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ADVANCE PARENTAL CONTROL APPLICATION

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Abstract: **According to Canalis investment firm of Singapore and research firm Gartner by 2017, there will be 15.6% Smartphone teenager's users. The annual growth rate of Smartphone users in India would be around 129%, even more than that of China (109%).Parent concern grown about teenager's addiction of their smart devices and their sending and receiving age inappropriate content online. The Internet is a powerful learning tool. However, the large scope and anonymous feature of the Internet brings with it risks from unambiguous or inappropriate content to predators lurking in chat rooms and using instant messaging services. One of the biggest concerns of parent is that their child must not use the technology for destructive things. Giving smart devices to children's are something that can be delayed, but not denied. Lots of parental control applications are available but adoption rate of these applications is comparatively low. We have conducted a structured, qualitative feature analysis of 85 Android mobile application designed for the purpose of promoting adolescent online safety. We found that the available applications supported parental control through restriction and monitoring over teen self-regulation or parental active mediation. These applications can't make the parent-child relationship positive because child is aware of this application and child knows that parents are monitoring them. Thus the adoption of this application is low. So that parent is seeking for the novel application. As per the parent requirement we proposed mobile application prototype suggesting, alternative designs to keep an eye on child activity on their smart phones. Parents have to install child application on children device. All the child activities log files stored on the web server. The mostly dialed call, mostly visited sites, child location is mined stored on web server and notification is send on the parent application Parent child application is communicate through the web service. Child side application is totally hidden from child which make the parent child relationship strong**

Keywords – *Mobile Platforms, Smart Phones, RTO, Android, fingerprint, Biometric*

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I INTRODUCTION

Smartphone addiction among Indian teens has increased rapidly, addiction magnitude in India ranged from 39% to 44% .According to Canalis investment firm of Singapore and research firm Gartner by 2017, there will be 15.6% smartphone teens users and annual rate of growth of smartphone users in India would be around 129%, even more than that of China (109%)[1].Smartphone abuse and addiction may even become cause of an accident and ruining our personal or social life. It has been found that nearly 3-5% of the online population is found to have problematic sexual behavior which is rapidly evolving due to the easy and increasing accessibility of online sexual content and the immediate connectivity now provided by cheaper

Smartphone's and social networks. The Depression or other mental health issues (43 percent), domestic violence or sexual assault (42 percent), and sleep (39 percent) to be "very" important issues for teens their age. Smartphone addiction among Indian teenager's and adolescents can not only damage personal skills, but also it can increase the significant negative health risks and harmful psychological effects on Indian adolescents. Mobile phone addiction is one of the forms of uncontrollable use of "a mobile phone" by adolescents across the world. With the increase of smart phone usage in child and adult, safety is most important issues. Adolescent between 9 and 16 years old gained access to inappropriate content. So that the cybercrime is increases day by day. Parent concern related to their child is increases. According to a Common Sense Media report, 75% teens have access to social networking sites, 47% of teens use video

chatting applications, and 37% use social media applications. with these new way for connecting with the world, the internet offers a lots of new risks to teens, such as cyber bullying, exposure to unwanted explicit materials, harassments, or sexual harassment. The demand for parental control methods that restrict content increased over the decades due to rising availability of the Internet and their risk. there are lots of application are available but the adoption of this are low.

Yet, only 16% of parents having installed such monitoring software on their teens device. We conduct the little research on why the adoptions of these applications are low

II LITERATURE REVIEW

Literature survey is limited to the area of mobile online safety strategies that leverage of technical mediation. Arup Kumar Gosh et. al[2] is created application we choose the different Techniques and methods. They found that more collaboration approach helped to reduce smartphone usage and nourishes parent-teen relationships. It has been developed the teen online safety strategies by using VSO(value sensitive design) approach [2] . Waller Fuertes, Karina Quimbiuico et.al.[3].This paper presents the design decision and implementation of parental control mechanisms that both register and avoid inappropriate content access by children and teenagers through internet. We have applied OOHD(Object Oriented Hypermedia Design)combined with NLP(Natural Language Processing) that uses the Boolean Retrieval model by means of string searching algorithm as Boyer Moore and Fuzzy string search[3].Mahafuzulhog Chowdhury, Ahmed Imteaj et.al.[4].They found that whole muhlies are remotely access. This idea is based on controlling a smart phones by another device which can be either a normal or a smart phone. In this application to retrieve the important files, contacts, numbers, calls and message log , tracking location information replaced by SIM numbers. Through this application the uses attain the proficiency of controlling his smart phone predominantly[4]. SayFeizal Wardhonar Mira Kania Sabarish et.al.[5] In this application by using smartphone which can improve collaboration between children and parents[5]. M. A. AL Rushed, Ousmane Abdoulaye Oumar, Damanjit Singh et.al.[5]. The system is able to provide the real time text alert for speed and location by using the GPS techniques.

III REQUIREMENT

The proposed system work for parent to monitoring their children at remote place. The application is used to track location, monitoring children's activity like mostly incoming and outgoing call monitoring, monitoring mostly visited sites, monitoring mostly outgoing SMS .As per the need of novel application which maintain the positive parent child relationship our proposed system is hidden from the child

device. For implementation of application SDK tools and android studio software use. We are choosing android operating system is that to target more android user's. Android is affordable for every one which will increase the adoption rate of this parental control application.

IV DESIGN AND IMPLEMENTATION

This section describes the conceptual design of proposed system. The internet is medium that is used for data and services request from the mobile to server and request information back to user .Above figure shows the architecture of the system
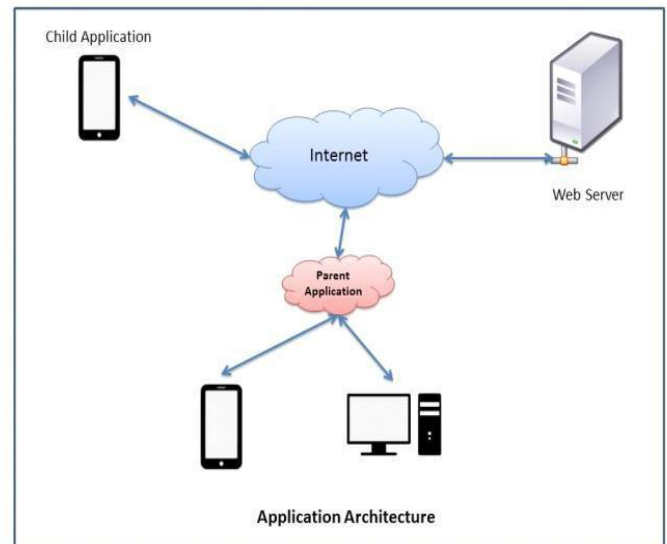
Figure 1 System Architecture of Advance Parental Control

A. Client Side (Mobile Application)

At the client side there are two applications one is on parent device and another is on children's device. Parent install the child application on the children's device .Children's application register with the Parent_ID(Unique ID) .This parent and children application communicate over the network through the web service. The parent can request for child activity from the server also an alert in the form of notification on the parent application. Parent set the restrict area for geofence .when the child leave the restricted area the notification is generate and sends on parent device.

B. Server Side

At the server side the data mining technique is used on the data stored in database .By using the Boyer Moore and fuzzy string matching algorithm is used for finding the inappropriate content on the browsing history and mostly visited sites . Algorithm can be identify and sort the call pattern, call type, most dialed incoming and dialed call, mostly incoming and outgoing SMS and generate the notification and send on the parent application.

This two element communicate with each other by using web service. REST protocol is used for interfacing between client side and server side. REST is used for designing the web services that are lightweight, maintainable

and scalable in nature and easy to maintain. with the help of Get and Put method the children activity files like call log, sms log and browsing log files are get and stored on the server side database .we are using Oracle database. The oracle is reliable database. It reliably manages a large amount of data in a multiuser environment so that many parent can concurrently access the same data at same time. This is giving high performance for accessing the huge data from database server. A database server gives the efficient solution for failure detection and recovery and prevents unauthorized access.

V LOCATION TRACKING

For tracking the child location Geofence technic used .This set up a virtual boundary or fence around a real world geographic location. Geofence take the advantage from LSB(Location Based Service)in order to proactively children location dependent content or execute location dependent action when child enters or leave the dedicated zone by the parent which is shown in below figure
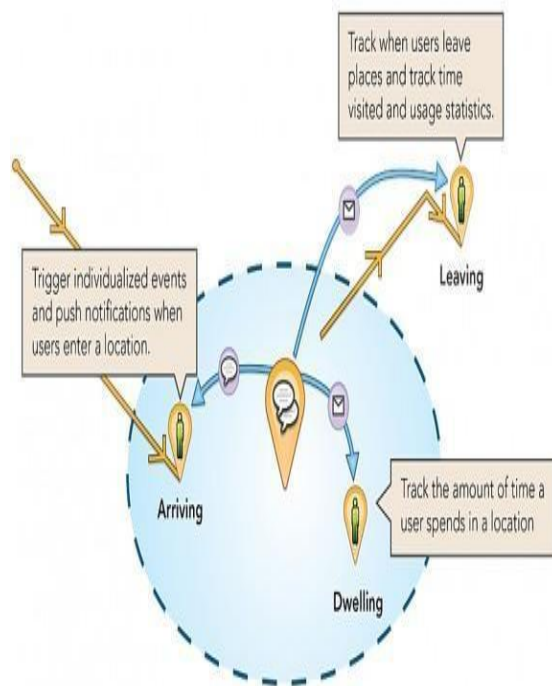

Figure 2 Geofence boundary

Through this parent can set the geographical coordinate. This geofence can include latitude and longitude coordinat es that gives the boarders of the geofence. Parent may set up the geofence by providing coordinates that define a line, point, or boundary on a map.the geofence can be defined by providing geographic coordinates for a geographic location and a radius.

The geofence may correspond to a circle or arc based on the geographic location and radius. The geofence may also be defined based on or using a point of interest, landmark, retail store, street intersection, town center, zip code, city/state as shown in figure.

Figure 3 Geofencing Restricted Area

VI CONCLUSION

Parent can set up the boundaries around the school/college area would allow parents to track children through their mobile phones, tablets, or laptops and know where their children are at all times. An alert will be triggered if a child leaves the designated school/college limits.

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