Loop Habit Tracker

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Assignment 1

1 Introduction

This document contains a detailed summary of the functional and non-functional requirements for the "Loop Habit Tracker" application, which is intended to assist users in improving productivity by forming and tracking habits. The software aims to help users achieve their goals by organizing their daily routines and tracking performance trends over time. The following sections define the system's basic functions, including required functionalities and non-functional components that ensure the system runs quickly, securely, and is expandable for future upgrades.

2 Requirements

2.1 Functional Requirements

2.1.1 Track Habits

The system shall allow users to track habits: Users can add, change, and delete habits. Each habit can be set for a particular time interval (daily, weekly, or customized).

2.1.2 Notifications

The system shall send notifications to remind users of their habits: Users can set reminders, including selecting specific times of the day or week for notifications.

2.1.3 Performance Reports

The system shall generate performance reports: The system will create reports illustrating users' progress over time, such as completed habit streaks, skipped days, and overall completion rates.

2.1.4 Account Management

The system shall allow users to create accounts and log in: Users should be able to create new accounts using their email.

2.2 Non-functional Requirements

2.2.1 Optimal Performance

The system shall provide optimal performance: The application must be responsive, with a response time not exceeding two seconds under normal conditions.

2.2.2 Compatibility

The system shall ensure compatibility across platforms: The application must be fully compatible with iOS, Android, and major web browsers.

2.2.3 Usability

The system shall prioritize usability: The user interface must be intuitive, allowing users to navigate the application easily. Clear instructions must be provided for new users.

2.2.4 Data Security

The system shall maintain secure data storage: Users' data must be encrypted both in transit and at rest to protect sensitive information.

3 Program Tasks

3.1 Capturing Progress

Enable users to chronicle their daily endeavors with ease, watching their journey unfold with every entry.

3.2 Visualizing Achievements

Create visualizations, such as dynamic charts and progress bars, to show users' growth over time.

3.3 Offering Insights

Provide insights into behavioral patterns, revealing trends and offering nudges for improvement.

3.4 Setting Aspirations

Allow users to set both short-term milestones and long-term goals, helping them achieve personal aspirations.

3.5 Encouraging Rewards

Introduce reward systems to celebrate users' achievements and make the habit-tracking process enjoyable.

Assignment 2

4   Purpose of the Application

The "Loop Habit Tracker" is designed to help users improve productivity by developing and monitoring habits. The application addresses the need to organize daily routines and track progress over time, helping users achieve personal goals. Its primary function is to streamline habit management by allowing users to log habits, set reminders, and receive notifications while generating performance reports to visualize progress.

5   Survey Results

Q1: Do you face challenges in tracking your daily or weekly goals?
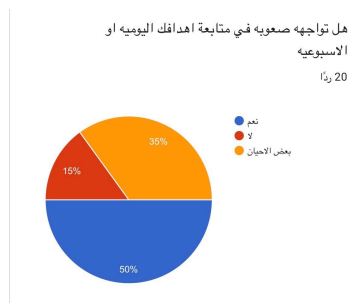

Figure 1: 50% of participants experience consistent difficulty in adhering to daily goals, while 35% encounter this intermittently, suggesting a demand for habit-tracking tools.

Q2: If you have used habit-tracking applications, do you think they have helped you organize your daily habits and acquire new, positive habits?
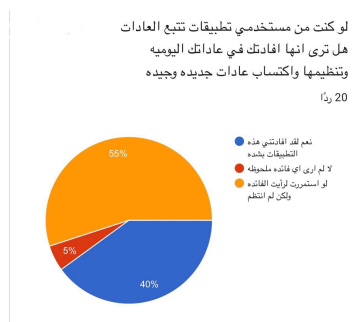

Figure 2: 55% of users believe habit-tracking tools will help achieve their goals, while 40% already see benefits. Only 5% found no benefit.

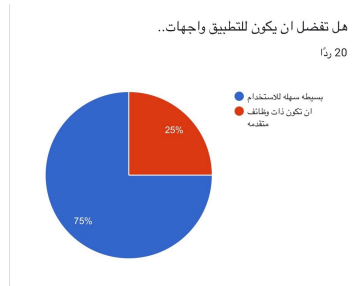**Q3:** Do you prefer a simple, easy-to-use interface or more advanced functionality?

Figure 3: 75% prefer simple, easy-to-use interfaces, while 25% favor more advanced functions.

Q4: How do you think a habit-tracking application could improve your productivity?
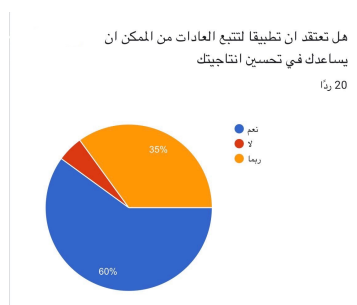

Figure 4: 60% of non-users believe a habit-tracking app could enhance productivity, while 35% were uncertain, and 5% were skeptical.

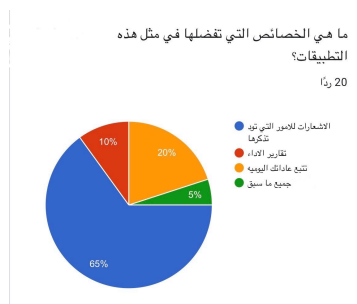**Q5:** What features do you find most valuable in habit-tracking applications?

Figure 5: 65% prefer receiving notifications as reminders, 20% prefer tracking daily habits, and 10% prefer performance reports.

5.1 Similar Applications

Several similar habit-tracking applications already exist:

- **Habitica:** A gamified habit tracker that rewards users with virtual incentives.

- **Streaks:** A simple habit tracker for managing daily tasks with a minimalist design.

5.1.1   Advantages

- **Habitica:** Engages users with gamification, making the process enjoyable.

- **Streaks:** Offers a simple interface focused on ease of use.

5.1.2   Disadvantages

- **Habitica:** Gamification may overcomplicate the experience for those seeking simplicity.

- **Streaks:** Limits the number of habits that can be tracked simultaneously.

5.1.3   Comparison with Loop Habit Tracker

"Loop Habit Tracker" provides robust performance tracking and reporting capabilities, surpassing simpler apps like "Streaks." It may lack Habitica's gamification but focuses on detailed analytics and productivity, offering a comprehensive tool for long-term habit monitoring.

References