

An Authoritative Tool -Mobile Spy Tracker Agent

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ABSTRACT

Many approaches have been proposed for the security systems. The system developed here, remotely monitor all Calls and tracks, and GPS location. Mobile spy Tracker Agent (MSTA) is the most ample remote tracking and 24-hour care system for Android handsets. By means of the Mobile spy Tracker Agent on the target phone, one is able to view mobile calling logs (such as contact number, name and duration of call). Also using GPS tracking system we can locate on a map. Any Web browser can be used to get the information of handsets registered. This software acts as a dominant apparatus to track your children and safeguard them at the time they are away from home. This software gives answers for the phone activity. In this paper the technique and algorithms are proposed and executed thus providing a safety zone for the society in several aspects. The challenge is to deliver an application that should monitor and also does not affect the performance of the system.

Keywords

spy, mobile, tracker

1. INTRODUCTION

Cell phone spy system have in recent times began to spread with the rapidity of sound and gained a countless share of popularity. They can be used in various determinations. Such as enabling

- Parentages to keep an eye on their kids;
- Firms to track the employees phone usage as well as to prevent frauds;
- Spouses to locate their partners.

Observing the features of mobile phone, being parent we have questions arising regarding phone activity. In response to these issues program to monitor and track call and detailed information is developed. This systemization contains features such as:

1.1 GPS Tracking

The location is traced out here i. e., knowing where the cell is at present and where all it had been placed. Minute recordings of location and its information allows parents to track the children at regular time and often. Logging of GPS is user defined. (By default logging interval is taken as 15 minutes).By means of the remote GPS logging on the target phone, one is able to view mobile calling logs. Also using GPS tracking system we can locate on a map. Any Web browser can be used to get the information of handsets registered.

1.2 Call Logging

Monitors all inbound, outbound and missed calls The information could be the contacts emails, numbers, duration of call and phone location for every single call generated or received.

Details are stored securely in server located in US. Users can opt out anytime and clear the details from server either through mobile or from website. Figure 1 shows the spying areas.



Figure 1: Spying Areas

The authoritative tool-Mobile Spy is utilized for observing the actions that occur on the cell phone. Parentages can use Mobile Spy to observe the doings of their children with this software installed in their smartphones. Monitoring of conversations with others talks, incoming and outgoing messages etc. Employers can also use Mobile Spy similar way with their co-workers and subordinated who have company-issued smartphones. With this the Employers can ensure that there is no misuse of investment information by employees. This is how they will be able to track where they go when away from the workplace, in case of disclosing company-sensitive information, look for disparaging SMS and chats etc.

2. LITERATURE SURVEY

Tracking of calls and SMS are not available in pre-loaded software which can be viewed remotely. Some systems are available in market but those systemizations send SMS for every operation to other number, which is highly expensive as each SMS costs.

2.1 Disadvantage

- Tracking of calls and SMS are not available.
- Systems send SMS for every operation to other number, which is highly expensive.

2.2 Does one Really Need such security?

As parent we provide our children with cell phones. This brings in the need of Mobile Spy software. Sometimes it is needed badly. For example, if a erotic killer is following your teenage daughter, you want to get information about it and very soon u can enforce law. Similarly if ones teenager is trying to be indulged in drugs then we take prior steps to safe them. One need not wait until they become hopelessly addicted. Alike the above two examples when you have employees that use the mobile issued by your company for work purposes. In case of danger can one afford to have employees sharing company

confidential ideas with your competitors? Can one bear to have employees stopping off at a tavern when they are thought to be making a delivery run? Without Mobile Spy such activity conduction could lead to disaster.

2.3 The Focal Structures of Mobile Spy

The Mobile Spy software is package full of characteristics that report the chief problem zones created by unmonitored mobile phones. A smartphone with this spy software running on it shows you:

- The past record of the examined phone's GPS locations.
- Gives awareness of all names and contact numbers in the phone.
- Shows you commands for controlling the phone remotely.
- Shows the websites where the user visits to frequently.
- Shows the plans phone's task and calendar log the user has.
- Also call logs.

2.3.1 Advantage

- Does not have additional costs because it doesn't use SMS facility for providing information.
- Data base of the user can be read, i.e., one can know the numbers and names of people communicating with your child.

3. PROPOSED OPTIMIZED SCHEME

Android operating system is divided into five sections and four main layers as shown figure 2 in the architecture diagram. To operate or develop this one must know how to carry out the basic functions. One must also know all the basic concepts of Android OS. Exploration of the Android architecture in detail is done here. Android architecture here means the building blocks of the Android OS.

3.1 HARDWARE REQUIRED

- **Processor:** Any Processor above 500 MHz.
- **RAM:** 1GB.
- **Hard Disk :** 40 GB free
- **Standard Devices:** Keyboard, Monitor and Mouse.
- Mobile Device with Android Support.

3.2 Software Required

- **Operating System:** Windows XP and higher versions.
- **Coding Language:** Java 1.6 and higher editions
- **Tool Kit:** Android Development Kit / SDK 4.2
- GPS and Internet Connection
- SQLite Database
- Eclipse with Android Emulator in Computer (For testing and debugging)

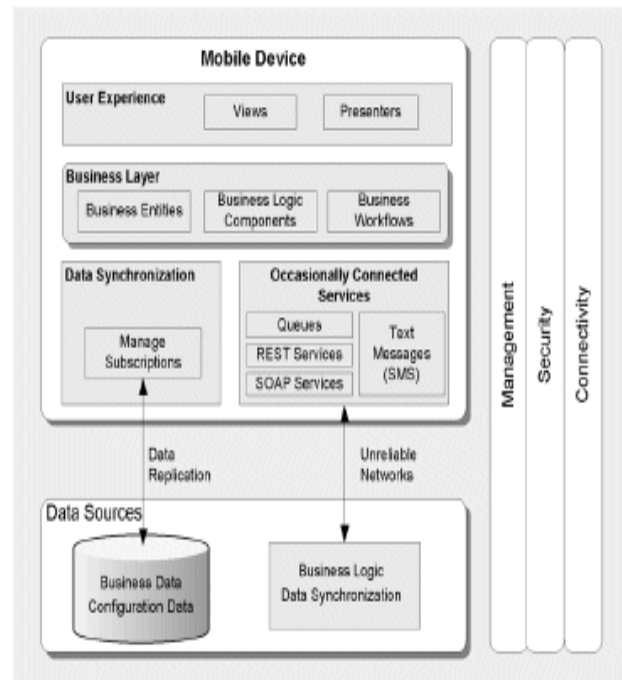


Figure 2: Android Architecture

3.3 Linux- Kernel

The elementary level is the Linux-Kernel. The total Android OS is constructed on uppermost part of the Linux Kernel with some more architectural changes further. Kernel means the core of any Operating System. With this we say Android is built upon Linux Kernel i.e Android at its core is Linux.

3.4 Libraries

The next layer is the Android's built-in libraries. This layer supports the device to grip diverse types of data. The libraries are inscribed using C++ or C language depending on the hardware. Some of the essential built-in libraries includes:

3.4.1 Surface Manager

It composes the window manager with off-screen buffering i.e., the systems can't straight draw into the screen; as an alternative the representations go to the off-screen buffer.

3.4.2 Media framework

Media framework offers different media codecs permitting the tape and replay of different media arrangements.

3.4.3 SQLite

SQLite is the database engine used for data storage purposes.

3.4.4 WebKit

It is the browser engine. It is used to show HTML content.

3.4.5 OpenGL

It is used to extract graphics content to the screen.

3.5 Android Runtime Machine

Android Runtime consists of Dalvik Virtual machine and Core Java libraries.

3.5.1 Dalvik Virtual Machine

It is a type of Java Virtual Machine used in android strategies to run systems. It is adjusted for low memory, low power during the process. But the Dalvik Virtual Machine runs .dex files. .dex files are constructed from .class file during compilation

and offers higher productivity in low resource environments. The Dalvik VM permits multiple occurrence of Virtual machine to be produced for simultaneously providing isolation, security threading support and memory management.

3.5.2 ART (Android Runtime)

Android Runtime is a new virtual machine introduced by Google for Android OS. In Lollipop, ART completely replaces the Dalvik Virtual Machine. Advantages of ART over Dalvik VM includes improved garbage collection and AOT (Ahead Of Time) compilation. These enhances the routine of systems considerably.

3.6 SYSTEMIZATION FRAMEWORK

These are the blocks that proposed system directly interacts with. These programs manage the basic functions of phone like resource management, voice call management etc. As a developer, just consider these are some basic tools with which building of this systemizations is done. Important blocks of systemization framework are:

Activity Manager: Manages the activity life cycle of systemizations.

Content Providers: Manage the data sharing between systemizations.

Telephony Manager: Manages all voice calls. One can use telephony manager if they want to access voice calls in proposed systemization.

3.7 SYSTEMIZATIONS

Systemizations form the first level in the Android architecture At this place our systems are going to fit into. Several standard systemizations are installed priority with every device, such as:

- Web browser
- Dialer
- SMS client system
- Contact manager

This facilitates the developer to write a system that can replace any prevailing system. That is, we are not bounded to access any particular feature i.e., practically unbounded. Thus Android serves as opening for never-ending opportunities to the developer. The following figure 3, figure 4, figure 5 and figure 6 shows the sequence diagram and flow process of the proposed system that performs the set of activities that are needed to carry out the functionality provided by the system.

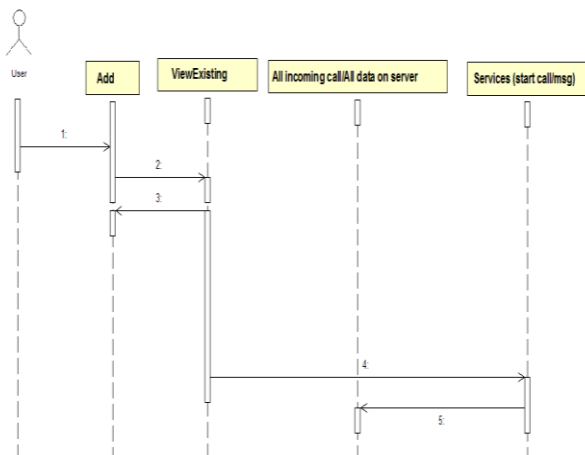


Figure 3: Sequence Diagram.

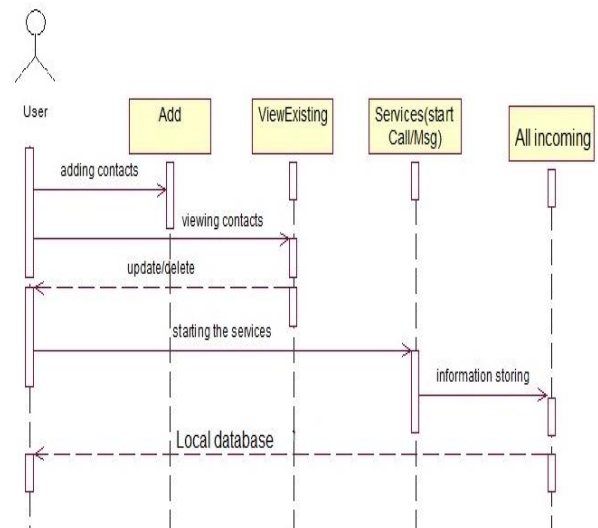


Figure 4: Options that can be performed by the user.

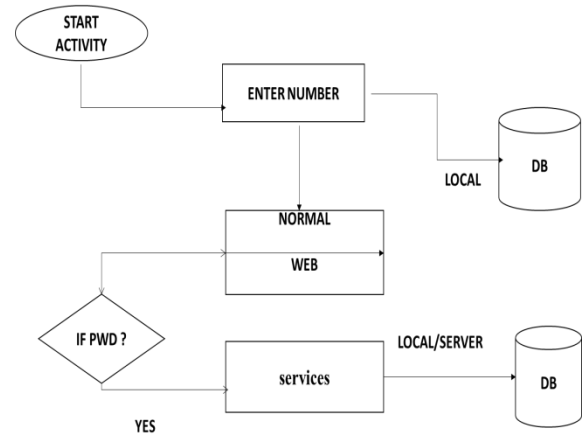


Figure 5: Data Flow Diagrams.

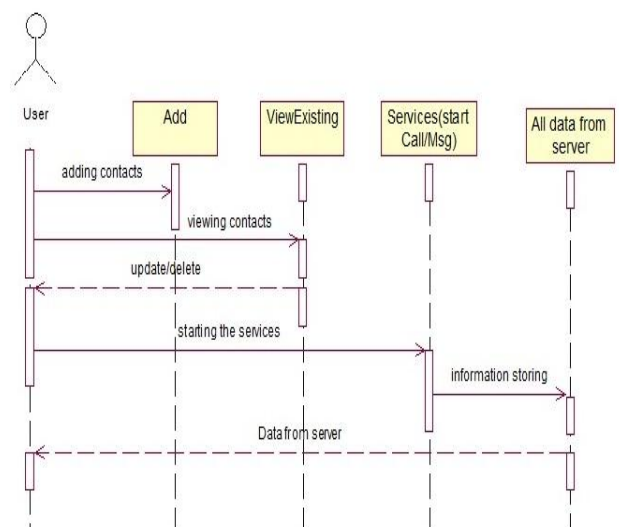


Figure 6: Flow of data between system and the database.

4. RESULTS AND ANALYSIS

4.1 INSTALLATION

Make sure that the system meets the software and hardware requirements.

- Download the “.apk” file into your android device and click on the file for further installation process.
- Proceed with the complete action using dialog by selecting Package installer.
- Then check what services the application wants to use and click on install.
- Make sure that those services are available in your android device to successfully run the application.

4.2 OPERATION

- Open the application by clicking on the application icon. The application icon will be created during successful installation of the application.
- As soon as the application is opened a dialog box will pop up, where the number of target mobile is to be entered.
- Once the number is entered the 8 digit password will be generated by the server and sent on the mobile number entered so far.
- This mobile number should be of parent or of the person who wants to monitor and track the records of their sibling who is using the application.
- After the verification of the user based on the valid password sent in text, the user will be entertained with 5 options as displayed on the login home page.
- If the user enters an invalid password then he won't be allowed to process further. This serves the security purpose.
- Another feature is provided in this application. If the user fails to enter the password then this password can be resent, if he is again entering the data.
- Before logging in the user will be provided with two separate options in the form of a check box. The user is supposed to choose any of these two provided option
 - Normal or Web
- Normal: if the user chooses normal mode then the tracked and monitored data will be sent in the form of a text message to the person who is tracking/monitoring or using the application which is installed in the user mobile and also the mobile being tracked which is the target mobile.
- Web: In the web mode the information will be generated and displayed in the form of the XML page on the screen. This is simpler as one can view within the application.

The below figures shows the development of the android system using the android architecture which is explained above and the screenshots are as follows.

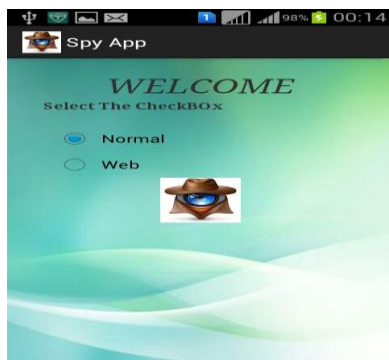


Figure 7: User Login Page

The above figure allows a user to login with the two options to login as a normal login or a web login which takes you to the respective hyperlink page for full accessing of the system for different users.

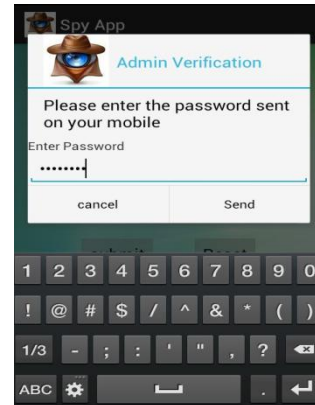


Figure 8: User password for registered mobile number.

In the above figure as the user enters the correct password which is been sent to the registered mobile number as the authentication confirms main screen loads into the screen.

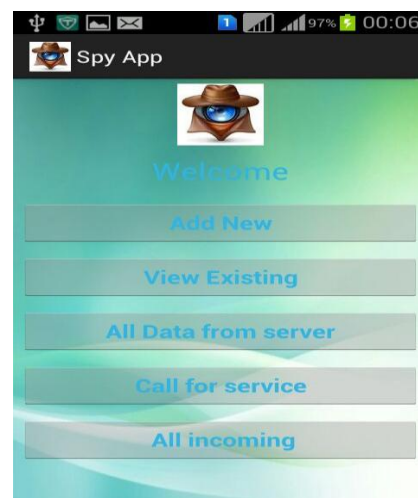


Figure 9: Options Available for selection.

The user can select any one of these options. On selection of any of these options the respective application pages. These pages will again open some application pages. The following screen displays the same page. The call and message records of the saved numbers on the web server can be viewed using the view existing option and the results displayed will be as follows. It gives the GPS location in terms of longitude and latitude of the person. The following output is for a call track here the 1st field is contact number the caller but no name will be displayed in this 2nd is the location of caller, 3rd is the date and time of call, 4th is type of call and last is Message as shown in figure 11.

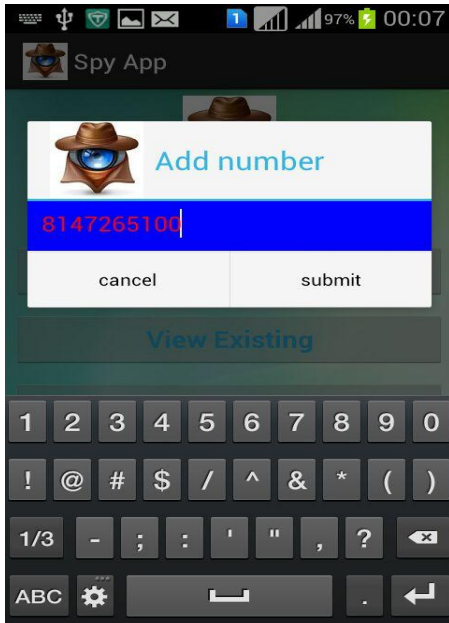


Figure 10: Add number to be monitored.

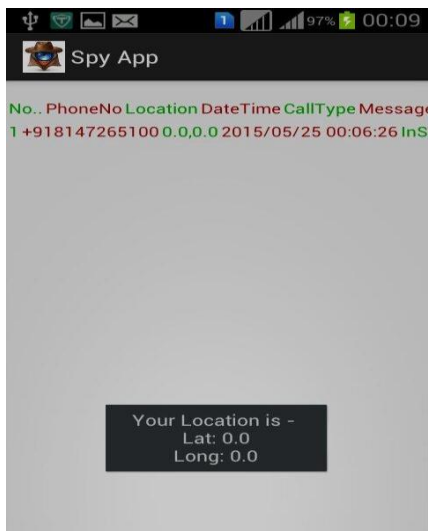


Figure 11: Details of number being monitored.

5. CONCLUSION

Mobile Spy App Tracker Agent is the best tracking Spy solution. As seen in the related work section most of the applications include either of the three records but here all three are together so it provides completeness to the project. One can view the information and it can be viewed by the user using a browser. It changes in the tracking information and the call log information saved on a remote server. This can be accessed only by user. Integrates the call number so one can easily know the peoples with whom your siblings are in touch with and to whom they call and Message. So the transparency will be there. Lastly the GPS location is sometimes helpful for tracking the location and all so it's useful for security as this can be used at night time as well as when they are at an unknown place.

6. ACKNOWLEDGEMENT

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