## **SMART DOOR BELL**

## CODE:

```
#include <ESP8266WiFi.h>
#include <Firebase ESP Client.h>
#include "addons/TokenHelper.h"
#include "addons/RTDBHelper.h"
#define WIFI_SSID "123456789"
#define WIFI_PASSWORD "123456789"
#define API_KEY "AlzaSyCJqfTstb2SEIYQKJZaBzmPVIqRTDLH-7g"
#define DATABASE_URL "https://testcloud-edc85-default-rtdb.firebaseio.com/"
FirebaseData fbdo;
FirebaseAuth auth;
FirebaseConfig config;
unsigned long sendDataPrevMillis = 0;
bool signupOK = false;
int lpin = D1;
int bpin = D2;
String intValue;
void setup(){
 pinMode(lpin, OUTPUT);
 pinMode(bpin, OUTPUT);
 Serial.begin(115200);
 Serial.println();
 String thisBoard = ARDUINO_BOARD;
 Serial.println(thisBoard);
 WiFi.begin(WIFI SSID, WIFI PASSWORD);
```

```
Serial.print("Connecting to Wi-Fi");
 while (WiFi.status() != WL CONNECTED){
  Serial.print(".");
  delay(300);
 }
 Serial.println();
 Serial.print("Connected with IP: ");
 Serial.println(WiFi.localIP());
 Serial.println();
 config.api key = API KEY;
 config.database_url = DATABASE_URL;
 if (Firebase.signUp(&config, &auth, "", "")){
  Serial.println("Firebase Auth successful");
  signupOK = true;
 }
 else{
  Serial.printf("Firebase Auth failed: %s\n", config.signer.signupError.message.c_str());
 }
 config.token status callback = tokenStatusCallback; // see addons/TokenHelper.h
 Firebase.begin(&config, &auth);
 Firebase.reconnectWiFi(true);
}
void loop(){
 if (Firebase.ready() && signupOK)
 {
  if (Firebase.RTDB.getString(&fbdo, "/mainbucket/bulb"))
  {
```

```
intValue = fbdo.stringData();
 String mySubString = intValue.substring(2, 3);
 Serial.println(intValue);
 Serial.println(mySubString);
 if (mySubString == "0")
 {
  digitalWrite(lpin, LOW);
  Serial.println("LED OFF");
  delay(100);
 }
 else if (mySubString == "1")
 {
  digitalWrite(lpin, HIGH);
  Serial.println("LED ON");
  digitalWrite(bpin, HIGH);
  delay(1000);
  digitalWrite(bpin, LOW);
  delay(1000);
  digitalWrite(bpin, HIGH);
  delay(1000);
  digitalWrite(bpin, LOW);
  delay(100);
 }
 delay(100);
}
else {
 Serial.println("Firebase error: " + fbdo.errorReason());
}
delay(100);
```

}