Software Design Document

Smart Remind Mobile Application

Revisions

Version	Primary Author	Description of Version	Date Completed
1.0	Darren Ravichandra	Initial Release	4/4/2024

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1.1 Purpose
The Software Design document describes the architecture and design for a checklist timer based application. Checklist Timer is designed to help the user plan out their daily life and the things needed to complete those tasks. It is also equipped with a timer which allows the user to receive haptic feedback when the task is nearing the allocated time set for it.

1.2 Scope
This document describes the implementation details of the Smart Remind Mobile Application. Smart Remind will consist of six major components:
1. User Interface (UI): This component will handle the presentation layer of the application, including the design of the checklist interface, timer controls, and user settings.

2. Checklist Management: Responsible for managing the creation, editing, and deletion of checklists. This component will also handle the storage and retrieval of checklist data.

3. Timer Functionality: This component will implement the timer feature, allowing users to set a duration for each task in their checklist. It will provide alerts and haptic feedback as tasks approach their allotted time.

4. Notification System: Manages the delivery of notifications to remind users of upcoming tasks and notify them when a task's time is up.

5. Data Persistence: Handles the storage and retrieval of user-generated data, including checklists, task durations, and user preferences.

6. Settings Management: Allows users to customize the application's behavior, including notification preferences, haptic feedback settings, and UI themes.

1.3 References

2.1 Interface Description

The application, when opened, will prompt the user to add a task. The interface will provide intuitive controls for adding tasks, setting durations, and managing checklists.

2.2 Front-end Components

Task input form: Allows users to enter task names and durations.
Checklist view: Displays the list of tasks with options for editing and deleting.
Timer display: Shows the countdown timer for each task.
Notification display: Provides alerts and notifications for upcoming tasks.

2.3 Back-End Components

Data storage: Manages the persistent storage of user-generated data, including checklists and task durations.
Timer logic: Controls the countdown functionality and triggers notifications when tasks are due.
Notification service: Sends push notifications to the user's device to alert them of upcoming tasks.
User authentication: Handles user login and authentication for accessing personalized data.

2.4 User Interfaces (GUI)

Task entry screen: Where users can input task names and set durations.
Checklist view: Displays the list of tasks with options for editing, deleting, and starting timers.
Timer screen: Shows the countdown timer for the current task with options for pausing and resetting.
Settings screen: Allows users to customize notification preferences, haptic feedback settings, and UI themes.

3.1 Icon Design