

# AppLimit Monitor for Smartphone Addiction

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## Abstract :

Smartphone addiction has become a pressing issue in modern society, with millions of people around the world struggling to manage their screen time effectively. In response to this growing problem, we have created the App Limit Monitor app, which aims to help users monitor and manage their smartphone usage. This research paper will examine the key features of the App Limit Monitor app, including how it helps users manage smartphone addiction and screen time. Additionally, the paper will explore the different settings available for users to customize their screen time limits. By analyzing the effectiveness of this app, this research aims to shed light on the potential of technology to help individuals overcome smartphone addiction and establish healthier screen time habits.

The aim behind design this App Limit Application is to promote better digital lifestyle and it will also helpful for people to gain control over their digital habits to achieve a healthy & balanced lifestyle.

**Keywords:** App Limit Monitor, screen time, Smartphone use, Setting limits, Digital addiction, Digital well-being.

## INTRODUCTION:

App Limit Monitor" is an android application is created to address the common problem of excessive screen time and digital addiction. By giving users the means to control and keep an eye on how they use their smartphones, it aims to empower them and encourage their digital well-being. This programme uses a creative, user-centered strategy to empower people to take charge of their online behaviours. The programme provides a wide range of utilities, including functions like time limits for particular apps and usage tracking.

Users may track their usage patterns over time and establish personalised usage limits for their apps. The "App Limit Monitor" project's focus on digital well-being and conscientious smartphone use helps to foster a culture of responsible technology use. By giving people the ability to control how they utilize technology. The application seeks to encourage a better lifestyle and lessen the harmful consequences of excessive screen time. All things considered, the "App Limit Monitor" is a useful tool for anyone trying to strike a balance in the modern digital age between their use of technology and their personal wellbeing.

## ***Problem Statement***

The "App Limit Monitor" project is a forward-thinking initiative designed to address the pervasive issue of excessive screen time and digital addiction in today's society. This project aims to create an innovative and user-centric mobile application that empowers individuals to regain control over their digital habits, ultimately fostering digital well-being. By developing a comprehensive toolset, the project seeks to strike a harmonious balance between technology usage and personal well-being.

## ***Literature Survey:***

### **1)The App Restriction feature for Addiction to Smartphones**

App Limit Monitor is an app that have ability to prevent and block users when they've spent too much time on particular apps, helping to curb excessive smartphone usage. Additionally, it gives users the ability to set their own usage policies and temporarily disable access to certain frequently used apps.

It also has a function that lets users put their devices away without losing the capacity to handle important issues. It allows users to put limits on particular apps or their device usage for a specified period of time, and it provides real-time insights about smartphone usage habits. Users can set limitations on particular apps for predetermined periods of time in each of these apps.

### **2)Digital Well-Being and Screen Time Management**

Many people can become addicted to their smartphones, which can lead to various problems like mood swings, feeling like you need the phone all the time, and even having trouble stopping using it. Some studies suggest that too much smartphone use might affect how our brains work, our physical health, and our mental well-being. People who use their smartphones too much might start to feel like they really need to use it all the time, and when they try to stop, they might feel restless or anxious. However, not all studies agree on whether using a smartphone or spending a lot of time on screens is good or bad for our health. This review aims to collect information on how smartphone addiction might affect the health of adults.

### **3) Mobile App Development and Usability:**

The usability of a mobile app is just as important as its features and functions in determining its success. This article examines the critical connection between usability and mobile app development, emphasizing how developers may produce applications that function flawlessly and offer a pleasurable user experience.

### **4) Screen Time Management Apps and Solutions:**

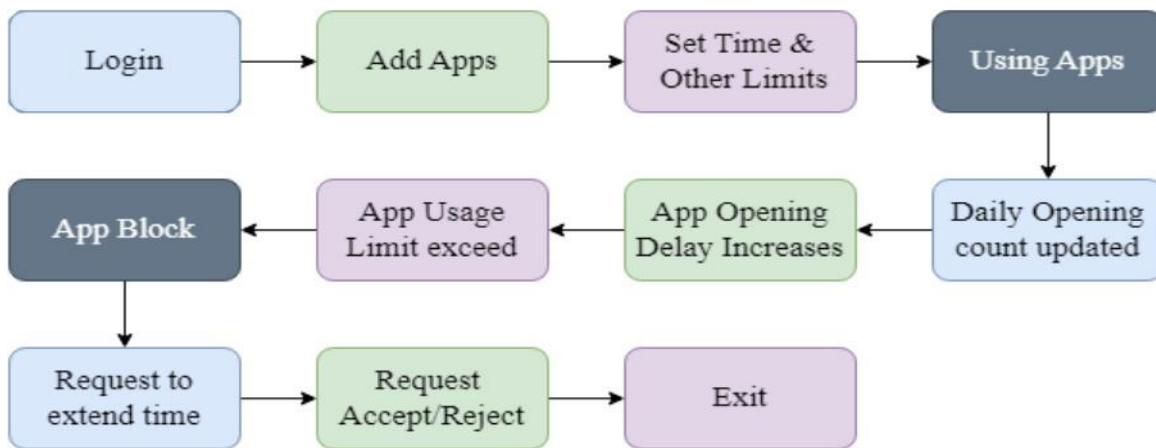
These applications help people take back control of their online behaviors. With functions like scheduling, app limitations, and usage tracking, these apps help people have better, more positive interactions with screens. Families and individuals can achieve a harmonic balance between the virtual and physical worlds by establishing boundaries and using these tools with awareness.

### **5) Social Effects of Technology:**

Spending too much time online and being addicted to digital devices can make people feel more lonely and isolated because they might prefer talking to others online rather than meeting them face-to-face.

## ***Methodology***

The proposed system will work as follows: With its easy-to-use login system, users (parents and children) can quickly access the app by using their IDs and passwords. Parents can monitor which applications their child uses for extended periods and set specific time limits for each app they wish to monitor. Additionally, the app introduces an app opening delay that gradually increases after each app opening, testing the user's patience. When the app limit is reached, users are notified, and the app is automatically blocked to prevent further usage. In cases where more time is needed, users can request an extension from their parents, which can be accepted by a parent or guardian. Parents can also directly block their children from further app usage or block specific apps that they wish their children not to use during study periods. With these intuitive features, the "App Limit Monitor" promotes responsible smartphone usage and empowers users to maintain a balanced digital lifestyle.



### Features of App Limit Monitor:

**1. A user-friendly login system:** Using their special IDs and passwords, users—parents and kids alike—can easily access the app, guaranteeing safe access.

**2. Observation by parents:** Parents are able to keep an eye on their child's app usage and determine which apps their child spends a lot of time on. Parents can monitor their children's digital activity using this option.

**3. Setting time restrictions:** Parents have the ability to assign time limitations to certain apps that they want to keep an eye on, allowing them to manage the amount of time their kids spend using different apps.

**4. App opening delay:** After each app opening, the app adds a delay that progressively grows, testing the users patience.

**5. Notification of exceeding boundaries:** Apps are immediately blocked by the parents when it exceeds their specified time limit and user will have no longer access to the app.

**6. Time extension request:** Users can ask their parents for a time extension, which allows them to use the app further

**7. Parental supervision of app use:** To maintain a proper learning atmosphere, parents can either restrict particular applications during scheduled study

**8. Promotion of responsible smartphone usage:** With its user-friendly features, the "App Limit Monitor" app encourage people of all ages to maintain a digitally balanced lifestyle and promotes good screen time habits. This promotes responsible smartphone usage among users.

### Applications:-

#### 1. Personal Use:

Individuals can use the App Limit Monitor to manage their own screen time and reduce digital addiction. It helps them maintain a healthier balance between their digital life, which helps to improve overall well-being.

#### 2. Parental Control:

Parents can use the application to set usage limits and monitor their children's app usage. It ensures that children do not spend excessive time on their smartphones, promoting a healthier and balanced.

#### 3. Educational Institutions:

Schools and colleges can implement the App Limit Monitor to help students manage their screen time effectively. This can enhance focus on studies and reduce distractions during classes.

**4. Workplace Productivity:** Employees can use these application during their working hours so that they will not get distracted during their working hours and they can concentrate on their work.

**5.Ease for Therapists:**

Therapists and mental health professionals can recommend these applications to their clients who use smartphones excessively. This can help clients reduce their habit of excessive smartphone use.

***Proposed Modules:*****Child Module:**

By utilizing their login credentials, children can access the app through the Child Module's user-friendly interface. Child only have authority to check their app usage statistics. In order to promote patience the delay is introduced after each opening of the application.

**Parent Module:**

With the Parent Module, parents can keep an eye on and control their child's smartphone activity with a complete dashboard. They can set the time limits to the specific application and after exceeding the time limit the application get automatically blocked. Child will have no longer access to the app after exceeding that limit. In order to encourage their children to develop healthy digital habits, parents can even directly block the child to use the app and they can also examine usage statistics of their child.

***Conclusion:-***

In conclusion, the "App Limit Monitor" offers a user-friendly solution to the growing concern of excessive smartphone usage, particularly among children. By providing parents with the ability to monitor and control their child's app usage, the app empowers families to establish healthy digital habits. With features like setting time limits for specific apps and an app opening delay to encourage mindfulness, users can take proactive steps towards reducing screen time and promoting balanced lifestyles. The app's intuitive design and straightforward interface make it accessible for users of all ages. With its combination of practical features and user-centric design, the "App Limit Monitor" aims to empower users to make informed decisions about their digital habits and ultimately lead happier, healthier lives in the digital age.

***Reference:-***

•Yang, WenBin Gao,"A Cross-Lagged Panel On Smartphone Addiction Of Middle School Students",Beijing 100049,China (2022).

•Agung Sedyono, Anung Ariwibowo,"Software Requirement Specification Of Intelligent System For Monitoring And Preventing Smartphone Addiction", Jakarta, Indonesia (2017).

•Katsuki Yasudomi, Toshitaka Hamamura, Masuru Honjo, Akio Yoneyama, Masato Uchida,"Usage Prediction And Effectiveness Verification Of App Restriction Function For Smartphone Addiction",Waseda University,Tokyo,Japan(2020).

***Web Reference:***

1. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6449671/>
2. <https://www.helpguide.org/articles/addictions/smartphone-addiction.htm>
3. <https://www.techaheadcorp.com/blog/importance-user-experience-mobile-app-development/>
4. <https://www.journals.uchicago.edu/doi/abs/10.1086/714365>