




# DUTIES TRACKING APPLICATION

PROJECT REQUIREMENTS

Piyusha Sayal  
UCID: ps332



# DUTIES TRACKING APPLICATION

*Piyusha Sayal*

*Version: 1.0*

*Created by: Piyusha Sayal*

## Introduction

---

### 1.1 Purpose

The application aims to improve the overall efficiency and accountability of group projects by providing an intuitive task management solution. The application's primary goal is to simplify the delegation of tasks and improve communication within the group, leading to an increase in productivity and a reduction in delays. While the application cannot guarantee a flawless project outcome, it can help mitigate issues that arise from task mismanagement and communication breakdowns. Ultimately, the success of the project still depends on the team's ability to collaborate effectively and complete their delegated tasks on time.

### 1.2 Intended Audience

The application is primarily designed for individuals who share duties with others, such as roommates, friends, or family members. It is also suitable for groups that need to split their duties and organize their daily work.

Additionally, the audience for the task management application is small business owners who work from home or remotely and need help managing their workload and household duties. The software is designed to be user-friendly and accessible, even for individuals who may not be as comfortable with technology.

**John Michael:** 21-year-old college student can use the application to assign household chores to himself and his roommates, and to track who has completed which tasks. He could set up reminders and notifications to help ensure that everyone stays on track and contributes equally.

**Mike Johnson** - 40-year-old small business owner who works from home and wants a user-friendly application to divide work among his co-workers efficiently to improve the productivity and efficiency of the business.

**Sarah Hadid:** Sarah might use the application to create a list of household chores that need to be done each week, and assign specific tasks to each family member. She could use the app to track progress and completion and to send reminders to family members who have not yet completed their tasks.

Each of these personas represents a different type of small business owner who could benefit from the task management application. By understanding their needs, preferences, and pain points, the software can be designed to provide the most value to its end users.

### 1.3 Intended Use

The software is a task management application designed to improve the efficiency and accountability of group projects. The application simplifies task delegation, enhances communication, and helps team members track their progress and deadlines. The software addresses the problem of task management inefficiency and lack of accountability in group projects, which can lead to delays, missed deadlines, and a decrease in productivity. By providing a platform for effective task management and communication, the application aims to streamline project workflows, ensure accountability among team members, and ultimately lead to a more successful project outcome.

### 1.4 Scope

The scope of the software is to provide a user-friendly and effective task management solution for group projects.

**The main goals and objectives of the software are:**

- **Simplify task delegation:** The software should allow individuals to easily assign tasks to others, set due dates and priorities.
- **Enhance communication:** The software should provide a platform for group members to communicate effectively, ask questions, share updates, and provide feedback.
- **Improve accountability:** The software should help members stay accountable by tracking their progress, providing reminders of upcoming deadlines, and highlighting overdue tasks.
- **Streamline workflows:** The software should help streamline project workflows by providing a centralized platform for task management and communication, reducing the need for multiple tools and platforms.

It is important to define the software's scope clearly and ensure that all stakeholders are aligned on the software's goals and objectives. The software will not aim to provide features that are outside of its primary scope, such as complex project management tools, financial management features, or advanced reporting capabilities. While these features may be useful in some contexts, they can distract from the core mission of the software, which is to improve task delegation, communication, and accountability in group projects.

## Overall Description

---

### 2.1 User Needs

The application is designed to provide users with a comprehensive task management solution that addresses the user's specific needs. The functionalities addresses the pain points of the personas described earlier:

- **Stay on track with timely reminders at your beck and call:** This functionality helps users who struggle to keep track of who their tasks. The software can send timely reminders to users regarding their duties, reducing the need for manual follow-ups and ensuring that everyone stays accountable for their share.
- **Effortlessly manage your schedule with seamless calendar syncing:** This functionality is useful for users , who need to coordinate schedules and manage duties in a house. The software can integrate with users' calendars, allowing them to plan their schedule, co-ordinate and share updates with the group in real-time.
- **Stay in the loop with the latest updates at your fingertips:** This functionality helps users, who need to stay on top of the latest changes in schedule. The software can provide a platform for group members to share updates, ask questions, and provide feedback, improving communication and ensuring that everyone is on the same page.
- **Join the group and log in to experience a whole new world of collaboration:** This functionality is essential for all users, as it provides a secure and user-friendly platform for group collaboration. By joining the group and logging in to the software, users can access all the features they need to manage tasks, communicate with team members, and track progress towards project goals.

Overall, the software is designed to provide a streamlined and intuitive task management solution for users who need to collaborate effectively in group projects. Whether it's managing shared duties, managing individual tasks, the software can help users stay organized, communicate effectively, and achieve their goals more efficiently.

### 2.2 Assumptions and Dependencies

- **Assuming that all users have the same level of technical expertise:** This could lead to a user interface that is difficult to navigate for some users, leading to errors or confusion.
- **Assuming that all users have access to the same technology:** This could limit the software's reach and effectiveness, as some users may not be able to use the software on certain devices or operating systems.

- **Assuming that all users have the same preferences or needs:** This could lead to a software design that is not flexible enough to accommodate the diverse needs of different users.

Regarding factors that could affect the development of the software, some potential factors to consider include:

- **Technical dependencies:** The software may rely on third-party APIs, libraries, or frameworks, which could cause delays or errors if these dependencies change or become unavailable.
- **Resource constraints:** The development of the software may be limited by factors such as time, budget, or human resources, which could affect the quality or completeness of the final product.
- **Regulatory or legal requirements:** The software may need to comply with specific regulations or legal requirements, which could affect the design or functionality of the software.

## System Features and Requirements

---

### 3. 1 Functional Requirements

The functional requirements for task management software are essential for the software to meet the needs of its users. The software should allow users to register and log in to their accounts, create tasks, delegate tasks to team members, prioritize tasks, track task progress, integrate with calendar applications, provide communication features, allow for different user roles and permissions, and provide reporting and analytics features. These requirements are important for improving productivity, enhancing communication, and increasing accountability in group projects. The software should be designed to meet the specific needs of its users and provide a seamless experience for managing tasks and collaborating with team members.

For Mike's task management application, the functional requirements will play a critical role in meeting the needs of its intended audience. The software should provide an easy-to-use interface that allows users to register and log in to their accounts securely. Once logged in, the user should be able to create and delegate tasks to team members, prioritize tasks based on urgency, and track progress in real-time.

Functional Requirement	Description
User Registration	The software shall allow users to register for an account.
User Login	The software shall allow users to log in to their account with a unique username and password.
Task Creation	The software shall allow users to create new tasks and assign them to individuals or groups.
Task Delegation	The software shall allow users to delegate tasks to specific team members and set due dates.
Task Prioritization	The software shall allow users to prioritize tasks based on urgency or importance.
Task Tracking	The software shall allow users to track the progress of tasks and receive notifications when tasks are completed.
Calendar Integration	The software shall integrate with calendar applications to provide seamless scheduling and task management.
Communication	The software shall provide a means for team members to communicate with one another regarding tasks, including the ability to leave comments or send messages.

<b>User Roles and Permissions</b>	The software shall allow users to have different roles and permissions based on their level of access.
-----------------------------------	--

Overall, meeting these functional requirements will ensure that the task management application is user-friendly, efficient, and effective in improving productivity, enhancing communication, and increasing accountability in group projects.

### 3. 2 External Interface Requirements (System features)

When designing the user experience (UX) and user interface (UI) for the task management application, it's important to consider the unique use context and issues faced by the personas who will be using the app. For example, John, the college student, may benefit from a user interface that emphasizes collaboration and communication among roommates to ensure that everyone contributes equally to household chores. On the other hand, Sarah, the stay-at-home mom, may require a user interface that emphasizes delegation and prioritization of tasks among family members.

In addition to these unique use contexts, it's important to ensure that the app's design is consistent with the branding and design standards of the organization, as well as platform design requirements.

Finally, the user interface should be aesthetically pleasing, easy to use, and designed to accommodate users' accessibility needs. This can include clear labeling of functions and features, appropriate font size and color contrast, and other accessibility considerations.

By taking into account the unique needs of the personas and designing a user interface that is efficient, intuitive, and accessible, the task management application can provide a seamless user experience that improves productivity, enhances communication, and increases accountability in group projects.

- **Unique use context and issues:** The task management app is designed to address the specific needs and issues related to task delegation and accountability in group projects. Therefore, the user interface should be optimized for collaboration and communication among team members, with features such as commenting and messaging.
- **Design compatibilities:** The app should be designed to be consistent with the organization's branding and design standards. For example, the color scheme and logo should be consistent with the organization's brand image and style guide.

- **Platform design requirements:** The app should adhere to the design requirements of the platform it is being built for.
- **Look and feel issues:** The user interface should be aesthetically pleasing and easy to use, with clear labeling of functions and features. It should also be designed to accommodate users' accessibility needs, such as font size and color contrast.

Overall, the user interface of the task management app should be designed with the user's needs in mind, to ensure that it is efficient, intuitive, and meets the unique requirements of task delegation and accountability in group projects.

### 3.3 Non-Functional Requirements

There are non-functional requirements that should be addressed including security, performance, reliability, scalability, implementation, maintainability, packaging, legal requirements, budget, team, and usability.

- **Security:** The app should ensure that user data is encrypted and protected from unauthorized access. It should also have measures in place to prevent data breaches, such as two-factor authentication and regular security updates. This is important because users will be entrusting sensitive information to the app, such as task lists and personal information.
- **Performance and reliability:** The app should be designed to handle a large number of users and tasks without experiencing performance issues. It should also be reliable and able to handle unexpected errors or downtime. This is important because users need to be able to access the app and their tasks at all times, without experiencing delays or downtime.
- **Scalability:** The app should be able to grow and adapt to the changing needs of its users without compromising its performance or functionality. This is important because as more users and tasks are added, the app needs to be able to handle the increased workload without slowing down or breaking.
- **Maintainability:** The app should be easily maintainable, with regular updates and bug fixes to ensure that it continues to meet the needs of its users. This is important because users need to be able to rely on the app to work properly, and any issues that arise need to be addressed promptly.
- **Usability:** The app should be designed with usability in mind, addressing unique or specific usability issues that may arise in the context of task management, such as users who work in noisy environments or low light conditions. This is important because users need to be able to easily use and navigate the app to manage their tasks effectively.
- **Legal requirements:** The app should comply with data protection regulations and licensing agreements. This is important to protect both the users and the organization from legal issues or penalties.



- **Budget and team considerations:** The app should be developed within a realistic budget and with a skilled team of developers and designers who are able to deliver the app on time and within budget. This is important to ensure that the app is developed efficiently and effectively, without incurring unnecessary costs or delays.

Overall, addressing these non-functional requirements is crucial to ensure that the task management app is secure, reliable, scalable, maintainable, and easy to use, while also complying with legal requirements and being developed within a realistic budget and timeline.

## PERSONAS



### PERSONAL INFORMATION

- 21 Years
- New York

### EXPERTISE

- Business administration
- Organization
- Project management
- Event planning
- Time management
- Household chores
- Cleaning
- Technology

"Leadership is about motivating others to achieve a common goal."

## JOHN MICHAEL

### Graduate Student

John is a 21-year-old college student who is pursuing a degree in business administration. He is currently living in a shared apartment with three other students. John is known for being a responsible and organized person who always ensures that his living space is clean and tidy.

### GOALS AND MOTIVATION

#### GOALS

- Ensure that everyone in the apartment contributes equally to completing household chores.
- Maintain a clean and tidy living space.
- Avoid conflicts with his roommates.

#### MOTIVATION

- Desire to maintain a comfortable living environment.
- Being responsible and organized.
- Avoiding conflicts with his roommates.

### ATTITUDE TOWARDS TECHNOLOGY

- John is comfortable with technology.
- He is open to using software tools to manage household chores more efficiently.
- He believes that using technology can help him keep track of who has done what chores and ensure that everyone is contributing equally.
- John is always on the lookout for new apps and tools that can make his life easier.

### FRUSTRATION AND PAIN POINTS

- John often struggles to get his roommates to contribute equally to household chores.
- He finds it frustrating when he feels like he's the only one cleaning and maintaining the apartment.
- John is motivated to maintain a clean and tidy living space, but it can be challenging when his roommates don't share the same motivation.
- The lack of contribution from his roommates can lead to conflicts and tension in the apartment.

# SARAH HADID

## STAY AT-HOME MOM

+123-456-7890

123 Anywhere St., Any City

helloareallygreatsite.com

### ATTITUDE TOWARDS TECHNOLOGY

- Comfortable with technology, despite potentially not being as tech-savvy as younger generations.
- Open to learning and trying out new software tools and apps that can help her manage household chores more efficiently.
- Determined to make technology work for her and her family, even if she faces some challenges along the way.

### FRUSTRATION AND PAIN POINTS

- Struggles with getting her family members to contribute equally to household chores.
- Finds it frustrating when she has to do everything herself.
- Her children not taking responsibility for their actions can be a source of stress and frustration.
- Sometimes feels overwhelmed with managing the household and caring for her children.



Sarah is a 35-year-old stay-at-home mom who is responsible for managing her household and ensuring that everyone's needs are met. Her primary goal is to ensure that everyone in the family contributes equally to household chores, and she is motivated by the desire to maintain a clean and organized home and to teach her children the importance of responsibility and teamwork.

### GOALS AND MOTIVATION

#### GOALS

- Ensure that everyone in the family contributes equally to household chores.
- Maintain a clean and organized home.
- Teach her children the importance of responsibility and teamwork.

#### MOTIVATION

- Desire to maintain a comfortable living environment for her family.
- Instilling good values and habits in her children.
- Being responsible and organized.



# MIKE JHONSON

## SMALL SCLAE BUSINESS OWNER

### Personal Information

-  40 Years Old
-  Queens, New Yorks
-  [www.reallygreatsite.com](http://www.reallygreatsite.com)

### Skills and Interests

- Project management
- Financial Management
- Strategic planning
- Software tools
- Collaboration
- Entrepreneurship
- Personal Development

### Frustration and Pain Points

- Struggles to balance business operations and household duties, leading to stress and overwhelm.
- Frustrated by choosing between work and household tasks, feeling like he's not doing enough in either.
- Difficulties managing workload, leading to missed deadlines, unfinished tasks, and low productivity.
- Challenges with communication and collaboration with co-workers, especially if they're not comfortable with technology or working remotely.
- Struggles to identify areas for improvement in business operations due to a lack of data or tools.

### About Me

Mike, a 40-year-old small business owner who is always on the go. As a one-man-show responsible for running his business from home, he is constantly juggling multiple tasks and trying to find the perfect balance between work and home life. Mike's strong work ethic and determination to succeed in both his business and household duties drive him to explore new ways of streamlining his daily routine.

### Goals and Motivation

#### GOALS

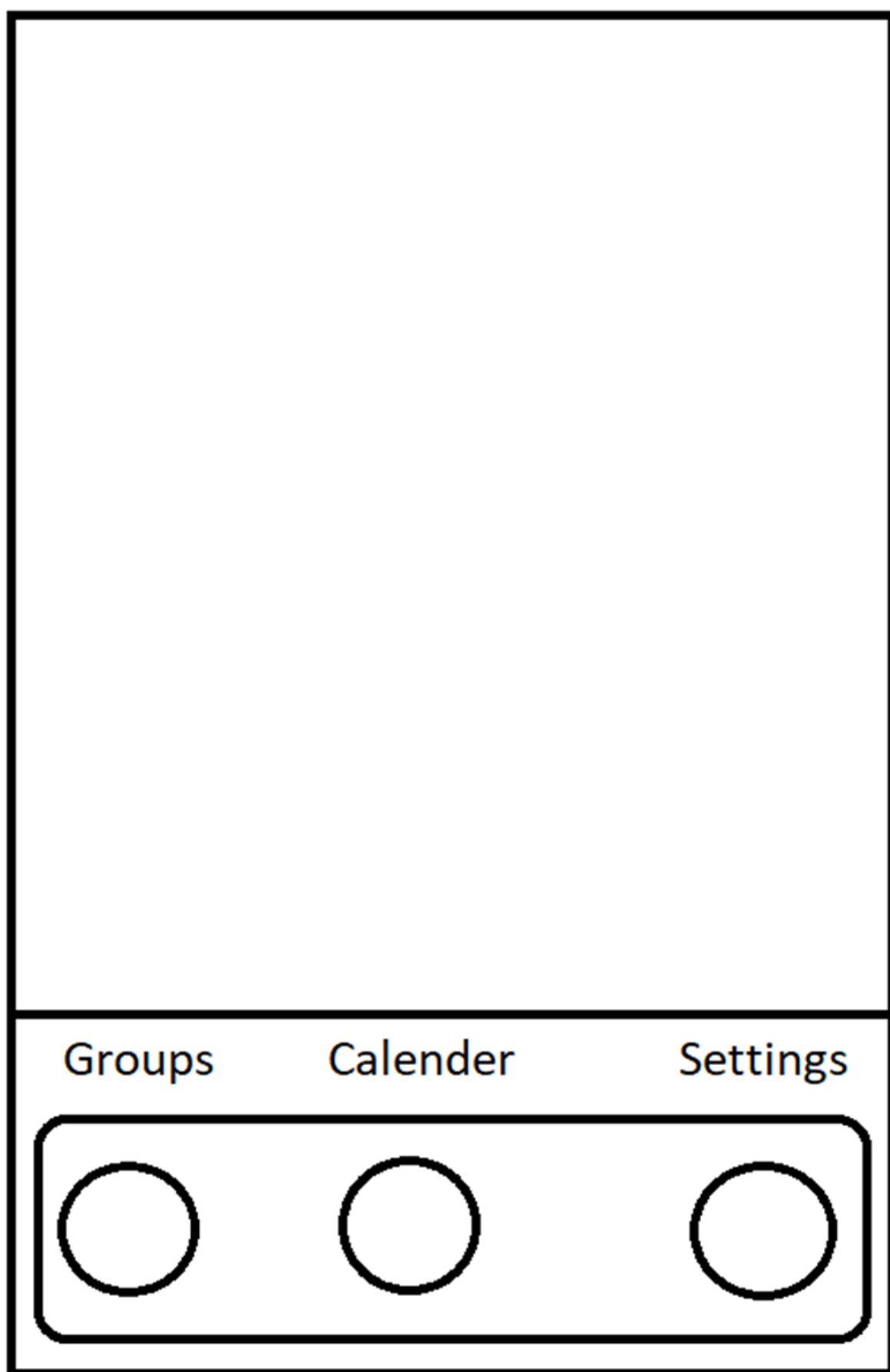
- Improve communication and collaboration with co-workers
- Streamline business operations and achieve greater efficiency
- Prioritize tasks and ensure they are completed on time
- Improve team productivity and performance
- Gain insights into business operations

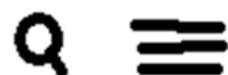
#### MOTIVATION

- Foster teamwork and collaboration
- Manage time more effectively and achieve greater productivity
- Improve business operations and maintain high standards
- Identify areas for improvement and provide necessary support and training
- Make informed decisions based on data and metrics

### Attitude Towards Technology

- Mike is comfortable using technology and software tools to help him manage his business and household duties more efficiently.
- He is willing to invest in technology that can help him achieve greater productivity and success in his business.
- To ensure that everyone on the team can use the duty tracking application effectively, it needs to have a simple and user-friendly interface that is easy to navigate and understand.
- The app should be designed with the user experience in mind, prioritizing ease of use and convenience for all users, regardless of their technical background or level of expertise.





Existing Group list

Only for you

New Group

Groups

Calender

Settings





Calender - (To-do)



Month and Date

\_\_\_\_\_

☐

\_\_\_\_\_

☐

\_\_\_\_\_

☐

To-Do

Checkbox

Un-sync from Calender

Groups

Calender

Settings



Account Details

Scan Code

Account Settings

Notifications Settings

Contact Us

Log Out

Made by \_\_\_\_\_

Groups

Calender

Settings

