

Intelligence Iot Based Fishermen Border Inspection System

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Abstract

Countries with the international marine time boundary line (IMBL) will always have security problems and continuous life threatens for those fishermen whose families main economical support is fishing. In Indian, the fisherman life has been going down day by day. The problem of the fisherman may affect the country as well as the income. So, efficient border alert system by using IOT is very important. This system is fully based on embedded technology. The border is very much important for nearly countries. So, maintaining the border is very important this system is mainly designed to track the border and it will not allow the fisherman to cross the border. So that they can reduce the gun shoots and death. The GPS system is used to track the signal from the cloud and the direction is view as well as accurate. The accurate value can be done by longitude and latitude output. The efficient border is necessary the application of the system is tracking the ship/boat to which the global system is connected, giving the information about its position whenever it's necessary. This is done with the help of GPS satellite and the bluetooth attached to the boat which helps to be attached.

I. INTRODUCTION

This paper concept is mainly depends on three concept. They are IOT, security system and wireless communication. The IOT is the concept which fully based on 2G, 3G or 4G. All the generation works according to the surroundings the data is taken from the directly by the cloud app. The GPS application is set with the cloud. Thus through the cloud it is send through the cloud it is send through the microprocessor and the fisherman message is alerted through the bluetooth device.

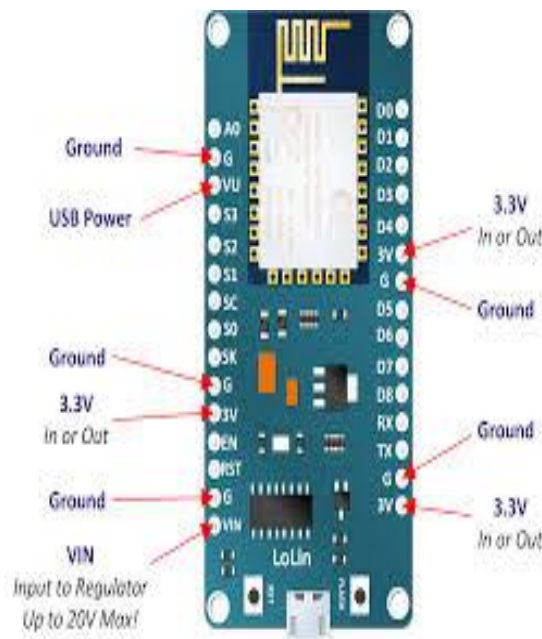


Fig.1 Amica Processor

The accurate location is tracked for a very long distance. The boat is tracked via web browser the boat is automatically gets diverted when it reaches the border. The intimation is send through the fisherman earlier. If the boat is taken reverse then it will not allow the fisherman to touch the border. The main concept is tracking the live setup. The mostly setup is alerted by before 50m. that too the GPGUA is used. It will not give the point accuracy in latitude and longitude. At first GPS modem is used but in this we had used the GPS data, bluetooth and wireless fidelity module. The GPS is used to sense the indoor location as the output. The security system is used for authentication purpose. The other user cannot able to operate the device without certain /correct password. They cannot able to modify any changes in display. The total data and devices used for this is fully encrypted. If the boat is lost or it is damaged due to flood the web server helps to identify the boat where it is. The main indoor concept is taken from the direct server. This is more helpful for the army as well as the fisherman. The tracking accurate values will help the fisherman to travel over a million of kilometers. So far the alarm has been introduced. If the boat reaches the border. Just the alarm can intimate the

fisherman but one certain situation the alarm cannot give any solution. Just a heavy flood can damage the parts and as well as just a wind can able to cross the border.

II. LITERATURE SURVEY

Fisherman alerts system for border crossing, in the year of 2010, the super slot tower is placed in the ship by this the tracking of the ship and border system can be alerted. In this the platform is based on ATMEHA164, RFIN reader. RF transmitter and receiver is used. The methodology implemented is automatic alarming system and output generation. The main drawback is if tower is damaged the whole system gets collapsed. If the flood tsunami is caused then the whole system gets damaged. There is no pre defined location. The range of coverage of the border system is too difficult. At first the tracking has been done with the help of RFID. In this N number of receiver and transmitted tags are used. The next comes ultrasonic in which it sends only the border and does not gives the current location. It can implemented only inside the water. Due to some fluctuations short circuit is caused so this is not implemented into the real world. The GPS is the next technology in which it is helpful for outdoor concept not for indoor. The platform is based on GPS and GSM. The methodology used in this is tracking system, location analysis, emergency SMS and weather forecasting is detected by using GMS and GPS the accurate position is difficult to obtain.Alert system for fisherman crossing border using android: in the year of 2017 the location is tracked by using GPS system. The platform used in this technology PIC16F877A,GPS and GSM. The methodology used here its tracking system sending information to the fisherman and location analysis of border system. In this main drawback is approximate current position can be viewed by electronic map. Tracking and warning system for fisherman by using IOT; in the year of 2018 this was the recent research the implementation is think speak IOT to store and location heard beat rate. The fisherman heartbeat is sensed and tracking has been them. The platform used here is ardino, at mega 328, GPS and GSM. In this also approximate tracking system and location analysis. This main disadvantage if the fisherman has a heart problem then this cannot be implementing and the boat does not reverse after entering to dangerous zone. This was the major drawback of this paper.

III. EXISTING SYSTEM

There is no pre defined location. The range of coverage of the border system is too difficult. At first the tracking has been done with the help of RFID. In this N number of receiver and transmitted

tags are used. The next comes ultrasonic in which it sends only the border and does not gives the current location. It can implemented only inside the water. due to some fluctuations short circuit is caused so this is not implemented into the real world. The GPS is the next technology in which it is helpful for outdoor concept not for indoor. In GPS the advanced version comes the neo GPS to ahead. This neo GPS depends on the tower. The error is caused before fifty meters of the border. So this may comes under the main drawbacks. There is no pre stored location can be sensed and no appropriate device maintaining there is lot of problems in range of covering the border system. To overcome this we have introduced many advanced technology to overcome the problem.

IV. PROPOSED SYSTEM

In this proposed system to overcome to the drawback the new thing comes into existence. In this amica processors used with in build IOT and WI-FI module. The GPS helps to track the live location by using GPS app through android mobile phone. Thus the app gets the data from the cloud server to the at mega processor send the data to the bluetooth module. Thus it is displayed(Fig1).The accurate location can be send via web browser. So that the fisherman can able to get an idea for the next level of fishing. This setup is fully based on the process of IOT. So that the board automatically sense the border and board is get reversed.it will not allow the board to cross the other nation border.so it leads to get less death on fisherman. The whole system is authenticated by security system each and every module its done by wireless communication. The marine traffic can be fully controlled easily. The main advantage in this proposed system is accurate location and board can be monitored completely.

V. BLOCK DIAGRAM

In this the inbuild IOT and WI-FI module is processed by atmega processor. It has USART and I/O ports are also present inside the single processor. the less power supply of 3.3v is given to the processor. The GPS cloud app is connected the bluetooth modem.in which the

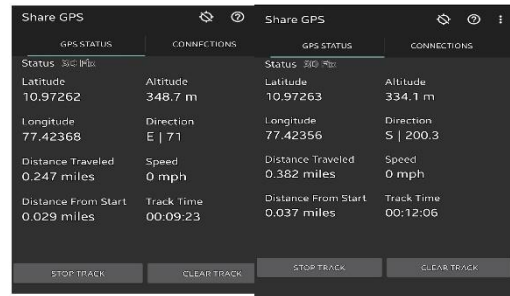
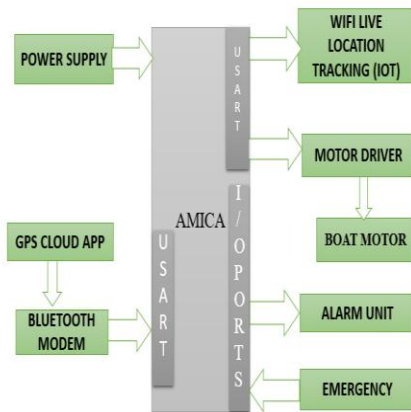
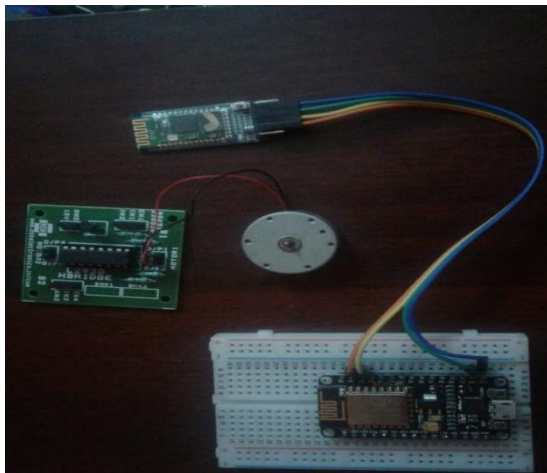


Fig.2 Location tracker

accurate value can be measured. Through longitude and latitude and the live process can be tracked with the help of IOT. This live location can be viewed with the help of WI-FI module. The motor drive is attached to the atmega processor to reversed the boat once it attains the border. if the case is emergency then the alarm unit is setuped in emergency unit. the whole systm gives the correct and current location for the fisherman.

VI. RESULT AND DISSCUSSION



DISCRIPTION:

Location is very much important for the fishermen to ride in the sea. For this welfare number of technique and algorithms has been implemented for perfect tracking. Through share GPS the Latitude, Longitude, Distance travelled, Speed, Distance from start, Track time, Altitude, Direction has been perfectly monitored.

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