

ABSTRACT

Indonesia is a country that has the most islands in the world. With so many islands, many people work as fishermen. There are various types of fishermen, one of which is a floating fish fisherman. However, the location of the fish floating is difficult to monitor because it often changes places carried by ocean currents. The purpose of this study is to make it easier for fishermen who are on land to easily monitor fish floating in the sea.

So that monitoring can be carried out on a mobile basis, an Android application is used using the LoRa communication protocol. What is monitored is the location of the floating fish platform that you want to monitor. The location data sent is in the form of GPS coordinates from the floating fish platform being monitored. The data reception scheme comes from Firebase Real-Time, then the data is processed by the Google Maps API to display the coordinates of the floating fish platform.

From this, an Android-based application was finally created with the name MyLora application which functions to monitor floating fish platform. With this application, it is hoped that it will be able to solve the problems that exist in the community, especially for floating fish platform fishermen who are in the middle of the sea. The tests carried out were as a functional of the application, testing public opinion about the application used and testing the location of the floating fish platform that was monitored. The result of the test is a comparison of GPS data from smartphone and GPS location data from IoT devices installed on floating fish platform that are monitored.

Keywords: *Firestore, Google Maps API, GPS.*