# Mobile Addiction Control Using Application Usage Trackers

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***Abstract*:**

**This is a project that focuses especially on children who are using mobile phones without their parents guidance. They can be monitored using an application and the data can be sent to their respective parents and also can be collected for further surveys.**

***Keywords: Mobile Addiction, Monitoring, Data storage, Parent supervising.***

## 1. INTRODUCTION

*We all know that mobile phone addiction is getting increased too much each and every year with the development of the technology (Figure 1). Nowadays parents don't even have time to monitor their kids' activity online. Children can even get misguided to the content's in them. So we are trying to monitor children's mobile usage with some source of monitoring method..So we are building an application that can monitor children's activity, alarm them and also inform their parents about the time they use and what content they use.*

### *1.1. Background:*

*When we take a look around ourselves then we can see that many teenagers are getting addicted to scrolling. This causes them to focus less on their goals and achievements in their life. This results in many issues like nomophobia, and huge amounts of psychological issues. This can be stopped from childhood itself. Parents must maintain their children everyday. But nowadays they are busy with their job, leaving the children and their phone alone.We have come across many ideas to solve this issue. And we have collected some statistics through the internet and references to improve the quality of the solution we produce. These are the reports which are collected from the given references of datas of smartphone users and measures taken in different countries (Figure 2).*

### *1.2. Statistics:*

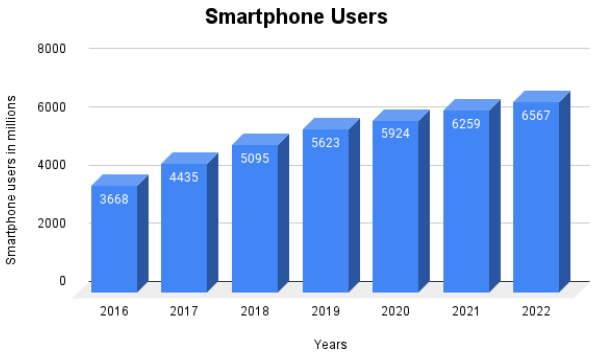


*Figure 1: Smartphone users data from statistica*

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*So we are building an application that can monitor children's activity, alarm them and also inform their parents about the time they use and what content they use.*

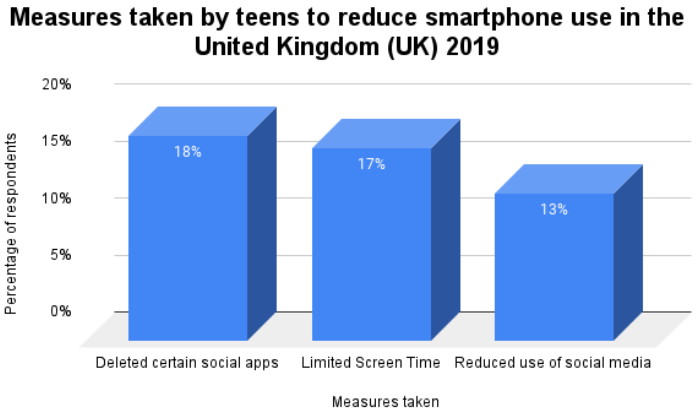


*Figure 2: United Kingdom has done several measures to reduce the usage of smartphones by kids from statistica*

## 2. APPLICATION OVERVIEW AND DESIGN

### *2.1. Similar apps on Play Store:*

| *S. No* | *Application Name* | *Drawbacks* |
|---|---|---|
| *1* | *SPACE: Break phone addiction, stay focused.* | *Most features will get unlocked in pro features only*<br>*Not properly tracking*<br>*Doesn't send data's to their parent's.* |
| *2* | *AntiSocialL Phone addiction* | *More adds*<br>*Heavy Bugs*<br>*Features unlocks at premium only*<br>*Doesn't send data to parent's* |
| *3* | *YourHour: Phone addiction tracker and controller* | *UI challenges*<br>*Doesn't support old devices*<br>*Heavy Bugs* |

*Table 1: Similar Apps in play store and its drawbacks*

*Related Solution: Making a program that makes the particular application time constrained. But implementing such a program in every application is not easy. The owners in these applications have the control of these applications. And it is not guaranteed that every other application will implement these programs.*

### *2.2. Feasibility:*

***Implementation:***

*Mobile applications are developed freely using open-source programming languages.*

***Maintenance:***

*These programs can be maintained easily in the database.*

***Proposed Solution:***

*Application monitors activity and sends those data to the parentsTo create a mobile application that can monitor childrens .*

### *2.3. Application design:*

*The application has two interfaces for parents and another for children.The children dashboard (Figure 3) tracks the screen data and sends it to the server.These details can be accessed through parent devices.*

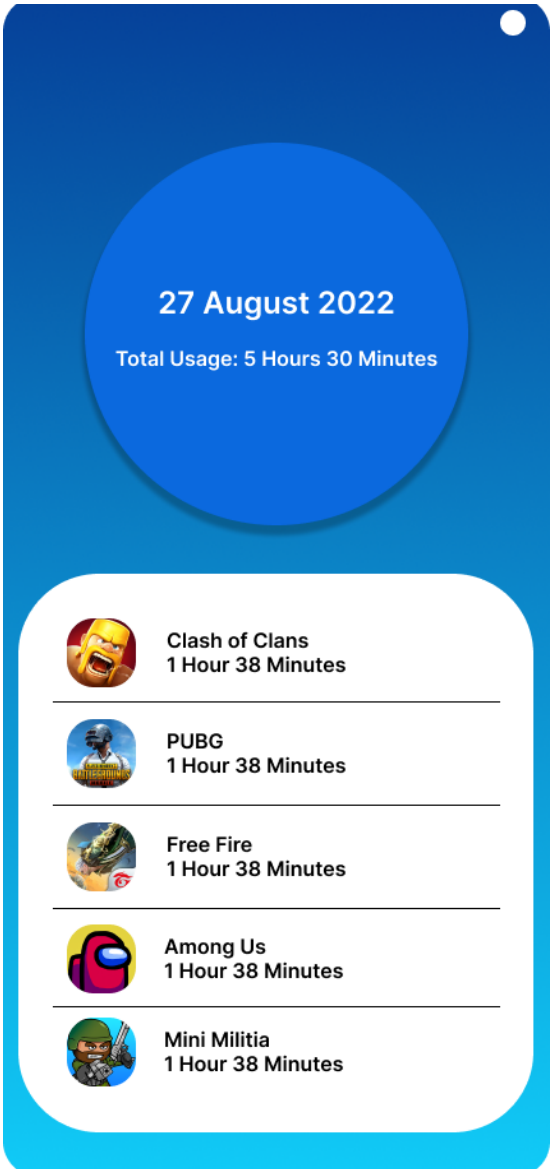


*Figure3: The design maintains a standard IPHONE 13 PRO MAX Dimensions*


*Figure 4: The design maintains a standard IPHONE 13 PRO MAX Dimensions*

This is the simple flowchart explanation for application flow.

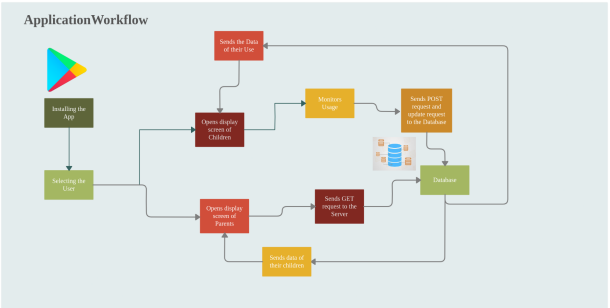


*Figure 5: Application FlowChart*

*When the application gets started the application provides a choice to the user whether they want to be the parent or the child. If they choose the child the application asks to sign in and create a user in the database. The API key about the user gets stored in the child device and may be called again for the future reference. When the parent logs in with the same user id the api key gets called on and also gets stored in the parent's device (Figure 4). After this the device remembers the parents and the child. When the child turns on the application, the application will start monitoring the child's work in the device.These datas get updated every 10 minutes to the database. The real time database facility provided by google firebase is used here. These databases help to maintain the sync in both the devices (Figure 5). As the data's get updated in the database the data also in the parents devices gets updated.In this way the parent can monitor the mobile usage of their children from anywhere.The parent UI provides the data about the highest usage, least usage, and past 3 days usage data. Comparing them the parent can understand the addiction level of their children in these devices.The application is made in such a way so that it maintains least RAM usage in the childrens device. So that it does not affect the user experience of the user.It is also made to support the devices with android OS above the version 5 i.e, ANDROID 5.0 LOllIPOP. After the next update the application will also be made to support IOS devices too.This application is created with android native development. That is Java with XML language.XML is used to design the front look of the device and java is used to maintain the application work of the application.This application does not shares the data of the user to any organisation except for government and other investigations without expliciting it to social medias or any sort of public distributions. And these applications can only be accessed to those people with an order from the high or supreme court with suitable reasons for investigation.Sharing those information about the user will be taken as the responsibility of the taken body.*

## 3. RESULTS AND CONCLUSION

*Mobile usage of childrens monitored can be reduced by 30%.*

### *3.1. Future work*:

*To improve the UI and create more feasibility to DB.*

### *3.2. Authors and Affiliations:*

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### *3.3. Drawback:*

*This solution requires more funding for implementation at a massive level, to maintain the user data and cyber security.Cyber Security is the biggest threat to this application. As it collects users' usage data, it can eventually become a threat to the user.*

### *3.4. References:*

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