AI- Driven Digital Wellbeing Application

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***Abstract*—Mobile phones play an important role in our daily lives and act as essential tools for communication, productivity and entertainment. However, the convenience you provide is often caused by overuse, distractions, and negative effects on your mental and physical health. Digital Wellbeng. The Application Project focuses on promoting a healthier relationship with technology by helping users consciously promote and balanced digital habits. By using a variety of intensive modes such as work, education, health, and social applications, individuals can consciously manage screen time, reduce distractions, and improve overall. The goal is to ensure that technology improves life rather than wasting itself. In other words, users can engage both the digital and physical worlds more wisely.**

***Index Terms*—Artificial Intelligence (AI), Digital Wellbeing Personalized Interventions, User Behavior Analysis.**

I. INTRODUCTION

In today's digital age, promoting awareness and control over technology usage is essential for maintaining a healthy balance between screen time and real-life interactions. By offering multiple modes—such as focus, education, and health—users can tailor their device habits to align with their personal goals, whether it's minimizing distractions, enhancing learning, or prioritizing well-being. These features empower individuals to take charge of their screen habits, reducing unnecessary interruptions and fostering greater productivity. Ultimately, mindful technology usage leads to improved mental and physical health, ensuring that devices serve as tools for enrichment rather than sources of constant distraction. Overuse of mobile phones leads to dependency and health issues. While the data is controversial, most scientists agree that there is a specific threat of using too many mobile phones. It has been reported that people who call several hours a day defeat brain tumors 50% more frequently. However, we don't know how much they rely on mobile phones or what is being overused. There are certain harmful health effects that can be used by medium-level mobile phone use.

II. LITERATURE REVIEW

The integration of artificial intelligence (AI) in promoting digital well-being has attracted considerable attention in recent years. The research in this literature explores basic concepts, existing tools and challenges associated with AI-controlled digital welfare systems. Digital well-being is associated with a state that creates a balanced relationship with technology with negative effects such as digital addiction, mental fatigue, and reduced productivity. This study highlights that longer, unregulated screen periods can have adverse mental health effects, including anxiety, depression, and poor cognitive performance (Smith et al., 2021). Tools that monitor and regulate technology use are important to address these challenges. Digital welfare focuses primarily on border screening and setting up boundaries, using tools such as Apple's Screen Time, Google's apps, and third-party providers such as Rescuetime. These solutions provide basic features such as app monitoring, daily limits, and focus mode. Some apps include mindfulness practices and provide relaxation exercises or notifications to promote breaks. However, most existing solutions lack AI-controlled personalization and real-time behavioral analysis. It also does not address this project by dynamically adapting to user needs or providing comprehensive insight into the impact of digital habits on general productivity and mental health.

III. METHODOLOGY

The suggested digital wellbeing system follows a modular design, combining various components to encourage healthier and more conscious usage of digital devices. The procedure incorporates six fundamental components:

A. Usage Monitor

Objective: monitor the duration of usage for various applications by the user. The Android's usage statistics manager utilizes the usagestatsmanager api to gather daily or weekly usage data. The tracker presents app usage data in the form of charts or lists, making it simple to understand and analyze. It assists users in reflecting on their screen time usage and recognizing patterns of excessive digital consumption.

B. Keyword Filter

The objective is to restrict access to content that includes certain harmful or distracting keywords. A background service scans the text that users type or the web pages they visit for any prohibited keywords. When the system detects a potential threat, it either prevents further input or alerts the user to the situation. User preference or preset filters can be used to update custom keyword lists.

C. View/reel Blocker

The objective is to limit short-form video content, such as Instagram reels or YouTube shorts, in order to reduce distractions. Package manager and accessibility service are utilized to keep track of screen contents and app states. When video content is identified in blocked categories, a notification or overlay is displayed to discourage its viewing. The app has the option to either force-close or pause the source application.

D. App Blocker

The objective is to temporarily limit access to specific applications, such as games or social media, during study or focused periods. User selects apps to block via a multi-choice interface. A timer-based lock system restricts the launch of blocked apps by utilizing accessibility permissions. Apps are automatically unlocked once the specified time period has elapsed or after the user has successfully authenticated themselves.

E. Focus Mode

Assist users in maintaining focus for a designated duration by controlling their surroundings and notifications. Activates do not disturb (dnd) mode using notificationmanager. Restrict access to specific apps using the app blocker module. Displays countdown timer and motivational quotes to maintain focus. Disables phone vibration, notifications, and system sounds temporarily.

F. Chatbot Assistant

Create a chatbot that offers mental wellness support, assists with habit formation, and provides instant motivation. By utilizing predefined responses and nlp (natural language processing) patterns, you can enhance the functionality of dialogflow or tensorflow lite (optional). Users can seek advice on mental health, share tips for staying focused, or inquire about the app's features and functionalities. The chatbot provides recommendations tailored to the user's query category, such as focus, stress, study, and more.

IV. CONCLUSION

Increased reliance on digital devices has reduced mental focus, productivity, and general wells for the average user. This study addresses these concerns by proposing and developing a comprehensive digital well-being Android application that combines several modules, including usage tracking, app blocking, keyword and role filtering, focus modes, and integrated chatbot assistant. Android System - API Integration - Applications such as Usage Status Managers, Accessibility Service, Notification Manager provide users with dynamic tools to regain control over their digital habits. The inclusion of chatbots allows for interactive and supportive solutions, especially for users who deal with issues of motivation and mental fatigue.

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