Child Monitoring System Using Android Application

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Abstract: These Days parents are worried about their children’s so that they need a complete track of them and monitor them all the time, this is often physically unfeasible so we introduce Safety Monitoring system which is useful for monitoring or tracking the kid and their activities from anywhere within the world. The foremost issue of a kid missing may be solved with the assistance of a kid tracking system moreover as parents who have to keep a track of their every step, this technique plays an important role. The android application uses google geolocation services to locate their child’s location. This application help to send SOS message for the oldsters the most important advantage of this feature. This application sends all the information from the child’s phone to the server and the server to the parent’s phone when the SOS button triggers manually. This application is split into 2 Apps, one is for the parent where they’ll see all the activities of their children, and the other is that the Child Part, where the kid can only see a site while the info is been fetched within the background without child’s knowledge.

Index Terms – GSM for Mobile Communication

I. INTRODUCTION

Now daily 80% of individuals on the planet having smartphones use people for different purposes. The most issue of child tracking system android application. The android application uses SMS services and google’s geo assistance in locating the missing child’s location by the survey of missing children in 2004. There are of total 5996 kids are missing. Out of those only 4092 children return or were found by police. However, 1904 children are missed. And also the kid’s ages 14 years and 17 years are missed or ran far from home. The oldsters are worried about their children. By missing the youngsters the parents are scared to go on a family trip. There are many chances to miss the child on the trip. The project is developed for those parents who have worried to miss their child. In Today’s world, most of Child’s have smartphones. With the assistance of smartphones, geo, and SMS-based tracking applications parents can watch on their child. Geo is combined with GSM-based SIM card into mobile to look at on Child's location. The google geo uses longitude and latitude to trace the placement the SMS(Short Message Service) is used to communicate child side and parent side applications. SMS service is used when mobile phones don’t support internet connectivity. System ready to send the child’s smartphone's exact location in the parent’s smartphone when parent demand to test the child’s location.

II. LITERATURE SURVEY

Locating Friends and Family Using Mobile Phones with google geo. Client server-based approach utilized in the architecture. The registration of the client phone is done by the server and then login is saved in the database of the server. Then the client sends location updates to the server the updates saved in the database of the server. Then with the assistance of Location Updates, the situation is tracked. This application was developed for helping to locate relations and friends. In 2011 the Chandra et al. used an approach with the assistance of SMS services.
Application was implemented for JAVA mobile devices which supports google geo. The client shares his location through SMS to the online server. The Client views his location on the map. This method architecture is Client-server based application and mobile application. On the server-side, it uses longitude and latitude, and SMS for storing user details. On the Client-side have a box that contains a google geo-tracking device and GSM modem. When a user is registered and logged in to the server then user details are saved to the server. This application was developed for monitoring the driving behavior of their employees.

III. SYSTEM DESIGN

A detailed description of the child monitoring system is based on software design. Software design describes a detailed description of modules the child monitoring system mainly contains the modules like parents, child, and admin.

![Block Diagram of Child Monitoring System](image)

In the above Fig.1 block diagram consists of three modules like parents, child, and admin. Parent module consists of features like create sites, view geolocation, manage sites, block sites, receive SMS. Child module consists of features like search site, update geolocation, SOS button, SMS alert to parent, add guardian, manage guardian. Admin module consists of features like Monitor emergencies SOS, Receive the only Email.
III. PROPOSED SYSTEM

The proposed system is divided into three modules.

1. **Parent Module**

Parent module consists of the next features like Create site details, View Google geolocation, Manage sites, Block Site, Receive SMS & email. The appliance by minimum runs the computer program, mostly for map tracking, also as a service (Listener) that runs within the background of the smartphone application. On the kid side, that's the client, the applying is usually a service or Listener that runs within the background of the smartphone. A user, the parent which acts as a server, will use the interface to send a location request SMS to the child. The Listener at the parent side performs one main function which is to pay attention to the child's reply to the placement request. However, the Listener on the child side (client) performs two main functions. One in every one of these functions is periodically to listen and gets location coordinates updates from GPS satellite or Network provider whichever more accurate. Few elements and fewer user interactions. This may lead to a system that's simple and simple to implement and use, thus making it more user-friendly.

2. **Admin Module**

Admin module consists of the subsequent features like Monitor Emergencies SOS, Receive the only email.

3. **Child Module**

Child module consists of the next features like Login, Search site, Update Geolocation, SOS Button - For emergency, SMS responsive to parent, Add Guardian - Email & Mobile No, Manage Guardian. The kid module is attached to the child. Its primary role is to periodically receive messages and in response send messages to the parent module and alert them if the kid is in peril. The kid module also contains a buzzer alarm that sounds whenever the kid is alarmed. This enables a parent to more easily locate the troubled child.

IV. VALUATION RESULTS AND DISCUSSION

The Fig 2 shows the Home page of the child monitoring system. Which consists of features like user log in, user registration, parents log in, parents registration, and admin login. Here the user is nothing but a child.

![Fig.2.Home page of the child monitoring system.](image)

The Fig 3 shows the parent login page of the child monitoring system. Parents should log in through registered email and password to access the app.
Fig. 3. Parent login page of the child monitoring system.

Fig 4 shows features available for parents after login. Which will consists of features like add site registry, view site details, block site, child Lat Long (location).

Fig. 4. Features available for parents in the child monitoring system.

Fig 5 shows the Child login page of the child monitoring system. The child needs to log in through registered Email and password.

Fig. 5. child login page

Fig. 7. Features available for Admin after login in the child monitoring system app.
Fig.5. Features available for Child after login in child monitoring system

Fig 6 shows the Admin login of the child monitoring system. Admin needs to log in through valid credentials.

Fig.6. Admin login of the child monitoring system.

Fig 7 shows the features available for Admin after login in the child monitoring system. After login admin can see all child’s map details along with the child’s details like phone number and name.

Fig.7. Features available for Admin after login in the child monitoring system.

V. CONCLUSION

The word Future resembles the word Children. The future pillars of one’s nation”, today's children are tomorrow's youngsters, preserving their dreams and life for a better future is necessary. Therefore, every parent should take care of their children, without letting them fall into the dark world of abuse, which entirely ruins them physically, mentally, and emotionally destroying our future. Hence, considering the importance of our future, our project makes it easy for parents to track their children and to
visually monitor them on regular basis, which makes them ensure the safety of their children and reduces the rate of incidents of child abuse.

REFERENCES


