

ABSTRACT

Public transportation such as buses are currently still in great demand to travel to various places due to their affordable and comfortable prices, and buses are also very often used by visually impaired people, therefore this tool is made with the aim that blind people can find out the position of the bus from the bus stop. or a terminal by sending coordinates and being received by the bus stop so that the stop will notify the bus's current position. The tools used for this research are the Ublox Neo-7M which is used as a GPS to get the coordinates from the bus, the Arduino Mega as the data receiver from the GPS and also displays the coordinates via the LCD and also passes the data to the ESP 8266, for the ESP8266 it is used to send the coordinates to the database in this case are the Firebase Database, after which the data that has been received by the Firebase Database will be retrieved by Maps which have been programmed using VueLeaflet. The research has produced a module that can send data to the Firebase Database and can also receive data from bus stops, and data that is sent to the Firebase Database can be displayed in the form of a website map that has been programmed. This tool can send data in the form of coordinates and can also display these coordinates with a visualization in the form of a website map that has been programmed and can also be received by bus stops.

Keywords: Blind, Firebase, VueLeaflet, Arduino, GPS.