Blocking of Illegal Websites in Student's Mobile Using Android Application

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ABSTRACT

This paper describes about developing an android application for blocking illegal website access. This application helpsto keep the student secured.Using server, we can monitor the student when he tries to access the blacklisted sites. In this application,we can also track the websites which the student accesses.
Keywords: Android, Black list, Server, Student

1.INTRODUCTION

ANDROID is a Linux-based operating system designed primarily for touch screen mobile devices such as smartphone's and tablet computers. It was developed by Android, Inc., which Google bought financially & was later purchased in 2005. Android is an open source and Google releases the code under the Apache License. The third party applications can be acquired by users either through an app store such as Google Play or Play Store. The first commercial version, Android 1.0, was released in September 2008.Most Android devices still run the older OS version 2.3 Gingerbread. The latest android OS version is Android 4.2 Jelly Bean. Android 5.0 Lime key pie has been in developing stage.

There are many applications in Android smart phones that block the use of third party applications but donot block the access of illegal websites. A database is maintained for each record.
This application is used to block the illegal website access by listing black listed sites. We set the black listing of the sites with the expectation of privacy. Application which we have developed is similar like the parental guidance/ child lock. This application is deployed into an android smart phone. We can install this application in android 2.3 version

1.1PROBLEM ANALYSIS

In the Systems that have existed, there is no exact methodology to block the website access inmobile, especially students. Also it is tough job because weblock the website through the help of operating system. Illegal websiteswhich will let the students in huge problem and also parents are not able to help their children. By this we can secure our students from accessingthis type of websites.Nowadays people are easily exposed by this type of websites like illegal websites/terrorist websites/adult content sites.

2. SOLUTIONS TO THE PROBLEM

In the application we develop, accessing of illegal websites is blocked. The blocking of sites is done by mapping when the user enters the URL in the application.Application is designed with a QVGA interface. The major advantage of this app is that the parents' are able to make a secured environment for their wards so that they don't get involved in unwanted activities and waste time.

2.1 CLIENT

An Android client is an application that access a service made available by a server. The server is often on another computer, in which case the client accesses the service by the use of internet.

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To send the request to the server, the ward has to be a registered person in the server. The ward has to submit their name, password and other details to the server during the registration phase. All this information is stored in the database via server.

2.2 SERVER

A Server is a computer program running to serve the requests of other programs. Thus, the request is given to the server & responds accordingly.

Here the Server acts as the main resource for the client. Server is responsible for maintaining all the history of websites visited. So the server will process the ward's request and get the concerned data from the database.

2.3 ACCESS

For accessing of Illegal websites, the websites are blacklisted and white listed according to parental guidance. The websites URL is entered in the browser and the server recognizes it. The server responds to the request given by the ward. The access is provided through GPRS.The Blacklisted websites are Social sites, torrents, videos which have adult content…The White listed websites are some of the search engines, educational sites, organizational websites , etc…

2.4 PROCESS OF APPLICATION

The application (apk) is installed in the ward's android mobile phone. This application works in Android version 2.3 & above. The ward's mobile needs an internet connection. It is connected to the server through GPRS connection.

The server recognizes the ward when he registers his name& password in the application during the registration phase. When the registration is over, the server's IP address is entered into the ward's android mobile by the parent. The assigned IP address is given in the ward's mobile which is used for server recognition. The server starts to monitor the ward. A data card is connected to the server which provides the Internet connection. Each and every website, the ward visits using the mobile is maintained as a database in the android mobile as well as in the server.

The server is administered by the parent. Therefore when an illegal site i.e. blacklisted sites' URL is entered, then the access will be denied.The application which is installed in the ward's mobile is secured by a third party application so that it cannot be uninstalled by the ward. The application can also be refreshed for every 24 hours.

2.4.1 Analyzing

The server is used to maintain all the records of the mobile client. When the website URL is entered in the application's browser, the request is first analyzed by the server and gives permission according to the response. A list of blacklisted sites are stated in the server program so as when the request is given by the ward it checks the list and provides further services. A database is maintained. The server is connected with the database through the JDBC (Java Database Connectivity) connectivity.

In the analysis phase, the URL entered in the browser is mapped with the list of illegal sites. The mapping is done by specific keywords given in the server for recognizing the site. In this way the analyzing &mapping is done. These operations can make the ward work in a peaceful environment with no fear.

2.4.2 Blocking

In the server, the wards' parent specifies certain sites as blacklist and not to provide any service from those websites to the ward. When the sites are specified as blacklisted then when the ward tries to access those sites he/she will be shown a message stating 'Website is blocked'. The blocking is carried out by the server which provides the service for browsing. The history of the visited website is maintained as a record in the application as well as in the server.

2.5 FUTURE ENHANCEMENT

The application developed can be deployed by a network service provider (SIM) with setting certain

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restrictions to his/her customer so as the service provider can keep them safe from indulging into unwanted matters such as terrorism/spam/harmful sites which can hack the user information. This can be a future enhancement.

Keywords: Server, Monitoring, Access, Blocking, GPRS,Blacklist, Illegal, Mapping, Sites, Android, JDBC, Client….

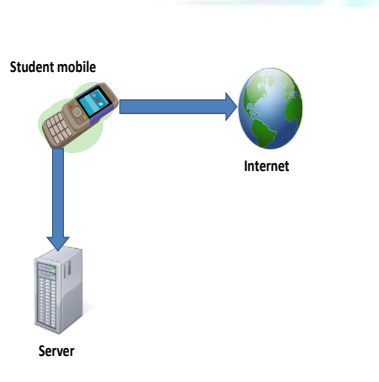## 3. TABLES & FIGURES

Fig 1: Architecture flow

Fig 2: Constraints table

Black Listed
www.facebook.com
www.torrentz.eu
www.grepolis.com
www.orkut.com

4. CONCLUSION

Blocking of Illegal Websitesapplication is created which will help parents keep their ward safe & secure from getting addicted to unwanted things by using his/her mobile phone. This will help the parents to track their wards behavior.

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