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SMS and GPS Based Fisherman Tracking System Using IOT

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ABSTRACT

Our fishermen are dealing with a real-life problem with their neighbouring countries. The Aim is to use RF innovation and safety measures to protect anglers' lives. GPS is used to track the pontoon's current location. The alarm will activate in the unlikely event that the angler crosses the fringe. By using a hand-off circuit, the vessel will invert. The Internet of Things station and angler will use the RF innovation to transfer data. Because of the bad weather and lack of creativity in salvage, area-based alert administrations are essential for fishermen. After giving the matter some thought, we suggested a low-effort; straightforward GPS beacon that fishermen can use to track their loved ones, friends, and fellow fishermen. If someone were to cross the edge, all anglers would receive an alert about that person in order for other fishermen to defend them in the unlikely event that they crossed the wrong way or were disappointed with the vessel. When the customer reaches a designated area of excitement for what's to come, it serves to remind them of the region. A low-effort, straightforward GPS beacon for anglers that uses following and checking units independently was intended in our suggested framework. The entire fishing community will receive an alert about the person who has breached the boundary. In the unlikely event that they crossed the pontoon incorrectly or with disappointment, other anglers can cover them. This framework provides indications for waterfront and angler watches. It alerts the base station to provide help while sparing the angler's life. In this way, we may prevent the angler from fishing before the fringe.

Keyword: Microcontoller, GPS, Sensor, RF Modules.

1. INTRODUCTION

Security problems are a constant in countries where the International Marine Time Boundary Line (IMBL) is present. Continuous life threats because modern unmanned perimeter security systems use cutting-edge technology. Remote camera use fishers are equipped with reconnaissance towers. About 18,000 different types of vessels sail direct from Tamil Nadu along the oceanic edge between India and Sri Lanka. Nevertheless, the Sri Lankan navy force shoots them after they unintentionally breach the border. Both of them experience misfortune as a result, along with financial gain. We have established a system that eliminates these problems and protects the anglers' lives. The residents of the beachfront area rely solely on their occupation of ocean fishing. If the angler crosses the boundary, it should be considered a real infraction. Due to ignorance, the angler crosses the outer edge of the sea as much as possible. The vessels are being intercepted by the nation's seaside monitors once they have passed the edge. Anglers' lives are

in danger in such a situation. In these situations, our outskirt ready framework for angler will help you win the project. By passing information through a network of middle-of-the-road devices, RF devices may communicate data across long distances. This allows for greater separation. It works best when a sensor or other information device transmits data irregularly. On August 18, 1978, the Indian Coastguard was formally established. By means of a parliament demonstration, it is established as an independent, equipped power within the Indian Union. The Army, Navy, and Air Force are the first three equipped powers under the Ministry of Defense, while this one is the fourth. This pertains to non-military security, but it also touches on national defense. Generally, it oversees fisheries, sea natural security, law enforcement, marine well-being, and ocean security. They necessitate observation, management, infiltration, and response. The Coast Guard is tasked with a number of tasks, including ensuring fishermen's safety.[4] When it comes to disasters, losses, snatching, and outside mediations, fishermen are helpless. The Indian Coast Guard is unable to assist fishermen exclusively, yet their concerns are essential to its goals. Protecting the maritime zones from criminal activity, including infiltration via oceanic routes and natural disasters, as well as providing charitable and sensible assistance inside the sea area, is the Coastguard's essential duty.

2.RELATED WORK

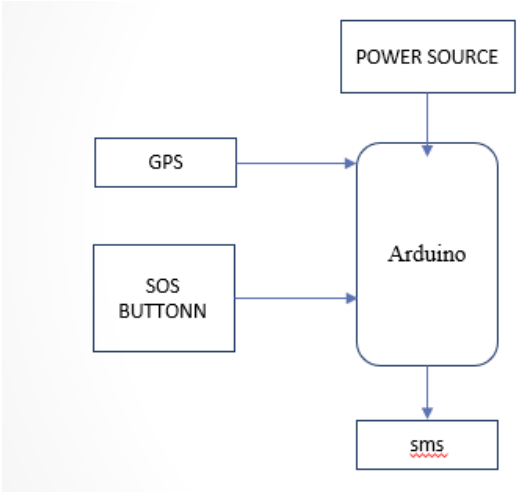
J Charles Finny Joseph, R Dinesh Kumar, M Shubin Aldo "Ready System for Fishermen Crossing Border utilizing Android "International Conference on Electrical, Electronics, and Optimization Techniques – 2016. People on the periphery can use the application to find the best route to reach their destination. The program will notify the user about the location of the devices and keep them informed about any problems arising from adversarial powers in boats to servers. This might be seen as an instance where CEOs use their ability to keep a safe distance from conflicts in various situations.**Archana Gupta, Mohammed Abdul Qadeer, Sandeep Kumar Location Based Services using Android 2012 IEEE** All three of the LBS types may be understood from the available GIS handling tools in Android since a portable device can be set up as a server, and since Android also supports this innovation, we can use the SQLite database to store data for that purpose. By using suitable strategies, we may construct the two mobile devices to provide peer-to-peer LBS benefits via SMS or MMS.**PulathisiBandara, UdanaBandaraTagciti:** A Workable Method for Generating and Discovering Location-Aware and Socially Relevant Information for Mobile Users 2010 IEEE Tagciti is a new field of mindful and socially relevant data creation and discovery management for mobile users. Rather than depending on artificially generated region-specific data, Tagciti provides users with the crucial opportunity to participate in the data generation process. It facilitates the creation of dynamic, contemporary, and socially relevant shared data. Furthermore, it provides a useful tool for using clients' interpersonal organization and location data to find created data in a socially significant and area mindful manner.

3.METHODOLOGY

General Packet Radio Service (GPRS), Board Smart Box (OBSB), and a distant server are all accessed through the on-board microcomputer infrastructure. The OBSB, which has an integrated Global Positioning System (GPS) beneficiary, is utilized by a product application that handles the processes of gathering neighborhood information and transmitting that information via GPRS to the distant server. The idea of Pervasive Computing is innovation that is covertly integrated into everyday life. Customers are presented with delicate services that need no thought. Currently, the Awareness and Notification Service

(ANS) has been developed, enabling the rapid development of applications that provide clients with condition-related advice. Additionally, the management provides notifications that are tailored to the client's preferences and present environment.

4. BLOCK DIAGRAM



5. MODULE DESCRIPTION

5.1 Power Supply

The 12V advance down transformer receives power from the AC source. With the use of a diode connect; the 12V AC transformer yield is adjusted. Capacitors are used to divide the 12V DC Diode Bridge yield.

5.2 GPS Module

There are two types of modules: dynamic labels that have a battery life and aloof labels that don't. GPS tags released to automatically identify a person, a package, or objects. These transponders are used to send data. There are two portions on a GPS tag. One is a coordinated circuit that controls, stores, and prepares data as well as demodulates radio frequency (RF) signals. The second device is a receiving device that can both receive and send signals.

5.3 GPS Reader

A radio frequency (RF) module, which functions as both a transmitter and a recipient of radio frequency signals, is part of the GPS reader. The transmitter is composed of an oscillator that causes the transporter to recur, a modulator that modifies information directions based on the bearer signal, and a beneficiary that has a demodulator to distinguish between the returned information.

5.4 SMS MOBILE Display

SMS MOBILE is able to display characters, numbers, and designs. The microcontroller's (P0.0–P0.7) I/O port is interfaced with the showcase. The presentation is multiplexed, so that, for instance, just one show continues to air at a time. The next showcase flashes on in 1/tenth of a second. Now and then shows will result in a continuous display of the tally due to Vision's diligence.

6. RESULT AND CONCLUSION

Must be able to identify the periphery with ease. Continuous monitoring of the climate our established structure will provide a convincing solution to fishermen's problems and prevent them from crossing into other countries' borders. This will prevent many anglers from dying at the border of the country. Most of

our work focuses on facilitating easy communication between two countries. Anglers' lifespan can be extended and their passing rate will be reduced. When using a wind speed detector. We can also follow the pontoon area in the same way. As a result, fishermen are able to easily identify the national ocean boundaries, which prevent them from entering their area. So saving their lives and fostering excellent relations with the surrounding countries.

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