**, we conducted a comprehensive market study to understand user needs and identify existing competitors in the field of task management. Digital applications have become essential tools for time organization and productivity enhancement, as users rely on these platforms to track their daily tasks and plan efficiently.

Initially, task management applications were simple, limited to creating basic lists. However, over time, they evolved to include advanced features such as email integration, habit tracking, and tools to help users prioritize their tasks based on importance and urgency. Despite this progress, there are still gaps in the market, as many applications lack essential features.

To address this gap, we analyzed two of the most popular task management applications, TickTick and Microsoft To Do, and studied their strengths and weaknesses. The goal of this analysis is to understand how **Monjez** can provide a better user experience.

Competitor Analysis:

Microsoft To Do is a free task management application developed by Microsoft to help users organize their daily tasks efficiently.

Features:

1. **Integration with Email (Outlook)** – Users can convert emails into tasks directly within Outlook, making it easier to track important tasks without manual entry.
2. **Cross-Device Synchronization** – Available on Windows, iOS, Android, and Web, allowing users to access their tasks anytime, anywhere.
3. **Completely Free** – No subscription or in-app purchases are required, making it a cost-effective solution for task management.

Limitations:

1. **No Recycle Bin** – Deleted tasks or lists cannot be restored.
2. **No Progress Tracking Charts** – The app lacks analytics or reports to monitor productivity over time.

TickTick was developed by Appst Inc. as a task management tool that helps users efficiently organize their daily tasks. It streamlines task planning, saves time, and enhances productivity.

Features:

1. **Synchronization with Apple Watch and Alexa:** The app allows users to add and manage tasks via voice commands using Amazon Alexa or Siri. Additionally, it provides seamless task tracking through Apple Watch, eliminating the need for a phone.
2. **Pomodoro Timer:** Enhances focus and productivity by implementing the 25-minute work + 5-minute break technique. Users can customize session durations and track completed sessions daily to monitor their progress.
3. **Eisenhower Matrix:** A powerful tool for time management that categorizes tasks into four main sections based on importance and urgency, helping users make quick and effective prioritization decisions.
4. **Habit Tracker:** Enables users to create and monitor daily habits such as exercise, reading, drinking water, or sleeping early. The app also provides statistics and charts to visualize progress and track consistency in habit-building.

Limitations:

1. **Limited Free Version:** The free version includes basic features, while some essential functionalities, such as team collaboration, advanced reports, and unlimited storage for attachments, require a paid subscription.
2. **No Full Offline Support:** While tasks can be viewed without an internet connection, modifications and synchronization require internet access, which can be inconvenient when working in areas with poor connectivity.

Feature	To Do	TickTick	Monjez
<i>Task Prioritization</i>	X	✓	✓
<i>Progress Tracking</i>	X	X	✓
<i>Themes</i>	✓	✓	✓
<i>Free to use</i>	✓	X	✓
<i>Shopping List</i>	X	X	✓

Table 2 Competitor Analysis

What Makes **Monjez** Stand Out?

In the world of task management, **Monjez** is more than just an app—it's a complete productivity experience designed to make your workflow smoother and more efficient. With Progress Tracking, you can visually see your achievements as your complete tasks, with a dynamic progress bar that keeps you motivated until every task is done.

But the innovation doesn't stop there! **Monjez** redefines task organization by introducing the Shopping List feature, allowing you to manage both your daily tasks and shopping needs in one place—no need for multiple apps. This unique feature helps you stay organized and increases your efficiency effortlessly.

And because personalization matters, **Monjez** offers custom themes to match your style. The best part? Everything is completely free! If you're looking for an app that goes beyond basic task management and truly enhances your productivity and daily routine, **Monjez** is the perfect choice for you!

3 Chapter3: Requirements Engineering

3.1 Requirements Elicitation and Analysis

At this stage, the focus was on **understanding user needs and behaviours in managing daily tasks** to ensure that the **Monjez** application provides practical solutions that enhance productivity and simplify task organisation. **Interviews and questionnaires were used as primary tools for data collection and analysis**, allowing for an exploration of the challenges users face and the features they look for in task management applications. The responses from the interviews and questionnaires are provided in **Appendices A and B**, offering detailed insights into user feedback.

This process provided deeper insights into how users organize their daily tasks and what makes the experience more effective and sustainable. The collected data helped in identifying priorities and key functionalities that should be incorporated into the application to ensure a smooth and flexible user experience tailored to diverse user needs.

3.1.1 Interviews

We conducted interviews with four target users to explore **their personal experiences and the challenges they face** in managing their daily tasks, as well as to understand **their needs and expectations** for the **Monjez** application. Each team member interviewed one user. Below is a summary of the interview participants:

Name	Nationality	Age	Gender	Experience	Interviewer
Rakan	Saudi	18	Male	Financial Analyst	Alhanouf
Nouf	Saudi	24	Female	Data Scientist	Njoud
Taraf	Saudi	21	Female	Information Technology	Nuran
Rawan	Saudi	23	Female	Architecture Engineer	Layal

Table 3 Interview table

Interview findings:

Findings of question “How do you organize and keep track of all your tasks daily?”:

- Users generally prefer digital tools for task management, with a focus on simplicity and ease of use.
- There is a clear inclination towards maintaining a balance between organization and flexibility, as seen in the preference for color-coding and light task structures.
- Strategies vary significantly, from visual mental systems to structured digital lists, highlighting that individuals adapt their methods based on personal comfort and lifestyle needs.

Overall, the findings from question (1) suggest that effective task management can take many forms, and users benefit from personalized systems that align with their preferences and daily routines.

Findings of question “What are some flaws in the current method you are using to track your tasks?”:

- Users recognize their limitations, such as the tendency to overload themselves and forget tasks, indicating a need for better workload management.
- The requirement for engaging, visually appealing tools is evident, as motivation plays a crucial role in task completion.
- Manual tracking methods, while reliable for some, can lead to boredom and inefficiency, suggesting that users would benefit from more streamlined solutions.

Overall, the findings from question (2) suggest that while users have established methods for tracking tasks, there are significant areas for improvement that could enhance their effectiveness and user satisfaction.

Findings of question “What makes sticking and completing your tasks daily easy and consistent?”:

- Users recognize the value of routines and clear goals in enhancing task consistency, suggesting a need for strategies that minimize distractions.
- Reward-based motivation and engaging tools are crucial for maintaining user interest and commitment to task completion.
- Integrating tasks into established daily habits can simplify the process, making it feel less burdensome and more natural.

- The emotional reward of seeing completed tasks serves as a powerful motivator, emphasizing the importance of tracking progress visually.

Overall, the findings from question (3) suggest that a combination of structure, motivation, and emotional satisfaction plays a vital role in helping users consistently accomplish their daily tasks.

Findings of question “What features do you wish to have when using a “to-do” platform, whether it’s a must or for fun?”:

- Users' needs vary widely, with some focusing on functional enhancements to improve productivity, while others prioritize personalization and enjoyment in their task management experience.
- The desire for integrated features suggests that users prefer platforms that can consolidate multiple functionalities, minimizing the need to switch between different apps.
- The emphasis on a user-friendly and ad-free environment indicates that usability and user experience are significant factors in retaining app engagement.

Overall, the findings from question (4) suggest that a combination of multiple features in one platform instead of multiple, add-free, and simple platforms are what makes the user dedicated to the platform.

Findings of question “Do you care for a shopping list feature that lists all your goods and their quantities?”:

- Users have different priorities regarding shopping lists, with some valuing practical organization while others focus on financial management.
- The desire for engaging and interactive features suggests that users appreciate elements that make shopping more enjoyable.
- There is a clear recognition of the benefits of having a structured shopping list to enhance budgeting and planning, indicating that many users would find such a feature valuable.

Overall, the findings from question (5) suggest that there is a significant interest in a shopping list feature. However, preferences vary significantly, with some users seeking practical organization and others leaning towards financial management or interactive experiences.

3.1.2 Questionnaire

Fourteen participants responded to the questionnaire, providing insights into their task management habits, challenges, and preferences. The gender distribution is evenly split, with 50% male and 50% female.

In response to the question "What is your current status?", 57.1% of the participants are students, 21.4% are employees, and 21.4% fall into the "Other" category, indicating that students are the primary users.

In response to the question "How does the way you organize your tasks affect your daily productivity?", 64.3% find it highly effective, while 21.4% consider it somewhat helpful but still face difficulties, and 14.3% do not follow any specific method. Notably, none of the participants chose the option stating that "organization makes no difference but wish to improve."

In response to "What challenges do you face when managing your daily tasks?", 50% reported forgetting tasks due to a lack of effective reminders, 42.9% struggle with prioritizing tasks and finding a suitable task management tool, and 35.7% face difficulty tracking task progress.

Regarding preferred features, 35.7% of respondents value the ability to add tasks quickly and easily, while the same percentage prioritize the option to highlight important tasks. Additionally, 14.3% prefer product categorization by type (e.g., vegetables, household items), and another 14.3% are interested in location-based reminders.

In response to "Are you willing to pay if the website offers additional useful features?", 35.7% would pay if the features are valuable, the same percentage prefer a free website, and 28.6% are open to paying depending on the price and features.

In response to the open-ended question "What features would you like in **Monjez**?", based on 12 responses, the most requested features for **Monjez** include a gamification and rewards system, task sharing, motivational messages and reminders, and a daily journal or memory log. Users also desire AI-based task prioritization, calendar integration, and homework management.

Summary of Findings:

The findings from the interviews and questionnaire reveal a comprehensive landscape of task management habits, challenges, and preferences among the participants, primarily composed of students. With an even gender distribution, the responses indicate that a significant majority (64.3%) find their current methods of organizing tasks to be highly effective, while a notable portion (50%) struggles with forgetting tasks due to insufficient reminders. This highlights a clear need for better tools to aid in prioritization and tracking progress, as 42.9% of respondents express difficulties in these areas. Preferences for task management features are diverse, with 35.7% valuing quick task addition and highlighting important items, while others are interested in financial management tools rather than traditional shopping lists. Many participants desire engaging and interactive experiences, with requests for gamification, rewards systems, and motivational reminders. This indicates that users are not only looking for practical functionality but also for elements that make task management enjoyable. Additionally, the desire for comprehensive features like AI-based prioritization and integration with calendars suggests that users are seeking platforms that consolidate various aspects of productivity. Overall, the insights reveal that while participants have established methods for managing their tasks, there is a significant opportunity for improvement through enhanced usability, engagement, and the integration of diverse functionalities that cater to their unique needs and preferences.

3.2 System Users

User Characteristics for Monjez Website:

- **Age**

There is no limitation to our website in terms of age, however we do target the Age Range 18 to 45 years old, because they are the most likely the ones who need our website the most.

Young Adults (18-25): Likely to be students or early career professionals, managing schoolwork and social activities.

Adults (26-35): Often in mid-level careers, balancing work, family responsibilities, and personal tasks.

Middle-Aged Users (36-45): More likely to have established careers and families, managing complex schedules involving work, children, and household tasks.

So, our website services all ages with no limitations or exceptions.

- **Gender**

Users are of both genders, Female and Male.

- **Nationality**

Monjez is designed for a global audience, but initial targeting may focus on locals, and users who can speak and understand English to a certain point.

- **Educational Level**

Monjez is designed with simplicity and accessibility in mind, making it usable for individuals with any level of education. The intuitive user interface allows users to easily navigate through the platform without requiring advanced technical skills or extensive training. Whether someone is a student, a professional, or someone managing household tasks, they can quickly grasp how to add, edit, and prioritize tasks or items on their shopping list. This inclusive design ensures that anyone, regardless of their educational background, can effectively utilize **Monjez** to organize their daily activities and shopping needs with confidence.

So, users need no certain level of education, and everyone is able to utilize our website easily.

- **Experience in a Specific Domain**

In general, most users will have general experience in task management, either through traditional methods (e.g., paper lists) or other digital solutions (e.g., mobile apps).

Moreover, this means that users do not need to be experienced in a specific domain to be able to use such a simple and straightforward website, and anyone with experience or not can use it, however it would be better to have basic familiarity with similar applications our websites, to enhance the experience.

- **Technical Expertise**

Users should have minimal technical knowledge to navigate and utilize the features effectively.

Conclusion

The user base for **Monjez** is diverse, encompassing a range of ages, educational backgrounds, and technical expertise levels, as there aren't any specific criteria to who can use it or not, as long as they can understand English

3.3 Use Case Diagram

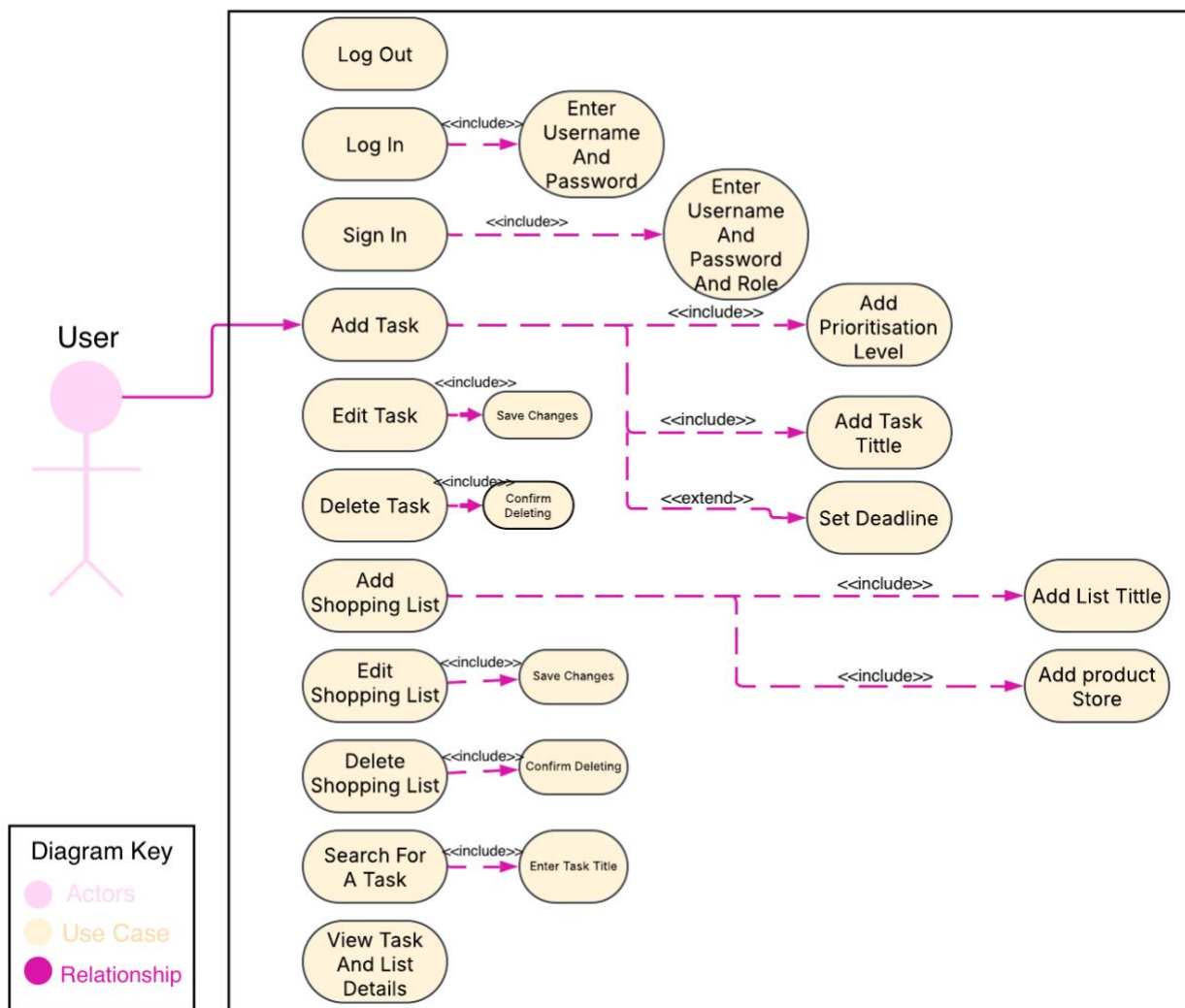


Figure 2 Use Case Diagram

3.4 product backlog

In this section, we will outline the key features of the **Monjez** application and the organization of its product backlog. The backlog consists of Product Backlog Items (PBIs), typically displayed in a table with columns for the item, its size, type, and acceptance criteria. These items are prioritized from the most to the least important.

Additionally, the product backlog will be managed in Jira to ensure efficient tracking.

PBI (User Story)	Size (Story points)	Type (Feature, defect, technical work, knowledge acquisition)	Acceptance Criteria The conditions of satisfaction that must be met for that item to be accepted.
As a new user, I want to be able to sign up so that I can create an account and use the system's features.	3	Feature	<ol style="list-style-type: none"> 1. If I go to the sign-up page and enter my username, a password that contains at least 8 characters, and a phone number, then click on the "Sign Up" button, I should be able to create an account successfully and access the application. 2. If I enter an email address or phone number that is already registered and click on "Sign Up," the system should display a notification informing me that the email or phone number is already in use, prompting me to enter a different one. 3. If I leave any required fields blank (e.g., username, password, phone number), the system should display a notification stating that all fields are mandatory and prevent me from proceeding until all required fields are filled.

As a registered user, I want to securely log in using my email and password so that I can access my personalized tasks and manage them seamlessly across all my devices.	3	Feature	<p>1. If I enter a valid email and password and click on the "Log In" button, the system should authenticate my credentials and redirect me to the main dashboard, ensuring a smooth login experience.</p> <p>2. If I enter an incorrect email or password, the system should display a clear notification indicating that my credentials are incorrect, while providing an option to reset my password.</p> <p>3. If I leave the email or password field empty and attempt to log in, the system should prompt me with a notification stating that all fields are required, ensuring that I provide the necessary information before proceeding.</p>
As a user, I want to quickly add a task so that I can stay organized and efficiently manage my responsibilities.	3	Feature	<p>1. When I enter my task and click "Add," the system should successfully save the task and display it in my task list.</p> <p>2. If I select a priority (High, Medium, Low) for the task, the system should automatically organize the tasks based on the priority.</p> <p>3. If I set a due date, the system should save the deadline and display it alongside the task.</p>
As a user, I want to add items with specific quantities to my shopping list and organize them into	8	Feature	<p>1- If I navigate to the shopping list, I should see the "Add Item" button. If I click on it, I should be prompted to enter the item's name, specify the quantity, and select a category. After clicking the save</p>

categories so that I can manage my shopping more efficiently.			<p>button, the item should be added to my shopping list.</p> <p>2- When I view an item in my shopping list, I should see a “Delete” button (trash icon) next to each item. When I click on the “Delete” button for an item, a confirmation message should appear, allowing me to either confirm or cancel the deletion.</p> <p>3- When I view the shopping list, I should be able to edit the quantity of an existing item. A save confirmation button should appear, and upon clicking it, the shopping list should immediately reflect the updated information.</p>
As a user, I want to view my tasks in a clear and structured way so that I can easily see all my completed and uncompleted tasks.	3	Feature	<p>1. When I navigate to the task page, all my tasks should be displayed in an easy-to-read list.</p> <p>2. The tasks should be sorted by priority, showing the most important tasks first, followed by those with medium and low priority.</p> <p>3. Each task should display its title, due date, and status (completed or incomplete).</p>
As a user, I want to mark tasks as completed by checking a checkbox,	2	Feature	<p>1. The user should be able to check a checkbox next to each task to mark it as completed.</p>

so I can track my progress efficiently.			<p>2. Once the checkbox is checked, the task should be visually marked as completed (e.g., a checkmark appears).</p> <p>3. If the user marks a task by mistake, they should be able to uncheck the checkbox to revert the task back to its previous state.</p>
As a user, I want to edit my task details (such as task content, due date, and priority) so that I can update my plans as needed.	3	Feature	<p>1. If I go to the task page, I should see an edit button to modify the task details.</p> <p>2. If I select edit, I should see the current details of the task, such as the task content, due date, and priority.</p> <p>3. If I modify any of the details (task content, due date, or priority), the system should successfully update the task.</p>
As a user, I want to delete a task so that I can remove tasks I no longer need or have canceled.	2	Feature	<p>1. If I go to the task page, I should see an option to cancel the task.</p> <p>2. If I select the "Delete" option, the system should prompt me with a confirmation message asking if I'm sure about deleting the task.</p> <p>3. If I confirm the deletion, the system should remove the task from the task list and update the page accordingly.</p> <p>4. After the task is successfully deleted, the system should display a message that the task has been deleted.</p>
As a user, I want to search for tasks by keyword so that I can easily find specific	2	Feature	<p>1. On the task page, I should see a search bar where I can enter a keyword related to the task.</p>

tasks in my list without scrolling.			<p>2. When I type a keyword, the system should filter and display only the tasks that contain that keyword.</p> <p>3. If no tasks match the keyword, the system should notify me with a message saying no results were found.</p>
As an active user, I want to log out securely so that I can ensure my account remains private and protected when I'm not using the application.	2	Feature	<p>1. If I click on the "Log Out" button, the system should immediately terminate my session and redirect me to the login screen, confirming that I have successfully logged out.</p>
As a User I want to see visual indicators or charts that display my task completion rate so that I can stay motivated by seeing my achievements.	3	Feature	<p>1- If I navigate to the home page, I should see a visual indicator (progress bar) that displays my task completion rate.</p>
As a user, I want to customize the website theme so that I can personalize my experience according to my preferences	5	Feature	<p>1- If I navigate to the customization settings page, I should see a list of available themes options.</p> <p>2- If I select a theme and click on the "Apply" button, the website appearance should update immediately to reflect my selection.</p>
As a user, I want the system to be easy to	5		<p>The system should have an intuitive user interface with clear instructions and</p>

use so that I can quickly understand how to interact with the website without any difficulties. Without any delays.		Feature	buttons so that users can navigate it effortlessly.
As a user, I want the system to be available most of the time so I can rely on it whenever I need it.	3	Feature	The system should be available for use 99% of the time, ensuring that users can access it without unexpected downtime.

Table 4 Product Backlog

4 Appendix

4.1 Appendix A: Interviews

4.1.1 Interview Questions:

1. How do you organize and keep track of all your tasks daily?
2. What are some flaws in the current method you are using to track your tasks?
3. What makes sticking and completing your tasks daily easy and consistent?
4. What features do you wish to have when using a “to-do” platform, whether it’s a must or for fun?
5. Do you care for a shopping list feature that lists all your goods and their quantities?

4.1.2 Interview Transcripts:

Interview outline (1)	
Interviewee: Rakan	Interviewer: Alhanouf
Location / Medium: zoom meeting	Appointment Date: 8 Feb 2025 Start Time: 2:40 End Time: 3:05
Objectives: To understand approach to task management, explore the features he desires in a task management application, and identify areas for improvement in his task tracking method.	Reminders: 1. Allocate time per question. 2. Ensure clarity in responses. 3. Note observations post-answers.
Agenda: Introduction Background in project Overview of interview Topics to be covered Permission to be record Question 1 Question 2 Question 3 Question 4 Question 5 Summary of major points Questions from interviewee Closing	Approximate Time: 1 min 2 min 1 min 30 sec 30 sec 1 min 2 min 3 min 1 min 2 min 1 min 2 min 1 min
General Observations: · Rakan prefers a blend of manual and digital tools to stay organized.	

<ul style="list-style-type: none"> • He values features like reminders, task prioritization, and progress tracking to improve his task management process. 	
<p>Uncovered Topics: Due to time constraints, the discussion on advanced features for task management was not fully explored.</p>	
Interviewee: Rakan	Date: 8 Feb 2025
Questions:	Answer and Observations:
Q1: How do you organize and keep track of all your tasks daily?	<p>Answer: I use a detailed to-do list and prioritize tasks based on urgency and importance. I rely on tools like Notion and Google Calendar to track my tasks and set reminders. I also break down larger tasks into smaller, manageable steps to stay on track.</p> <p>Observations: the user seems to be well-organized and prefers using digital tools for task management.</p>
Q2: What are some flaws in the current method you are using to track your tasks?	<p>Answer: Sometimes, I struggle with overloading myself. I tend to add too many tasks to the list, which becomes overwhelming and hard to manage. Also, I occasionally forget to review the list at the end of the day to assess progress.</p> <p>Observations: The user may be overestimating their ability to handle multiple tasks at once. They would benefit from a system that helps manage workload more effectively.</p>
Q3: What makes sticking and completing your tasks daily easy and consistent?	<p>Answer: Having a set routine makes a huge difference. When I stick to a daily schedule, with realistic and clear goals, it becomes easier to follow through. I also find accountability helpful, whether</p>

	<p>it's through reminders or sharing progress with others.</p> <p>Observations: Routine and clear goals seem to be effective for this user, but they may need additional support for managing daily distractions.</p>
Q4: What features do you wish to have when using a “to-do” platform, whether it's a must or for fun?	<p>Answer: I prefer features that allow task prioritization, deadlines, and reminders. Integration with my calendar and email would be useful, and I'd like to be able to track my progress with statistics or a productivity graph.</p> <p>Observations: User's needs lean towards practical features that enhance productivity, with a focus on progress tracking and integrations with other tools.</p>
Q5: Do you care for a shopping list feature that lists all your goods and their quantities?	<p>Answer: Yes, I think it's very practical. I like being able to keep track of what I need to buy in an organized way. It helps me plan better and stick to the items I really need, avoiding unnecessary purchases.</p> <p>Observations: The user values practicality and organization, which could be enhanced by adding a shopping list feature in the app.</p>

Table 5 Interview's Transcription for first Interviewee

Interview outline (2)	
Interviewee: Nouf	Interviewer: Njoud
Location / Medium: in home	Appointment Date: 14 Feb 2025 Start Time: 6:40 End Time: 7:05
Objectives: To understand approach to task management, explore the features he desires in a task management application, and identify areas for improvement in his task tracking method.	Reminders: 1. Allocate time per question. 2. Ensure clarity in responses. 3. Note observations post-answers.
Agenda: Introduction Background in project Overview of interview Topics to be covered Permission to be record Question 1 Question 2 Question 3 Question 4 Question 5 Summary of major points Questions from interviewee Closing	Approximate Time: 1 min 2 min 1 min 30 sec 30 sec 1 min 2 min 3 min 1 min 2 min 1 min 2 min 1 min
General Observations:	

<p>Nouf enjoys visually appealing, interactive, and gamified features to make task management more engaging.</p> <p>She values personalization and reward-based systems to stay motivated.</p>	
<p>Uncovered Topics: Due to time limitations, we didn't cover how the app could be optimized for better usability and a smoother user interface experience.</p>	
Interviewee: Nouf	Date: 14 Feb 2025
Questions:	Answer and Notes:
Q1: How do you organize and keep track of all your tasks daily?	<p>Answer: I like to keep things light! I use fun apps with color-coded tasks and try not to be too strict. I prefer simple lists and reminders that keep me on my toes but also don't overwhelm me with too much structure.</p> <p>Observations: Prefers a fun and light approach to task management with a mix of color coding and simple lists.</p>
Q2: What are some flaws in the current method you are using to track your tasks?	<p>Answer: I tend to forget to check things off, especially when I get distracted. And sometimes, if I'm using an app that isn't fun or engaging enough, I lose interest in checking off tasks. So, I need something that's visually fun to keep me excited."</p> <p>Observations: Needs more engaging and visually appealing apps to help her stay motivated and check off tasks consistently.</p>
Q3: What makes sticking and completing your tasks daily easy and consistent?	<p>Answer: I think rewards help! If I complete tasks, I'll treat myself with a little fun activity, like watching a short show or getting a snack. It keeps me motivated without feeling like it's all about work. Plus, a fun app with interactive features keeps me going.</p>

	<p>Observations: Reward-based motivation and interactive features are key to maintaining consistency.</p>
<p>Q4: What features do you wish to have when using a “to-do” platform, whether it’s a must or for fun?</p>	<p>Answer: I’d love something that adds a bit of personality! Maybe different themes or background music that changes as I complete tasks. And fun progress bars or animations when I check things off would make it way more exciting.</p> <p>Observations: Prefers personalized and fun features, such as music and themes, to enhance the user experience.</p>
<p>Q5: Do you care for a shopping list feature that lists all your goods and their quantities?</p>	<p>Answer: I mean, it sounds fun if the list is super cute and interactive! It could be like a game where I ‘collect’ the items as I buy them. I think it would make shopping feel less like a chore and more like a challenge.</p> <p>Observations: Sees value in a fun and interactive shopping list feature that makes the experience more engaging.</p>

Table 6 Interview's Transcription for Second Interviewee

Interview outline (3)	
Interviewee: Taraf	Interviewer: Nuran
Location / Medium: in university	Appointment Date: 12 Feb 2025 Start Time: 1:10 End Time: 1:35
Objectives: To understand approach to task management, explore the features he desires in a task management application, and identify areas for improvement in his task tracking method.	Reminders: 1. Allocate time per question. 2. Ensure clarity in responses. 3. Note observations post-answers.
Agenda: Introduction Background in project Overview of interview Topics to be covered Permission to be record Question 1 Question 2 Question 3 Question 4 Question 5 Summary of major points Questions from interviewee Closing	Approximate Time: 1 min 2 min 1 min 30 sec 30 sec 1 min 2 min 3 min 1 min 2 min 1 min 2 min 1 min
General Observations: · Taraf was late for the interview because he forgot the appointment, which confirms his heavy reliance on memory instead of using reminder tools.	

Uncovered Topics: It was not discussed how he handles unexpected or urgent tasks and whether he has a specific system for rearranging his priorities when needed.	
Interviewee: Taraf	Date: 12 Feb 2025
Questions:	Answer and Observations:
Q1: How do you organize and keep track of all your tasks daily?	<p>Answer: I rely on my memory and use a mental prioritization system. Every morning, I take a few moments to visualize my key tasks and categorize them by importance and complexity.</p> <p>Observations: She seems to rely heavily on her memory, which may lead to forgetting so.</p>
Q2: What are some flaws in the current method you are using to track your tasks?	<p>Answer: Sometimes, I overestimate my ability to remember everything, which leads to forgetting some tasks. Also, not writing tasks down makes me less accurate in estimating the time required for them, causing last-minute stress.</p> <p>Observations: She struggles with remembering all tasks and might need a written or digital tracking system.</p>
Q3: What makes sticking and completing your tasks daily easy and consistent?	<p>Answer: Having a clear structure for the day helps me stay on track. I divide my time into morning, afternoon, and evening, assigning tasks accordingly. I also use association techniques, like completing tasks alongside daily habits.</p> <p>Observations: She integrates tasks into daily habits, which might make it easier for her to complete them naturally.</p>

<p>Q4: What features do you wish to have when using a “to-do” platform, whether it’s a must or for fun?</p>	<p>Answer: I would like a feature that combines task tracking with journaling, allowing me to document my day along with a date for each entry. It would be useful to review past days and link tasks to significant events.</p> <p>Observations: She is looking for a more comprehensive platform that combines productivity with personal reflection.</p>
<p>Q5: Do you care for a shopping list feature that lists all your goods and their quantities?</p>	<p>Answer : Not really, but I would prefer a feature that helps me with financial planning in a simple way, such as automatically tracking my daily expenses and categorizing them into sections like “Daily Needs,” “Entertainment,” and “Savings.”</p> <p>Observations: She seems more interested in financial management rather than managing a shopping list.</p>

Table 7 Interview's Transcription for Third Interviewee

Interview outline (4)	
Interviewee: Rawan	Interviewer: Layal
Location / Medium: in university	Appointment Date: 17 Feb 2025 Start Time: 2:07 End Time: 2:39
Objectives: To understand approach to task management, explore the features he desires in a task management application, and identify areas for improvement in his task tracking method.	Reminders: 1. Allocate time per question. 2. Ensure clarity in responses. 3. Note observations post-answers.
Agenda: Introduction Background in project Overview of interview Topics to be covered Permission to be record Question 1 Question 2 Question 3 Question 4 Question 5 Summary of major points Questions from interviewee Closing	Approximate Time: 1 min 2 min 1 min 30 sec 30 sec 1 min 2 min 3 min 1 min 2 min 1 min 2 min 1 min
General Observations: · Rawan always has this habit of writing every single thing she does wether it's a task or not in her notes, I know this because of my observations on her when hanging out, and that is why I	

chose her actually, she seemed like the perfect person to interview about to-do and notes questions.	
Uncovered Topics: It was not discussed how she likes or prefers her rewards to be in return for achieving and completing the tasks.	
Interviewee: Rawan	Date: 17 Feb 2025
Questions:	Answer and Observations:
Q1: How do you organize and keep track of all your tasks daily?	<p>Answer: I use the notes app in my phone because my phone is always with me, and I make a list of all the months, and each month I make a list of the days in it, and write the tasks of each day, also I write the tasks that will be completed monthly, not only daily.</p> <p>Observations: She seems to have a certain pattern she follows to keep track of her tasks.</p>
Q2: What are some flaws in the current method you are using to track your tasks?	<p>Answer: Most of the time I get bored of having to write each month's name and every day, it would definitely be easier if I had a template prewritten, and I just write the tasks.</p> <p>Observations: She seems very faithful to her note's app, despite having to write everything manually, which means the advantages of this method overlap the disadvantage of having to write everything by herself.</p>
Q3: What makes sticking and completing your tasks daily easy and consistent?	<p>Answer: The feeling of achievement I get when I look at my note's app at the end of the day and see all my tasks checked and completed, it gives me a sense of relief.</p>

	<p>Observations: She lives off the feeling of achieving and completing all the needed work in her day, so her biggest reward is seeing how disciplined she is.</p>
<p>Q4: What features do you wish to have when using a “to-do” platform, whether it’s a must or for fun?</p>	<p>Answer: I would like to have my tasks organized and simple that’s the most important thing, also I would like a cycle tracker in my to-do app instead of having multiple apps, and also no adds, as it is what makes me quit using apps most of the time, they annoy me too much.</p> <p>Observations: She is looking for a platform that combines multiple features, as she hates going around multiple apps just to have a certain feature.</p>
<p>Q5: Do you care for a shopping list feature that lists all your goods and their quantities?</p>	<p>Answer: Yes, I really need a feature like this actually, because if I write the stuff, I have to get I will be limited to them, and not lose control and buy anything I see, it helps me save up and control my money when I have certain things, I know I have to buy.</p> <p>Observations: She seems interested in this feature, and committed, not some talk as she also showed me her list of groceries in her notes app.</p>

Table 8 Interview's Transcription for Forth Interviewee

4.2 Appendix B:

4.2.1 Questionnaire Questions:

1. What is your gender?

- Male
- Female

2. What is your status?

- Student
- Employee
- Other

3. How does the way you organize your tasks affect your daily productivity?

- It helps me complete tasks efficiently and without delays.
- Sometimes it's helpful, but I still struggle with some disorganization.
- I don't notice a big difference, but I would like to improve my approach.
- I don't use any specific method to organize my tasks.

4. What challenges do you face when managing your daily tasks? (You can select multiple answers)

- Difficulty prioritizing tasks.
- Forgetting tasks due to lack of effective reminders.
- Difficulty tracking task progress.
- Lack of a suitable task management app or tool.

5. If the website includes a shopping list management feature, what features would you like it to have?

- Ability to add items quickly and easily.
- Categorizing products by type (e.g., vegetables, household items, etc.).
- Prioritization of important items.
- Location-based reminders (such as a notification when entering a specific store).

6. Are you willing to pay if the website offers additional useful features?

- Yes, if the features are worth the cost.
- No, I prefer using a free website.
- Maybe, depending on the price and offered features.

7. What features would you like in **Monjez**?

(Open-ended question for user input).

4.2.2 Questionnaire Answers:

What is your gender?
14 responses

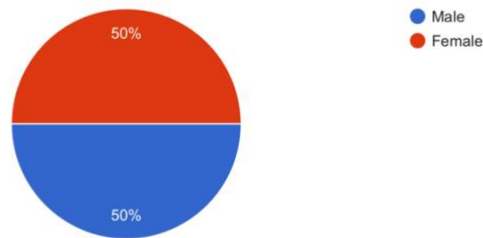


Figure 3 Q1 Graph

What is your current status?
14 responses

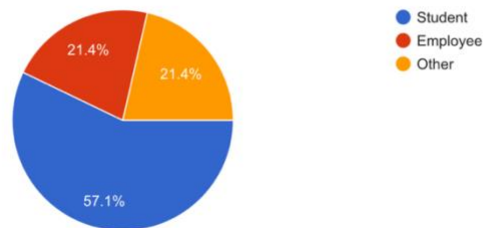


Figure 5 Q2 Graph

What challenges do you face when managing your daily tasks? (You can select multiple answers)
14 responses

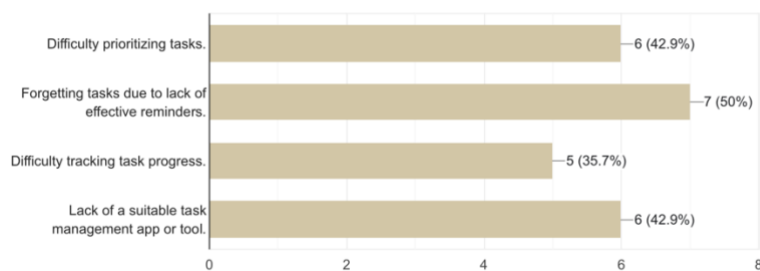


Figure 4 Q3 Graph

How does the way you organize your tasks affect your daily productivity?

14 responses

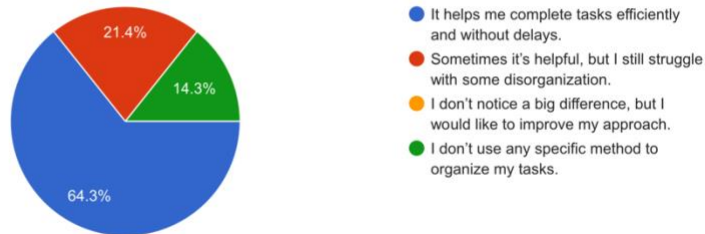


Figure 6 Q4 Graph

If the website includes a shopping list management feature, what features would you like it to have?

14 responses

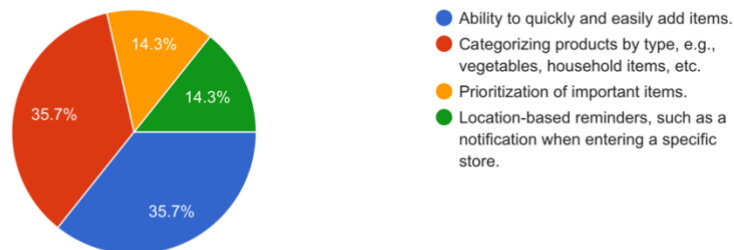


Figure 7 Q5 Graph

Are you willing to pay if the website offers additional useful features?

14 responses

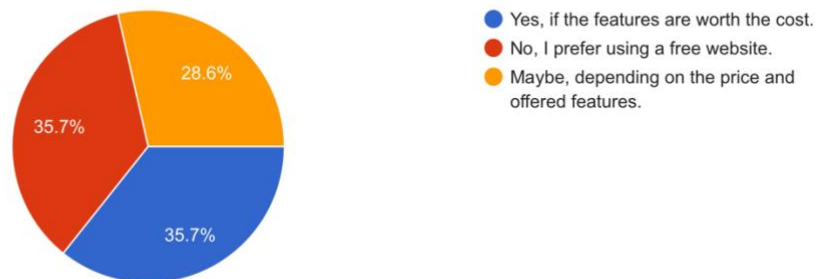


Figure 8 Q6 Graph

What features would you like in Monjez?

12 responses

- Gamification and Rewards System Introduce points, badges, or streaks to motivate users to complete their tasks.
- Allow user to share task lists
- Encouraging messages upon completing any task and reminders of the number of remaining tasks.
- Daily Journal or Memory Log A feature where users can write down daily reflections, memories, or important thoughts
- I want there to be a place for journaling memories because I love writing down the details of my day and being able to revisit and access them after a long time.
- Smart task prioritization using AI to analyze deadlines
- Integration with calendar to remind me if I have important task or appointments
- Due my homeworks
- An easy and simple app; I want to reduce the time I spend managing my day
- Ease of handling

Figure 9 Q7 Graph

4.3 Jira:

Projects / Monjez

Backlog

Q Search NA +2 Epic

Import work Insights View settings

▼ Sprint 0 12 Feb – 26 Feb (14 issues) 0 0 0 Complete sprint

SCRUM-3	As a new user, I want to be able to sign up so that I can create an account and use the system's features.	TO DO	
SCRUM-4	As a registered user, I want to securely log in using my email and password so that I can access my personalized tasks ...	TO DO	
SCRUM-5	As a user, I want to quickly add a task so that I can stay organized and efficiently manage my responsibilities.	TO DO	
SCRUM-6	As a user, I want to add items with specific quantities to my shopping list and organize them into categories so that I ca...	TO DO	
SCRUM-7	As a user, I want to view my tasks in a clear and structured way so that I can easily see all my completed and uncomple...	TO DO	
SCRUM-8	As a user, I want to mark tasks as completed by checking a checkbox, and if I mark it by mistake, I should be able to un...	TO DO	
SCRUM-9	As a user, I want to edit my task details (such as task content, due date, and priority) so that I can update my plans as ...	TO DO	
SCRUM-10	As a user, I want to delete a task so that I can remove tasks I no longer need or have canceled.	TO DO	
SCRUM-11	As a user, I want to search for tasks by keyword so that I can easily find specific tasks in my list without scrolling.	TO DO	
SCRUM-12	As an active user, I want to log out securely so that I can ensure my account remains private and protected when I'm ...	TO DO	
SCRUM-13	As a User I want to see visual indicators or charts that display my task completion rate so that I can stay motivated by ...	TO DO	
SCRUM-14	As a user, I want to customize the website theme so that I can personalize my experience according to my preferences.	TO DO	
SCRUM-15	As a user, I want the system to be easy to use so that I can quickly understand how to interact with the website withou...	TO DO	
SCRUM-16	As a user, I want the system to be available most of the time so I can rely on it whenever I need it.	TO DO	

Figure 10 product Backlog in Jira

5 References (IEEE):

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