Public Issue Tracker

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Abstract— **We face lots of issues in day-to-day life. But there is manual process for resolving different kinds of issues. Firstly we have to register a complaint at the local government office via manual form filling. Then that filled form is processed by the government and it takes lots of efforts, time and there is no instant assistance. These disadvantages can be overcome by having a system which will make new issue available to the user on-the-go and to the point and location specified by user .And looking at the current scenario it seems that to provide a user such a system the best platform raises to the mobile, and even in the mobile category raises the android s the best choice. More and more users are switching to the android platform day by day. As per statistical survey, more than 30percent users India use smartphones. Hence we decide to build a system which can totally be controlled by a mobile phone and can be handled from anywhere. This improves the efficiency of the system. This system consists of mobile application and web application. In mobile application we will develop a mobile application for android OS. In mobile application user raised the issue. This is followed with sending of GPS coordinates with the different issues. These issue details are sent to the server which stores it in the database. These issue details are checked by the main admin to see whether any issue is repeated or not. And this checked issue list can be shown to the user. In this manner our system will solve the different social issues as early as possible.**

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I. INTRODUCTION

In this project, we are developing Android application which will be useful for Android users. We propose the implementation of real time issue tracking services through Google Web Services and Android API's. Project will be divided into 2 parts:

- **Mobile Application**
  In this we will develop mobile application for android OS. This will be using latest android API's launched by Google. Through internet i.e. GPRS or 3G connection user will raise issue which will be stored in Government database with issue details and user details.
- **Administrative web interface**
  In this we will develop a web application which will help government to view and manage the raised issues. This web application will be developed using PHP.

So the purpose of this project is the implementation of real time issue tracking services through Google web services and Android API. In this we are using GPS service. The Global Positioning system is a space based satellite navigation system that provides location and time information in all weather conditions. Using android mobile application people can add issue description and particular place using GPS which provide coordinator means latitude and longitude of these place. This application will provide immediate service to the general people.

II. MATHEMATICAL MODULE

System S1=Android application
System S1={S', I, ∂, O}
S' = {GPS, GoogleEarth}
I = {issue details, issue image, loc_lattitude, loc_longitude}
∂= {save/submit}
O = {store image to hosting, issue details in database, location to database}
System S2=Web application
System S2={S', I, ∂, O}
S' = {Googlemap, Broadband}
I = {I1, I2}
∂ = {save/submit, retrieve}
O= {store issue details in database, get issue details}
I1=Issue_Id ←Main admin
I2=Issue_Id, Dept_name ←Dept admin
∂ = check {Issue_Dept = User_dept}

III. EXISTING SYSTEM

Manual Process:

In the manual process for resolving different kinds of issues. Firstly we have to register a complaint at the local government office via manual form filling. Then the government servant has to check the issue by visiting that particular location. Then they try to solve this issue.

Disadvantages of Existing System
1) The manual process takes lots of time and efforts to solve the problems.
2) There is no immediate response from the government for our complaint.
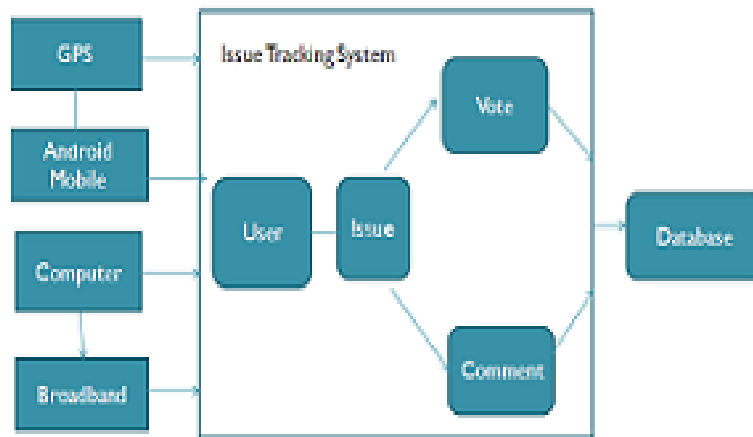
IV. PROPOSED SYSTEM

Figure 1: System Model

We are developing an android application for tracking the different kind of issues. We can use GPS and GPRS for implementing various location based services. In This application we are going to develop the public issue tracker system. Our systems consist of three modules mobile application, web application and users. In mobile application android user will raise the issue with issue image, issue details, issue location and he can also add comment on that issue. And also other user adds comment and like that issue. In our system there are three users government admin, government department head and common people. Then firstly government admin have to login. Then government admin check all issues and categorized them as per respective department like road, water, electricity, etc. Then government department head has to take appropriate action to solve all issues. Main admin send the notification to the user about completion details of the issues.

Advantages of Proposed System:
1. Avoids lot of paper works.
2. Provides various modules within one package.
3. Provides various public issue information.
4. People can aware about various issues.
5. Time efficient.
6. The issue can be raised from anywhere.
7. Mobile phones being portable, the issue details is readily available in users hand.
8. Android Operating System is open source.

Disadvantages of Proposed System:
1. Requires GPRS connection every time.
2. Bad weather and poor internet connection can affect the system.
3. Required Android based OS mobile containing in-built GPS.
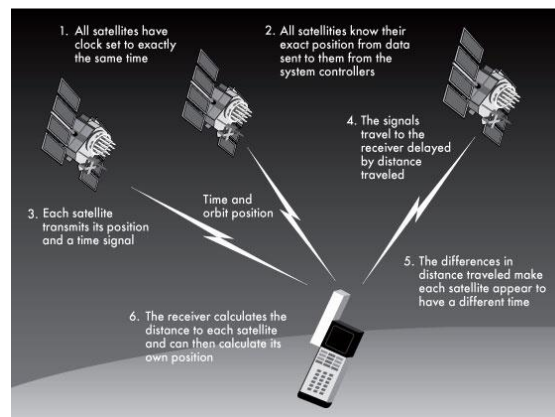4. Require Google map.

V. WORKING OF GPS

Figure 2: Working of GPS

The **Global Positioning System** (**GPS**) is a space-based satellite navigation system that provides location and time information in all weather conditions, anywhere on or near the Earth where there is an unobstructed line of sight to four or more GPS satellites. The system provides critical capabilities to military, civil and commercial users around the world. It is maintained by the United States government and is freely accessible to anyone with a GPS receiver. This form will provide list of issues to the user. According to user input place it will switch to next form in which user will get the details of particular issue with the pin point location of the particular location on map. The Global Positioning System (GPS) is a worldwide radio-navigation system formed from 24 orbiting satellites and their ground stations. These satellites orbit the Earth every 12 hours at approximately 20,200 km. GPS uses the satellites in space as reference points for location here on Earth and the ground stations help satellites determine their exact location in space. GPS provides position based on the method of "triangulation". The GPS receiver measures distance using the travel time of radio signals and correct for any delays the signal experiences as it travels through the atmosphere.

The GPS receiver gets a signal from each GPS satellite. The satellites transmit the exact time the signals are sent. By subtracting the time the signal was transmitted from the time it was received, the GPS can tell how far it is from each satellite. The GPS receiver also knows the exact position in the sky of the satellites, at the moment they sent their signals. So given the travel time of the GPS signals from three satellites and their exact position in the sky, the GPS receiver can determine your position in three dimensions - east, north and altitude .There is a complication. To calculate the time the GPS signals took to arrive, the GPS receiver needs to know the time very accurately. The GPS satellites have atomic clocks that keep very precise time, but it's not feasible to equip a GPS receiver with an atomic clock. However, if the GPS receiver uses the signal from a fourth satellite it can solve an equation that lets it determine the exact time, without needing an atomic clock. If the GPS receiver is only able to get signals from 3 satellites, you can still get your position, but it will be less accurate. As we noted above, the GPS receiver needs 4 satellites to work out your position in 3-dimensions. If only 3 satellites are available, the GPS receiver can get an approximate position by making the assumption that you are at mean sea level. If you really are at mean sea level, the position will be reasonably accurate. A modern GPS receiver will typically track all of the available satellites simultaneously, but only a selection of them will be used to calculate your position.[1]

VI. CONCLUSION

We are developing the PUBLIC ISSUE TRACKER SYSTEM which is similar to the social networking sites. In this way, we have to developing the android application which will help the people to solve the different issues like water, electricity, road issues as early as possible. The mobile devices are growing rapidly and the android being the most sought after platform, our application will prove out to be one of the most useful one. The administrator can administrate the database from anywhere and hence the total system becomes easy and efficient. We considered a user is the part of the system and which can handle the all the types of issue.

VII. REFERENCES

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