Parental Security Control

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Abstract

This project describes an android application for parental security Control which will help the parents to monitor the activities done on their children's smart phones. Now-a-days a lot of misuse is done on smart-phones operating android by recent generation. To control this misuse we are developing this application which will be installed on child's smart phone by parents. There is some feature which we will provide like Create and maintain log of calls, Record call, Create and maintain log of message, Record messages, Record the history of websites browsed. This entire detail is maintained and recorded by our application file in background. This entire data will be sent to parent's email id. Parents can view what their child is messaging as well as talking. This will enhance security over children by parents.

1. Introduction

Why parental control is important? What effect does media exposure have on our children? That question has generated heated debates from one generation to the next.. The internet might be one of mankind's greatest achievements, but it can be a very dangerous place for child if proper supervision isn't available. We look parental control for social networking sites, mobile devices, and your home network. Parents, educators, social scientists, media pundits, and many others all offer their opinions, but rarely is any consensus reached.

Parental controls are features which may be included in digital television services, computer and video games, mobile devices and software. Parental controls are divided into four categories: contents filters (which limit access to age inappropriate content), usage controls (which constrain the usage of these devices such as placing time-limits on usage or forbidding certain types of usage), computer usage management tools (which enforces the use of certain software) and monitoring (which can track location and activity when using the devices).

An android application enables parents to restrict which applications their child can access while also allowing parents to monitor text messages, call logs, MMS pictures, and other transactions occurring on their child's mobile device, to enable parents to set time limit on the usage of mobile devices, and to track the exact location of their children as well as monitor calls in and out and the content of texts in and out.

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You can use Parental Controls to manage how your child uses the computer. For this, you can set time limits that your children can use the computer, the games and the applications that they can run on computer. When Parental Controls blocks access to a game or application program, a notification is displayed that the program has been blocked by admin. Your child can click a link in the notification to request permission for access to that game or application.

If parents are worried that their kids might be exposed to mature contents online through cell phones and tablets? Is their teen's location is safe for them. The solution for all these problems is provided in this android application of Parental Security Control. This app brings user a complete parental control which reduces their worries by monitoring their kids' online activities, keeping track a tab on app the download on their android phones and keeps them informed about their child's location.

2. Objectives

i. This app offers the bulk of categories to block all inappropriate content from their child's web experience. This app helps to block all inappropriate content from your child's mobile phone.

ii. Create and maintain log of CALLS, SMS or MMS. We can maintain all logs of calls, SMS and MMS records.

iii. Record all CALLS, SMS or MMS. Using this app, the incoming and outgoing call will be recorded and send mail to the parent email-id.

iv. Use web history logs to be informed about your child's online activity. We can see the web history of our child's phone that is what type of site they could access.

v. Mail all these detail's to parents (cyber alerts). This app will automatically mail all the details to the parent like call history, web history, call record.

vi. Keep a monitoring on child's online presence 24/7 by this app. By seeing this app we can keep track on child's online presence 24/7.

vii. Remotely parents can monitor through an online control panel created only for parents so that they can control their child's privacy. We can remotely monitor there's child regular activity though an online control panel especially created for parent.

3. Working

The monitoring on child's device is done by parents from a remote web based application operated by web server. The android app will run on child's device in background so that the child is not aware about the tracking activities on his mobile.

The functioning of this app on child's device is to record calls, messages, and monitor online activities along with the log files.

All the log files are sent to the web server directly so that they could be accessed and monitored by their parents. The parents need to have authenticated username and password so that the private details of their infants should not be sniffed by any other person. Parents can view the files and also download them from the web server.
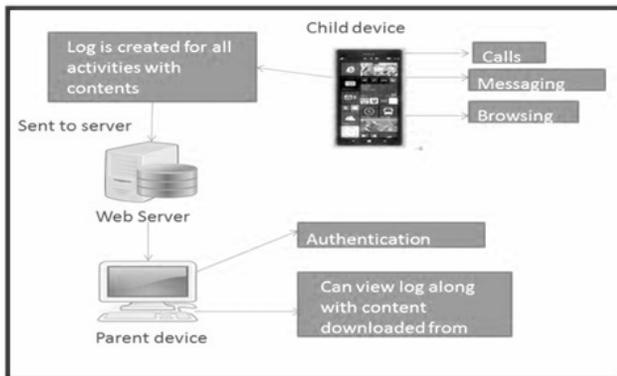
3.1 Workflow Diagram

Figure1: Working of Parental Monitoring on child's device

4. Application

i.   Keeps track of their child's internet activity. From this app we can keep track of our child's internet activity. In other words we see which type of site was access by the child.

ii. To control their privacy by yourself. Using this app we can set the privacy of child's mobile phone.

iii. Be updated about their regular activities. From this app will mail all the details to the parent so that parent can update about their child's regular activity.

iv. Log files could be mailed to parents. This app will mail all log details like incoming call, outgoing call, call record, etc.

5. Implementation

5.1 Modules:

i.   Parent Module:

The Parental Security control app will be implemented in order to provide the child a controlled device which could be monitored by their parents in order to provide them a fully secured device. The expected output will be an android application that will run on a child device in a hidden mode so that they will not be aware of having a parental monitoring on their device.

ii. Child Module:

The second module of the app will be on parental device through which a parent could have authenticated User ID and Password to access their child's information which is not shown publically to everyone.

Now the Parents will be able to track their child's online activities, block unwanted websites, get all their call and text records, record their calls.

5.2 Experimental Setup

5.2.1 Software Requirement

i.   Android SDK:-

A software development kit that enables developers to create application for the Android platform, along with this the Android SDK includes sample project with source code, development tools, an emulator, and required libraries to build Android applications, debugger, Relevant documentation for the Android application program interfaces (APIs).

ii. ADT toolkit :-

The Application Development Toolkit (ADT) is used to develop android compatible software which can be runnable on android devices. The objective of

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Application Development toolkit (ADT) is used to provide developers a user friendly tool. Ultimately, this lets the developers focus on what they want to develop. This includes a platform-independent cross-compiler tool chain, debugging and profiling tools and support scripts. These capabilities allow the developers to start work on the target architecture.

iii.   JDK 7.1 :-

JAVA programming language was introduced in 1995 which was used to connect users with information whether that information comes from web servers, databases, information providers or any other sources. JAVA has everything a good language, a high quality execution environment and a huge library provided.

iv.   Android OS (4.1 jellybean or above) :-

The Android OS is an open source operating system majorly used in android device. Android operating system which is runnable on any android device is having a specified version of 4.1 of jellybean which is minimum   requirement of this app. We have to set up this version primarily when a new project has been created.

v.   MySQL :-

MySQL is a freely available open source Relation Database Management system (RDBMS) that uses structure query language (SQL). SQL is the most popular language for adding, accessing and managing content in a database. It is most noted for its quick processing, proven reliability, ease and flexible of use.

vi.   Dreamweaver 8 :-

It is a software program for designing web pages, essentially a more fully featured HTML web and programming editor. This program provides a what-you-see-is-what-you-get (WYSIWYG) interface for users so that web pages could be created more dynamically. It supports multiple web and programming languages including HTML, Visual Basic (VB), C#, Cascading Style Sheet (CSS), Active Server Pages (ASP), Extensible Markup Language (XML) and many more.

5.2.2   Hardware Requirement

i.   Android device

ii.   I3 or I5 processor

iii.   2 Gb ram

iv.   Space 7 Mb

6. Conclusion

Thus we conclude that this app will ensure a child's security in many of the areas like:

- Parents control over their children is maintained.
- Remotely monitoring activity.
- Internet misuse could be controlled.

This can help any parents to make their child smartly secure and protect remotely without letting their child know s about it.

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