#include<SoftwareSerial.h>

#include<TinyGPS++.h>

#include <ESP8266WiFi.h>

#include <FirebaseArduino.h>

SoftwareSerial ss(4,3);

#define FIREBASE\_HOST "gps-gps-tracking.firebaseio.com"

#define FIREBASE\_AUTH "AIzaSyCPMOFvcrF539pso2KAqNoIYqPbZopZfu4"

#define WIFI\_SSID "grpN"

#define WIFI\_PASSWORD "iotgrpN"

TinyGPSPlus gps;

float latitude , longitude;

void setup() {

// put your setup code here, to run once:

Serial.begin(9600);

ss.begin(9600);

// connect to wifi.

WiFi.begin(WIFI\_SSID, WIFI\_PASSWORD);

Serial.print("connecting");

while (WiFi.status() != WL\_CONNECTED) {

Serial.print(".");

delay(500);

}

Serial.println();

Serial.print("connected: ");

Serial.println(WiFi.localIP());

Firebase.begin(FIREBASE\_HOST, FIREBASE\_AUTH);

}

void loop() {

// put your main code here, to run repeatedly:

while(ss.available()>0)

{

gps.encode(ss.read());

if (gps.location.isUpdated())

{

Serial.print("Latitude= ");

Serial.println(gps.location.lat(), 6);

delay(300);

Firebase.setFloat("latitude", gps.location.lat() );

handle error

if (!Firebase.failed())

{

Serial.print("setting Lat failed:");

Serial.println(Firebase.error());

return;

}

delay(300);

Serial.print("Longitude= ");

Serial.println(gps.location.lng(), 6);

delay(300);

Firebase.setFloat("longitude", gps.location.lng() );

handle error

if (!Firebase.failed())

{

Serial.print("setting Long failed:");

Serial.println(Firebase.error());

return;

}

delay(300);

Serial.print("Speed =");

Serial.println(gps.speed.kmph(), 3);

delay(300);

delay(100);

Firebase.setFloat("speed", gps.speed.kmph() );

handle error

if (!Firebase.failed())

{

Serial.print("setting Speed s failed:");

Serial.println(Firebase.error());

return;

}

delay(300);

}

}

}