TaskMaster - React Native To-Do App

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Overview

TaskMaster is a **React Native To-Do app** designed to help users efficiently manage their daily tasks. The app provides a structured interface with multiple tabs, robust authentication, task notifications, and a smooth workflow. It uses **Redux** for state management and **AsyncStorage** to persist tasks locally, ensuring that users' data remains consistent across sessions. Push notifications and reminders help users stay on top of their tasks without missing deadlines.

Authentication

The app provides secure login [Figure 2] and signup [Figure 1]functionality with **form validation**, ensuring that users enter valid email addresses, strong passwords, [Figure 3] and complete required fields. Additionally, it integrates **Google Sign-In** [Figure 4], offering a convenient and secure alternative for logging in. This ensures that users can quickly access their tasks while maintaining account security.

Home Tab

The Home tab [Figure 5] provides a **summary of tasks**, including total tasks, completed tasks, and pending tasks, giving users an overview of their daily workload. A **draggable Add button** allows users to quickly create new tasks. When a task is added, the app triggers an **instant push notification** to confirm creation and schedules a **reminder notification 2 minutes ahead** to ensure timely completion.

History Tab

The History tab [Figure 6] categorizes all tasks as **Active** or **Completed**, allowing users to track their progress and review past activities. This feature helps in understanding productivity patterns and maintaining accountability.

Profile Tab

The Profile tab [Figure 9] displays the user's account information, such as email and profile details, and provides a **logout option** for secure session management. Users can view and verify their account information at any time.

Task Features

Each task item supports multiple operations: users can **view details**, **edit**, **delete**, and **mark tasks as done** [Figure 12]. These actions are reflected immediately in the app, keeping the task list accurate and up-to-date. Notifications and reminders ensure that users stay informed about their tasks.

State Management and Notifications

TaskMaster uses **Redux** to manage the global state of tasks efficiently and **AsyncStorage** to persist tasks locally between app sessions. Push notifications provide immediate feedback when tasks are added [Figure 15], while scheduled reminders notify users 2 minutes ahead of a pending task [Figure 16], improving task completion rates. Also, while clicking the notification, it navigates to detail page.

Technologies Used

React Native, Firebase Authentication, Google Sign-In, Redux, AsyncStorage, React Native Push Notifications.

Conclusion

TaskMaster combines secure authentication, efficient task management, notifications, and a clean user interface. The app's structured design and reliable reminder system help users stay organized and productive in managing their daily tasks.

Figure 1: Signup Form with Validation and Google Sign-In

Figure 2: Login Form with Validation and Google Sign-In
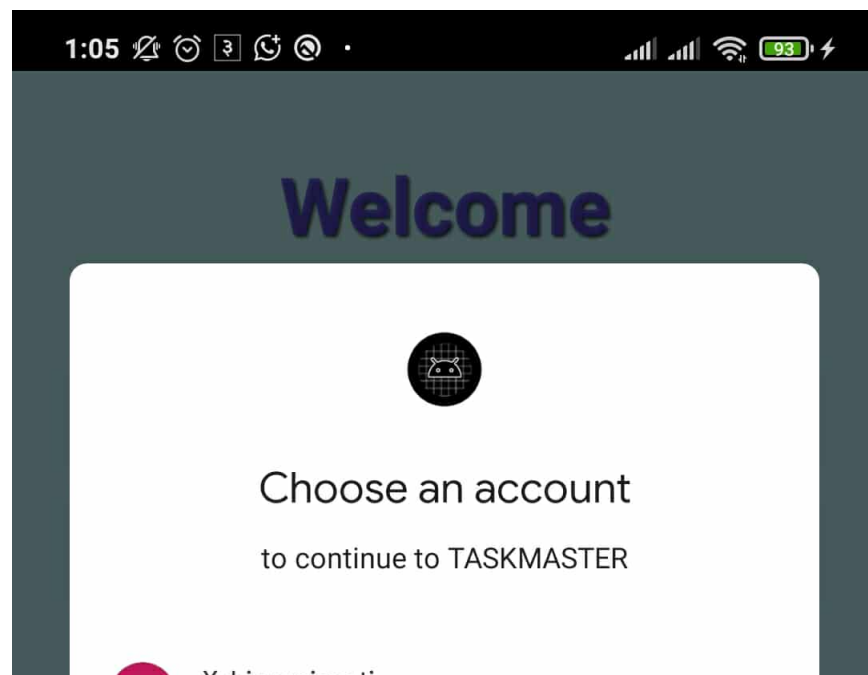
Figure 3: Form showing Validation
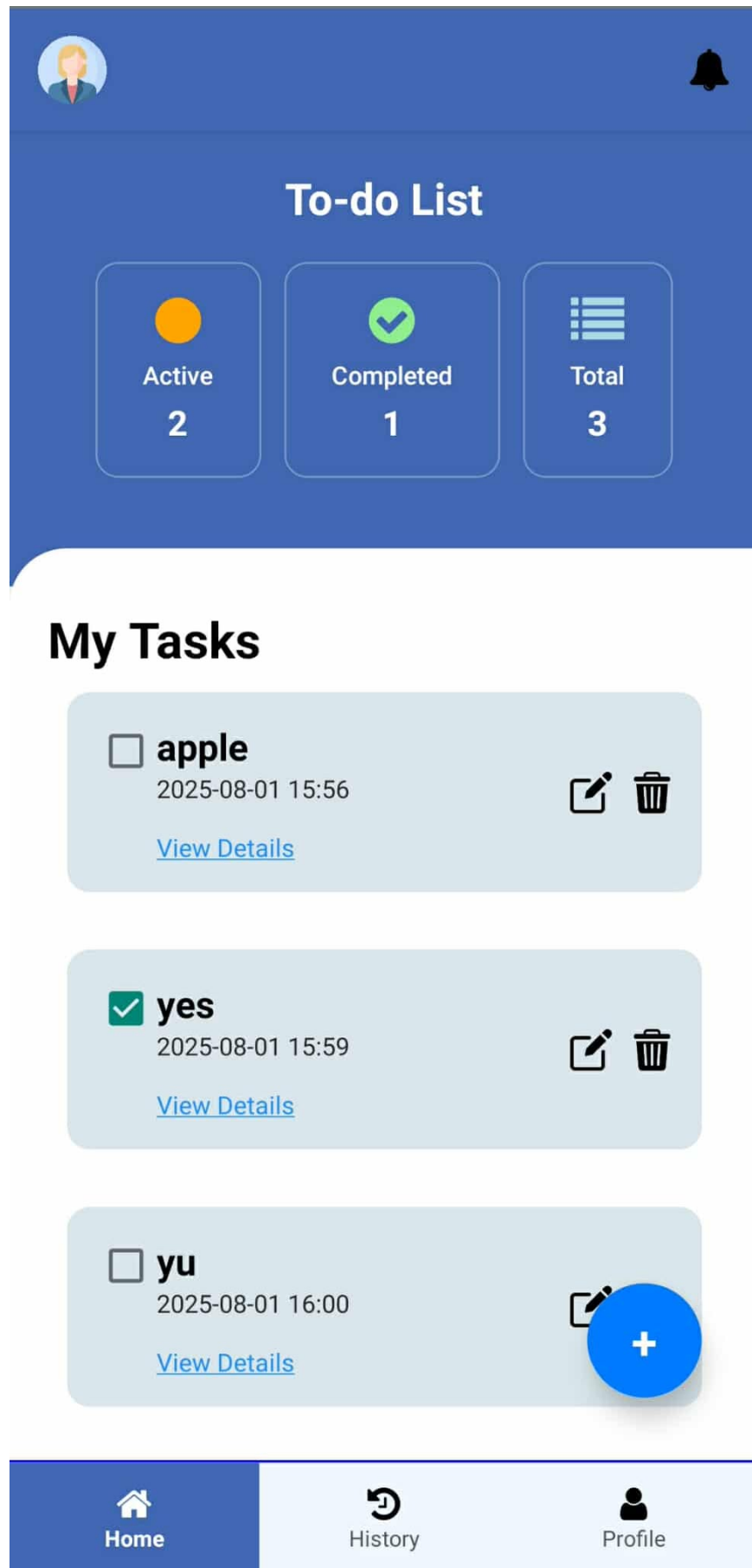
Figure 4: Google sign in

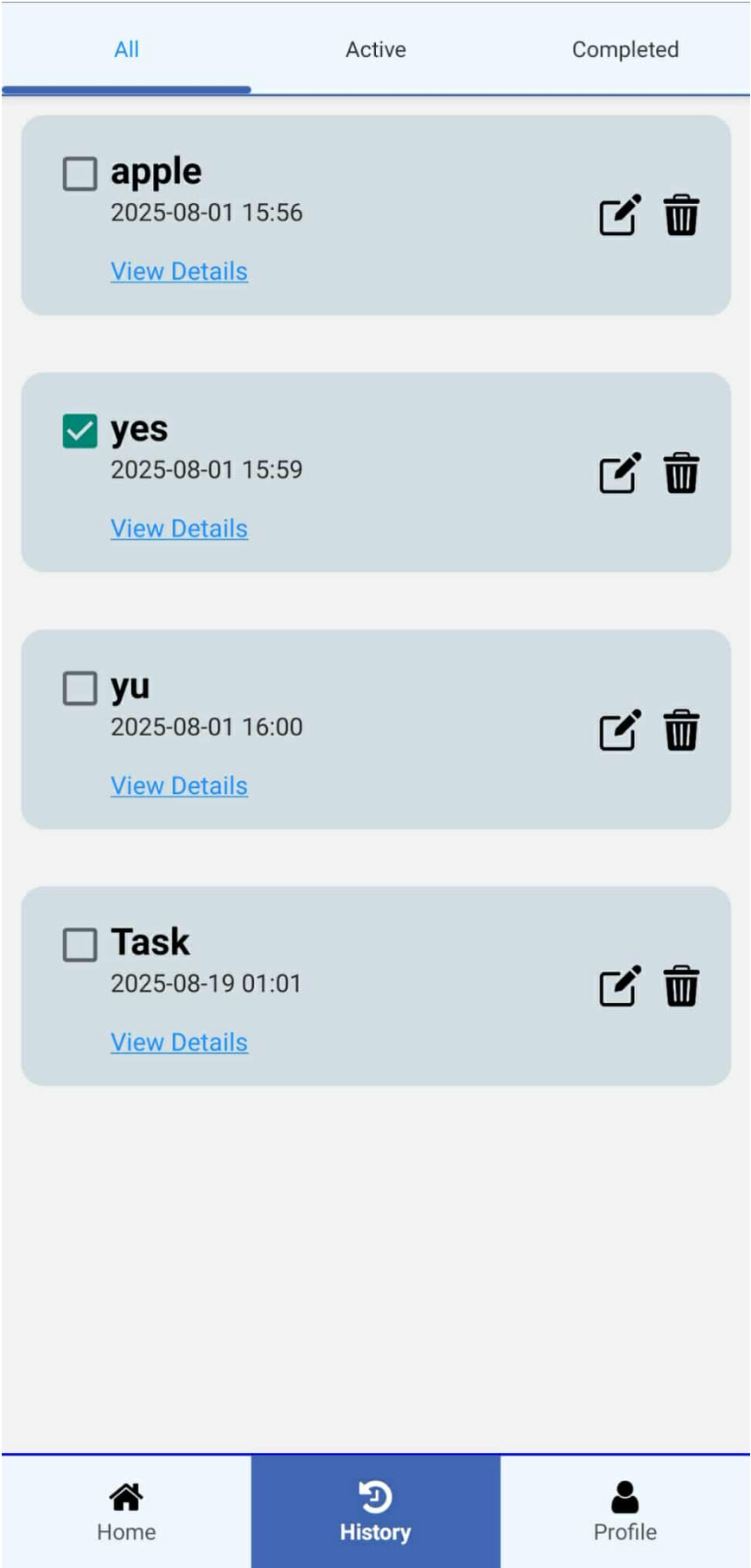Figure 5: Home Tab showing task summary and Add button
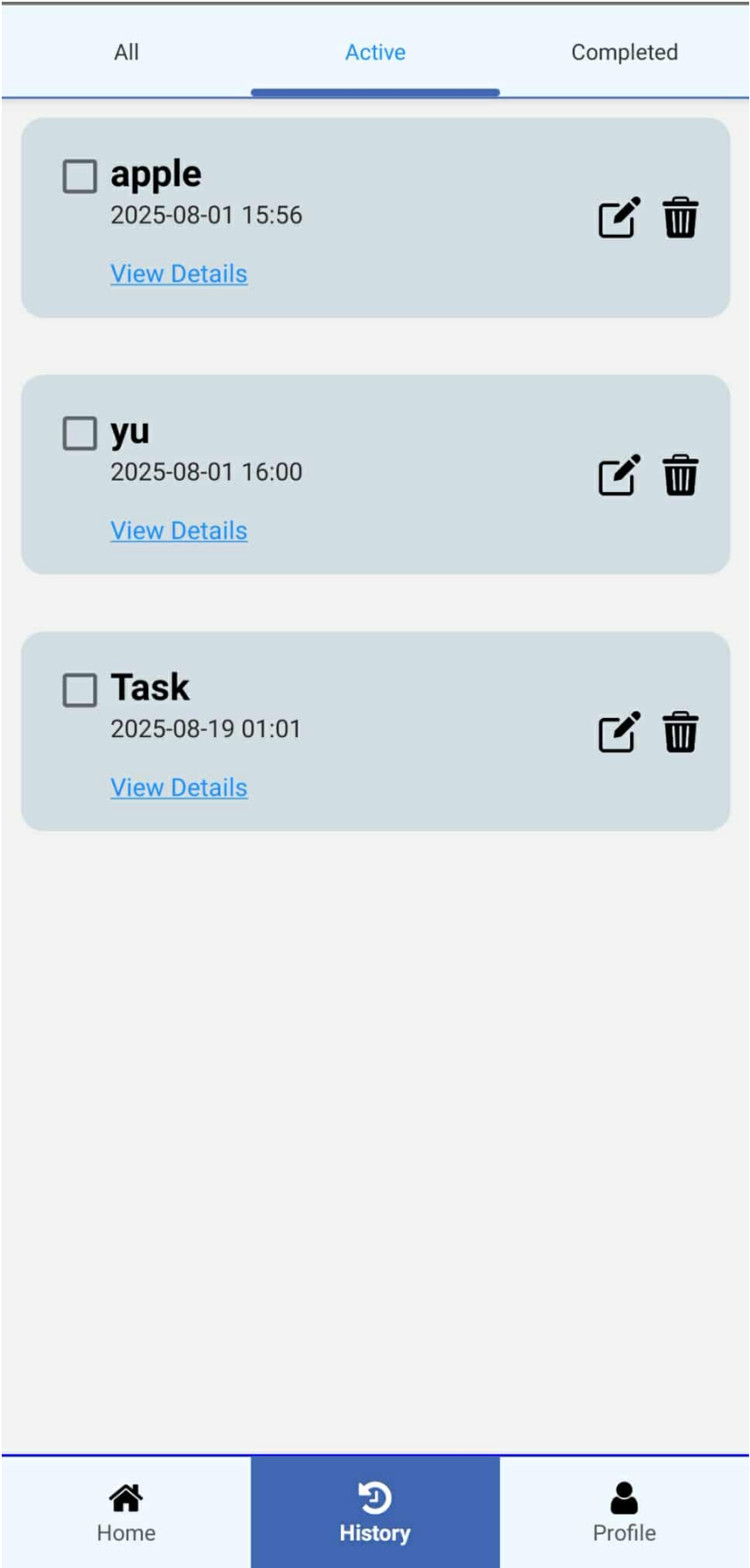
Figure 6: History Tab displaying all tasks
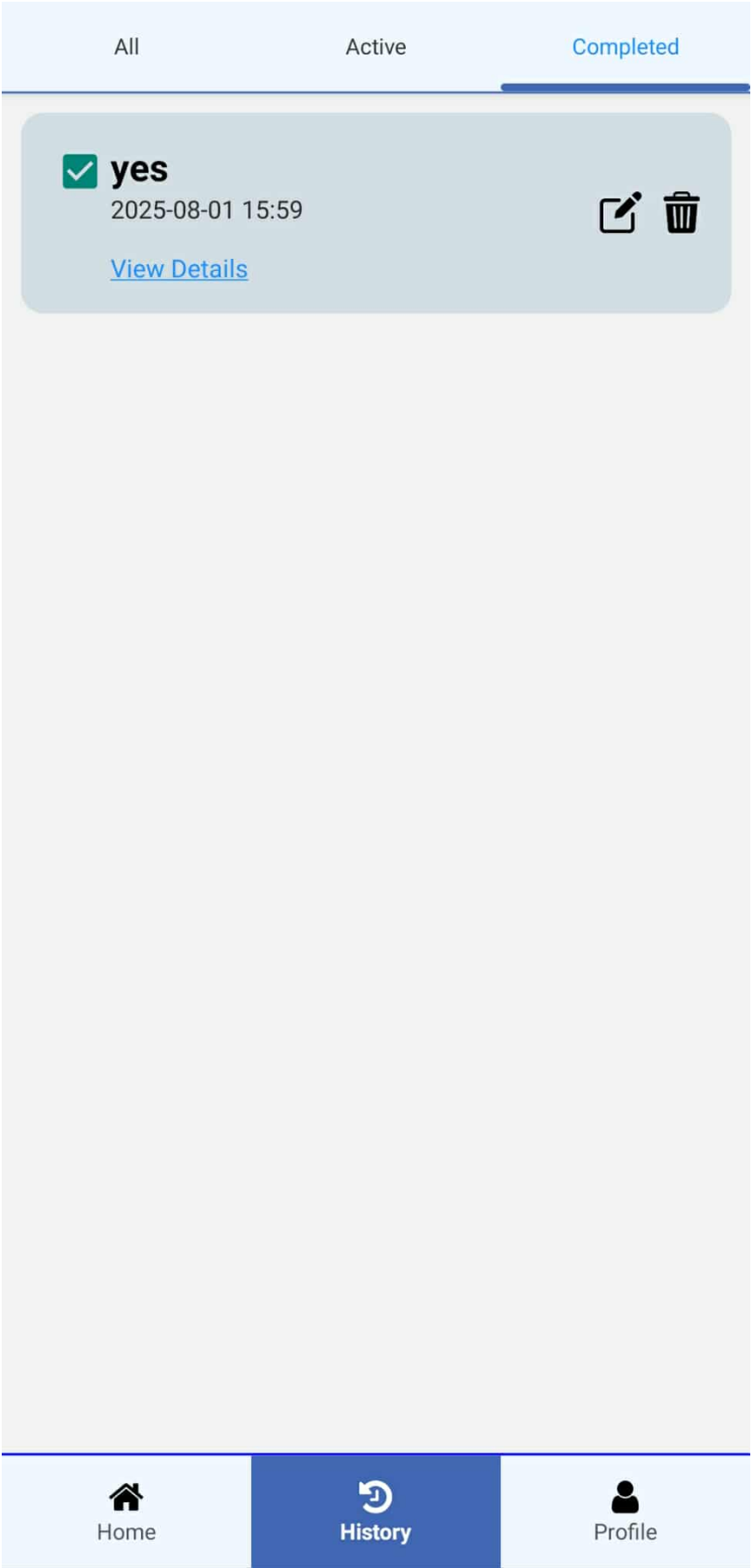
Figure 7: History Tab displaying Active tasks

Figure 8: History Tab displaying Completed tasks

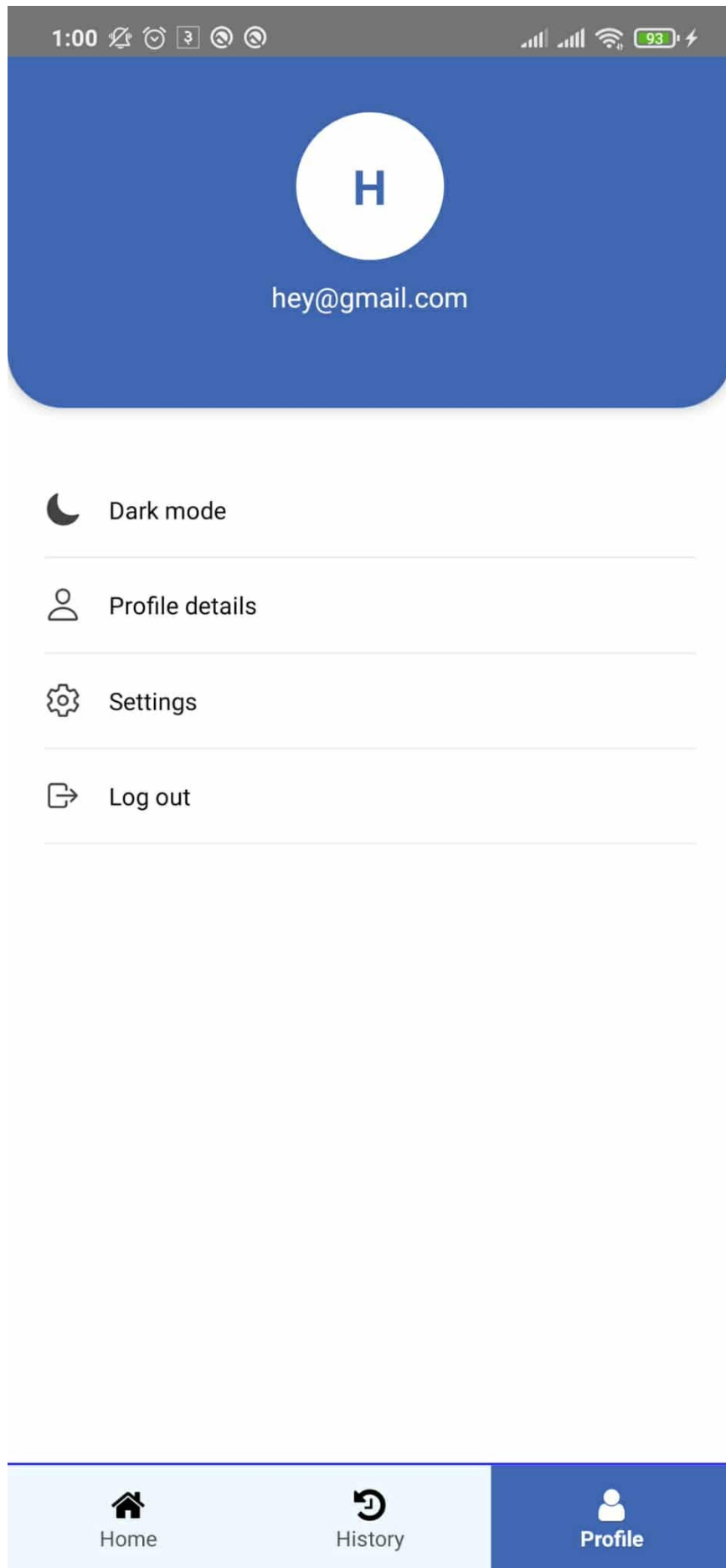Figure 9: Profile Tab showing user details and logout

Figure 10: Draggable add button open the task form
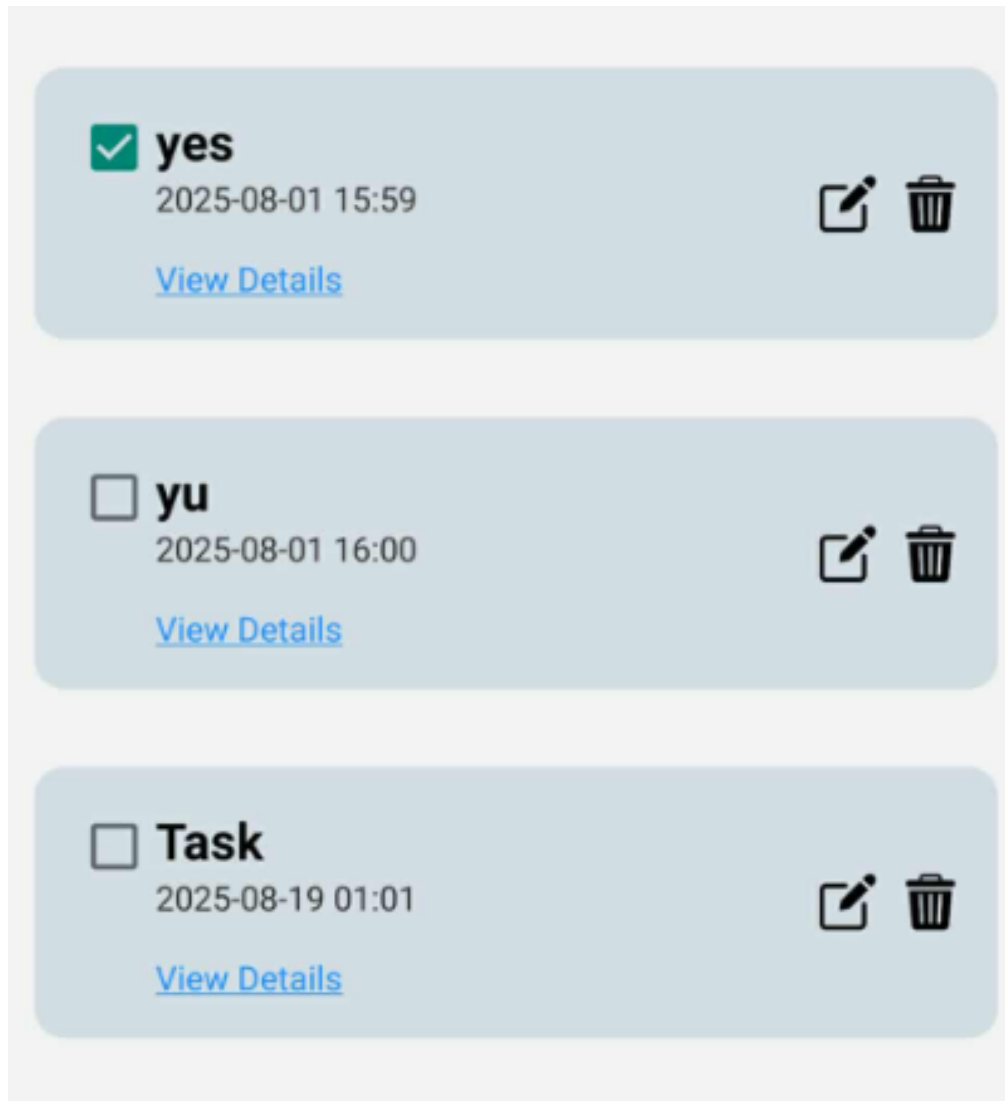
Figure 11: Task added notification

Figure 12: Task item with edit, delete, view, and mark as done features

← DetailsTask

Title:

Task

Date:

2025-08-19 01:01

Description:

Taskmaster Taskmaster

Figure 13: Detail page of task with description
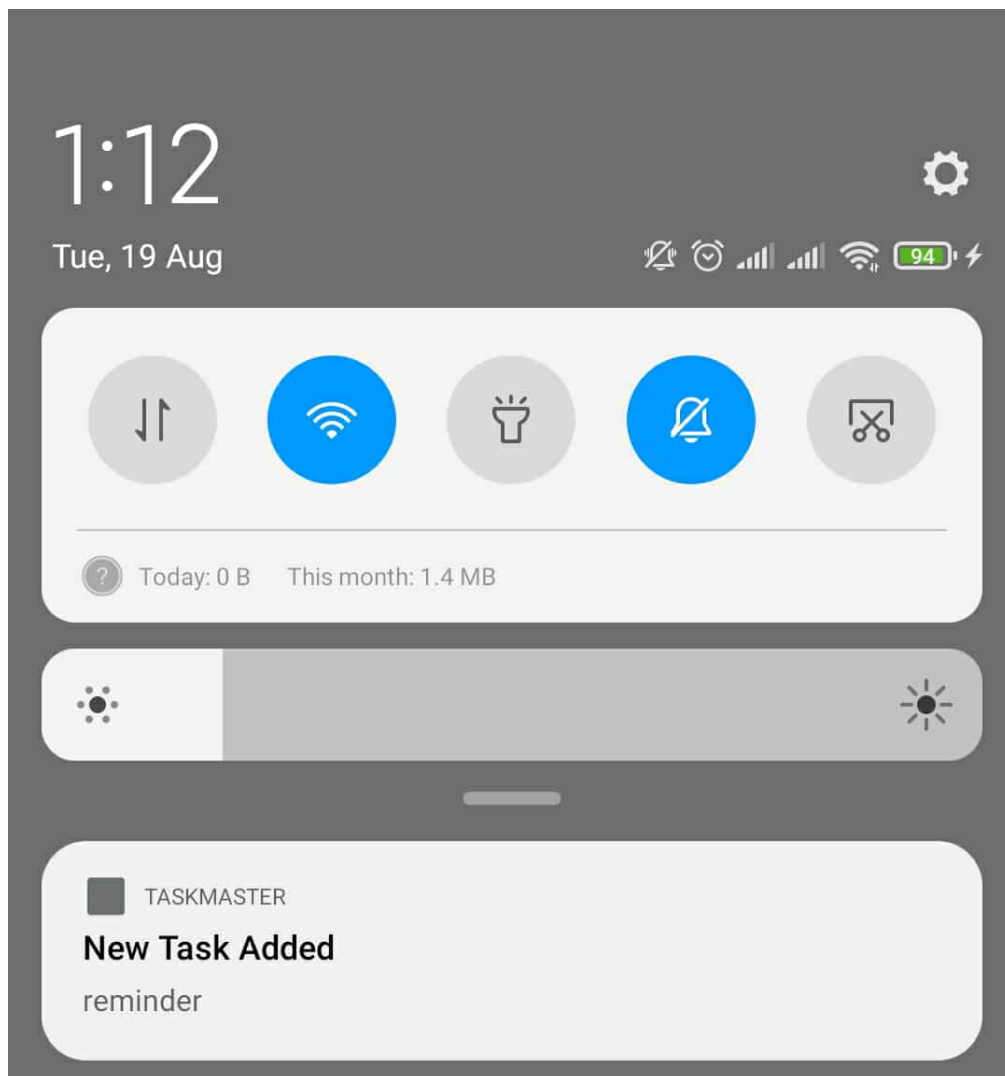
Figure 14: showing reminder task add form
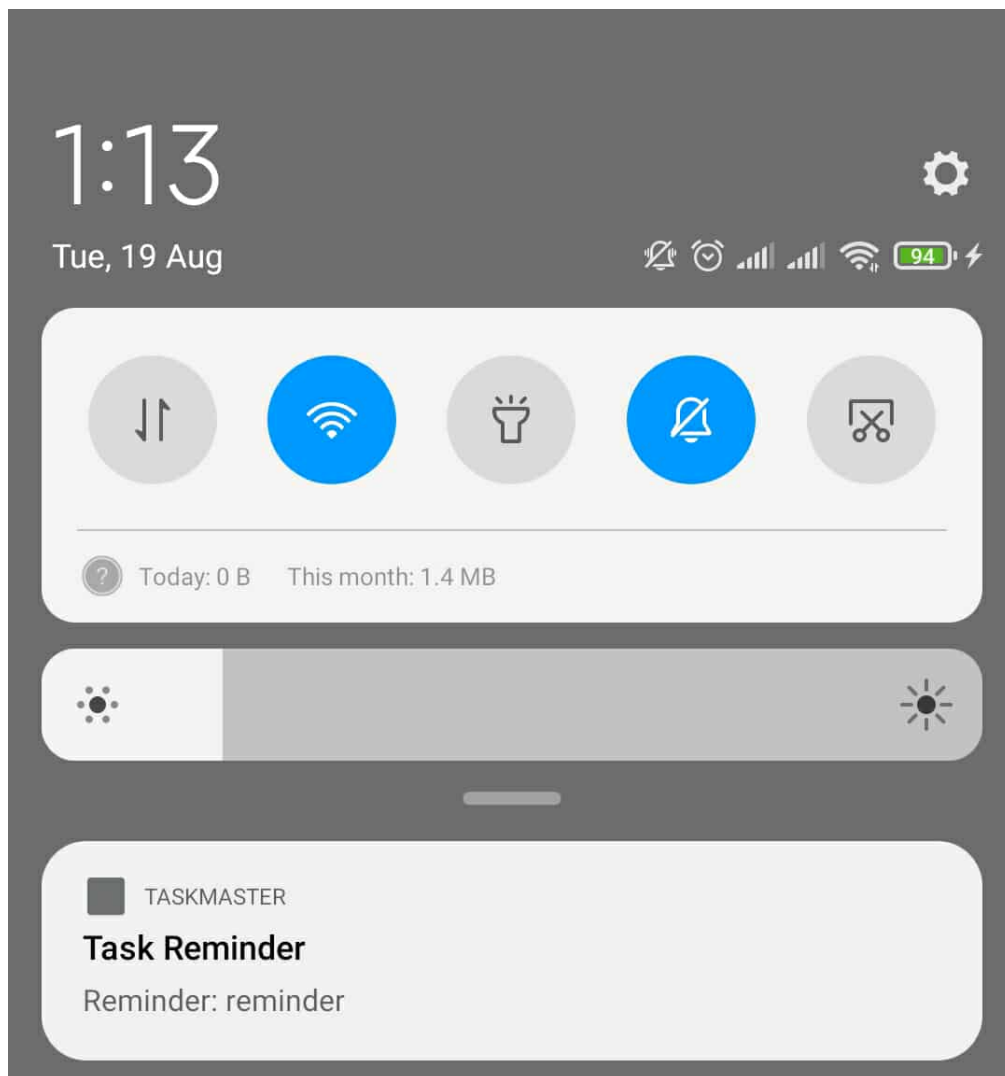
Figure 15: notification of reminder task add

Figure 16: 2 minute ahead renimder notification of reminder task