

Understanding the Problem

Overview [5pt]

In today's fast-paced environment, people struggle with information overload and task management, often leading to missed deadlines and reduced productivity. Existing productivity tools are either too complex or cluttered with features users don't need. QuickNotes is designed to provide a minimal, easy-to-use interface for managing daily tasks efficiently. A dedicated system like QuickNotes is necessary to help users stay focused, organized, and productive without the distraction of bloated features.

Characteristics of the users of the system [10pt]

The primary users of QuickNotes are individuals who value speed, simplicity, and accessibility in their task management tools. These users are typically tech-savvy and rely heavily on mobile devices for daily productivity. They often juggle multiple responsibilities and seek a tool that reduces cognitive overload rather than adds to it. QuickNotes appeals to those who prefer minimal, intuitive interfaces without the distractions of overly complex features. Whether they are managing assignments, meetings, or personal tasks, these users benefit from the app's quick and efficient functionality designed for fast-paced environments.

Types of people who would use QuickNotes:

- High school and college students
- Anyone seeking a simple, focused task list without unnecessary features

task analysis [30pt]

Tasks performed by users:

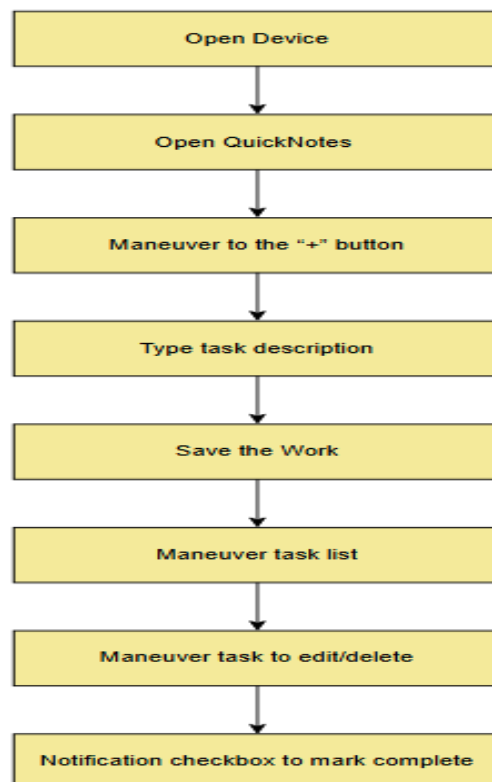
- Creating, editing, and deleting to-do items.
- Marking tasks as completed.
- Assigning priorities or tags.
- Setting due dates or optional reminders.

Characteristics of the Tasks

Users of QuickNotes perform a variety of simple yet essential actions such as creating, editing, and deleting to-do items, marking tasks as completed, assigning priorities or tags, and setting optional due dates or reminders. These tasks are typically brief, with most taking less than a minute to complete. Users frequently return to the app throughout the day to check off items, update existing entries, or add new ones. The nature of these interactions is low in complexity but high in repetition, making speed and clarity essential. Since tasks are often completed while on the move or during short breaks, they need to be as frictionless as possible.

Characteristics of the Task Environment

QuickNotes is used in a wide range of environments, from quiet settings like home or the office to noisier, more chaotic contexts such as public transport or while multitasking during meetings. The app is primarily accessed on mobile devices, meaning screen space is limited and interactions must be optimized for touch input. Because users may only engage with the app for a few seconds at a time, QuickNotes must provide fast response times and intuitive navigation. Additionally, the environment is often time-sensitive and distraction-prone, requiring the design to support quick glances, minimal scrolling, and easily accessible core features.



Analysis of Existing Systems

Currently, many users rely on widely available task management applications such as Microsoft To Do, Todoist, Google Keep, and Notion to organize their daily activities. While these platforms are powerful and feature-rich, our evaluation reveals key challenges in usability and user experience—particularly for individuals seeking a basic, fast, and distraction-free to-do list solution. Many existing systems are designed for power users or project-level management, which can overwhelm users with simpler needs.

Strengths of Existing Systems

- **Cross-Platform Availability:** Most apps are available on Android, iOS, and web, ensuring that users can access their tasks from multiple devices.
- **Cloud Sync and Backup:** Tasks are saved automatically and synced across devices, minimizing data loss and increasing accessibility.
- **Advanced Features:** These systems support complex workflows—such as subtasks, tags, due dates, file attachments, and collaboration—making them versatile for teams and advanced users.
- **Notifications and Reminders:** They provide configurable alerts to help users stay on track and meet deadlines.
- **Integrations with Other Tools:** Many can be connected to calendars, email clients, or virtual assistants, enhancing productivity through ecosystem synergy.

Deficiencies of Existing Systems

Despite their strengths, these systems fall short in multiple areas when evaluated against core HCI principles such as simplicity, accessibility, speed, and cognitive load—especially for users with basic needs.

1. **Overwhelming Complexity for Simple Tasks:** The abundance of features—while powerful—can cause cognitive overload for users who simply want to jot down and check off daily tasks. Users must often navigate through multiple menus or options to perform basic actions.
2. **Slower Performance on Low-End Devices:** Feature-heavy apps may perform poorly or load slowly on budget or older smartphones, a common issue in emerging markets or for students on limited hardware.

3. **Unnecessary Features for Solo Users:** Collaboration tools, team projects, or advanced tagging systems add visual and functional clutter that individual users may never use.
4. **Distracting Interfaces:** Visual design is often dense or busy, with too many buttons, menus, and customization options that detract from the core goal of fast task entry and completion.
5. **Lack of True Minimalism:** Even so-called “lightweight” options like Google Keep or Microsoft To Do may still include multiple feature layers and integrations that distract from basic usage scenarios.

Usability Criteria and Evaluation Metrics

Simplicity: QuickNotes should offer a clean and uncluttered interface that allows users to complete core tasks—such as adding or marking a task as done—with minimal steps.

Measurement: This can be evaluated by counting the number of clicks or taps required to perform basic actions like adding, editing, or completing a task.

Learnability: The app should be easy to understand for first-time users, enabling them to navigate and perform basic functions without needing tutorials or assistance.

Measurement: This can be assessed by tracking the percentage of new users who successfully complete core actions on their first try and how long it takes them to do so.

Efficiency: QuickNotes should allow users to manage their tasks with speed and minimal friction, supporting quick entries and updates even during multitasking or brief usage sessions.

Measurement: The average time it takes users to add, edit, or mark a task as completed will be recorded to determine efficiency.

Satisfaction: Users should have a positive emotional experience with the app, finding it pleasant, intuitive, and stress-free to use on a regular basis.

Measurement: User satisfaction can be measured through post-task surveys such as the System Usability Scale or brief Likert-scale questionnaires.

Error Prevention: The interface should be designed to minimize the chance of mistakes, such as accidental deletions or edits, by using clear labels, confirmation prompts, and intuitive icons.

Measurement: During usability testing, the number of incorrect or unintended user actions will be tracked to identify problem areas.

Discussion of the implications [10pt]

The findings suggest users need a fast, focused, and distraction-free system for managing tasks. The minimal design must prioritize core actions and eliminate unnecessary clutter. Context-aware design is crucial as users may have only seconds to interact with the app, so visual clarity, accessibility, and response time are vital. Moreover, emotional impact matters: QuickNotes should reduce mental load, not increase it, fostering a feeling of calm control over one's day. This insight goes beyond usability metrics, touching on the emotional and behavioral resonance of the product.