

Mobile Device Tracing via Phone Locator

Preeti Karmore, Bharati Dhomne, Aditya Siddhu, Tejas Kulkarni,

Durgesh Chavan, Abhishek Patil

Department of Computer Science and Engineering

Dr. Babasaheb Ambedkar College of Engineering and Research, Nagpur

Abstract – Mobile number locator "PHONE LOCATOR" is the place to track mobile numbers in the most sophisticated way. Our mobile number tracer is based on constantly updated algorithms and the latest technology, displaying details such as name, number location, owner's address, mobile company name, number area information in seconds.

The service isn't the only one, as the search results will include whether your mobile number is valid and any registered complaints. Our mobile number tracking tool is free and works nationwide. Please note that we do not collect data from users and use this window to display information already available on the Internet and make it private and secure..

Key Words: trace, mobile, network, tracer, address, internet

1. INTRODUCTION

Phone Locator helps you track the location of your mobile phone and personal information such as city name, location, carrier, country, etc. Mobile Phone Tracker provides the latest / current location of all mobile phones / mobile phone numbers in India. Re-register your complaint with a mobile number in the Celebrities & Surveillance category. Tracking your mobile phone location is free and does not collect or store any personally identifiable information. This service applies to all states and coalition regions of India. Based on the K-Nearest Neighbor (KNN) algorithm,

Our Phone Location has built a robust system that can collect live data from various carriers and other indexes to track live mobile numbers. The system ensures that you make a short list of exact details associated with the number you want to track. Note that all of this happens in less than 0.5 seconds.

2. WAYS TO FIND LOCATION

2.1. TO FIND A PRESENT LOCATION OF A MOBILE USER USING GSM:

The Handy is a state-of-the-art radio with two modes. Simple towers and channels organized in a network of cells send and receive radio signals. The cell phone consists of a low-power transmitter that can be locked to a nearby tower. As you move, you move from cell to cell and the base channel monitors the signal strength of the phone. As you approach the end of a single cell, the signal strength drops.

At the same time, the primary channel of the approaching cell confirms that the signal strength is increasing. When you move from cell to cell, the tower sends a signal from one cell to another. At remote locations, the towers may be too far apart to send the same signal. Even with many towers, mountains and skyscrapers can block the signal. Sometimes people find it difficult to find clear signs in buildings, especially in elevators.

2.2 TO FIND A PRESENT LOCATION OF A MOBILE USER USING GPS:

All cell phones always broadcast the radio signal, even when it is not in the phone. Mobile phone companies have been able to measure the location of a cell phone for many years using triangulation information from signal-receiving towers. However, the introduction of GPS technology for mobile phones has meant that GPS tracking of cell phones now makes this information more accurate. With GPS technology it is now very common in many new smartphones, which means that the location of anyone with a GPS-enabled smartphone can be tracked accurately at any time.

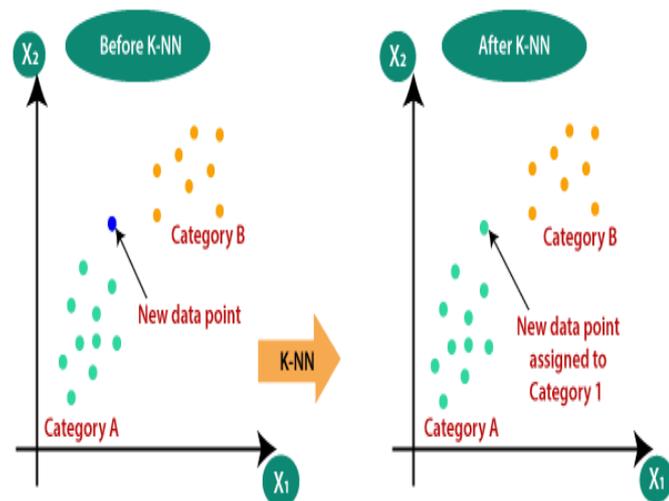
Therefore, GPS tracking of cell phones can be a useful feature for business owners, parents, friends and colleagues who want to communicate with each other. Since the cell phone already acts as a two-way radio when communicating with cell towers, GPS power

automatically expands the radio signal's access to space satellites. A-GPS technology is an advanced technology that suits mobile devices more accurately. A-GPS requires GPRS assistance and, in some cases, service provider network information, to pinpoint the current location accurately. In addition, the amount of CPU and programs required on a GPS phone is reduced by diverting most of the function to the service server instead. A standard A-GPS operating cell.

3. WORK DONE

3.1 KNN ALGORITHM

Understanding the background of the KNN algorithm is one of the easiest ways to learn a monitored machine. It simply calculates the point of the new data for all other training data points. Distance can be of any kind (India). It then selects data points near K, where K can be any number. Finally, assign a data point to a class where most of the K data points are part of it.



3.2 REQUIREMENTS

GPS-based GPS Tracking System for Android device consists of the following two sections.

- User
- Admin

User resources are below:

- Set your own password and username
- Record his location data on the website

- Start and stop services whenever they want
- Set nearby alerts based on location

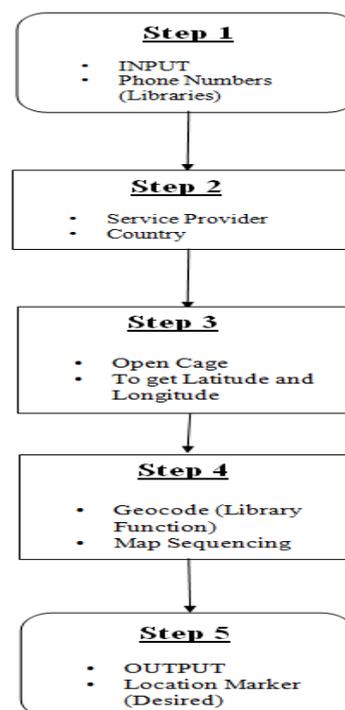
The user using the application owns his username and password so that no one else can enter the system and create confusion for the administrator about the user's location. The user enjoys security in a dangerous environment so as not to get lost as he leaves his logs on the website viewed by the administrator. Therefore, if any incorrect communication occurs, the administrator can get there soon to help him. Additionally, if a user wants to set an alarm system based on location, then the proximity alert system can help him. Allows the user to better manage his / her activities. Every user to be tracked must have the following skills:

- Use a Smartphone with Android OS
- Must have a basic knowledge of English

Manager resources are below:

- Can add or remove user if necessary
- Can access the location and route of each user

3.3 WORKFLOW:



As the work flow above shows how everything works.

STEP I: Take the Input as your mobile number and keep it in the dynamic, then use the Phone Library Libraries to ensure that the number is in the correct format.

STEP II: Then use the number to find the Service Provider and Country number, this is a secure process that does not involve the intervention of your service provider.

STEP III: This is where the real code works. Here we have used python libraries and one of them is the OPENCAGE library. This library helps us to find the required Longitude and Latitude of a number using a Network-based placement system and locate location.

STEP IV: After finding the Longitude and Latitude of the number we can now move this location to Maps. This is where another library comes into play namely, GEOCODE, this library helps us to find the longitude and latitude in Maps with the stop mark.

STEP V: Here is the Exit displayed on the map with all the required information displayed in the window. The marker indicates about 80% of the correct local results.

3.4 RESULT:

With the latest technological advances in modern science now people are expecting information about the location of any object for tracking purposes such as when a cab is booked the user needs to find a cab location in order to ensure his or her readiness.

In the meantime, we need more location-based resources to improve and save time and money while being free.

GPS is an app that has already been launched and everyone can access it without any restrictions.

Since we have a GPS location to improve this application, we need a GPS device to calculate the location of the information taken from the GPS.

Therefore, we have chosen the Android device to perform these calculations because the Android phone is expensive and offers multidimensional purposes to have some special built-in features like a GPS service that makes quiet things more common to work on.

3.5 OUTPUT:

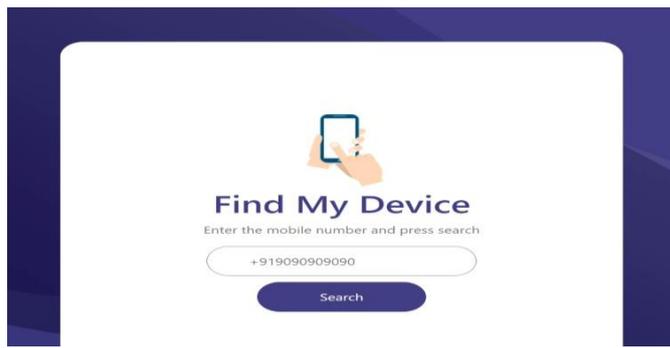


Fig -1: Figure

Here’s the Home Screen of our working project. As you can see here it has our projects logo and an Input box, where we have to enter the mobile number of a user, which beneath then having a Search button to search the location.

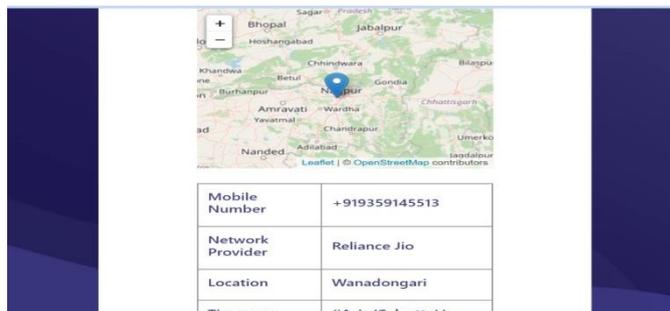


Fig -2: Figure

The Output Screen shows the Map having a pointer pointing the location of the user’s mobile number. It also shows the Mobile Number followed by its Service provider and name of location with its timepoints is what we wanted as an Output to show to a user.

4. CONCLUSIONS

We chose an Android phone as our GPS device because dedicated GPS devices are expensive. This is because all Android phones have this built-in feature. GPS devices identify your location via satellite. Search for the location again according to your specific criteria. After a certain distance relocation, the location may be recounted. We will plot this location to map. At the same time, we will connect with an external web server to send this information there. The web server will store the visiting path as a summation of some coordinating points within a range specified. The web server is a restricted area. We can see the visiting path from the

desktop or any other portable device. Like other systems, it is also not free from drawbacks. It will need the GPS service from the time we want to track. It will mostly use the battery power of the mobile phone. For this reason, our mobile phones can be automatically switched off for lack of power. We need to depend on an Internet connection to store the information on the webserver. If you have problems with your internet connection, or if you don't have the required bandwidth, you may not be able to send your data correctly.

4.1.1 PROS:

Convenient for a Normal user as we can't access a user's Location because it's Unethical.

- Easy to use Interface.
- Convenient/ Desired Results Displayed.
- Helpful in registering a lost phone complaint.
- Helpful to navigate your child nearby.

4.1.2 CONS:

- No LIVE Location access, instead can locate in a duration of time.
- Limited result Range.
- Ported Numbers may or may not be compatible with the current API used.

ACKNOWLEDGEMENT

We sincerely thank my advisor Prof. P. K. Karmore for giving me the opportunity to pursue my research under her guidance. It has been a great learning experience working with her. Special thanks to all my friends for their enthusiastic and generous support through my research study.

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