```
#include "HX711.h"
#include <WiFi.h>
#include <WiFiClientSecure.h>
#include <UniversalTelegramBot.h>
#include "DFRobotDFPlayerMini.h"
#include <WebServer.h>   // ADDED: lightweight HTTP server

// ---------------- HX711 Setup ----------------
#define SCK 22
#define DOUT1 21
#define DOUT2 19
#define DOUT3 23
#define DOUT4 18
#define DOUT5 27
#define DOUT6 26

HX711 scale1, scale2, scale3, scale4, scale5, scale6;

// ---------------- WiFi + Telegram + MP3 Setup ----------------
const char* ssid = "UIU-STUDENT";
const char* password = "12345678";
#define BOTtoken "8263888679:AAGMFblGKsENcqJhkUfGAsodhzSRBJrA-Gs"
#define CHAT_ID "7239421454"

WiFiClientSecure client;
UniversalTelegramBot bot(BOTtoken, client);

// --- Serial2 for Arduino Uno ---
const int RX_PIN = 16;
const int TX_PIN = 17;

// --- Serial1 for MP3 Module ---
const int MP3_RX = 4;
const int MP3_TX = 5;

DFRobotDFPlayerMini mp3;

// ---------------- Flame Sensor + Buzzer Setup ----------------
const int FLAME_PIN = 34; // Digital OUT from flame sensor
const int BUZZER_PIN = 32; // Active buzzer

// ---------------- HTTP server ----------------
WebServer server(80);

// HTTP handlers
void handle_play35() {
  mp3.play(35);                 // play 0035.mp3 (potato)
  Serial.println("HTTP: play35 called -> MP3(35)");
  server.send(200, "text/plain", "OK");
}
void handle_play36() {
  mp3.play(36);                 // play 0036.mp3 (onion)
  Serial.println("HTTP: play36 called -> MP3(36)");
  server.send(200, "text/plain", "OK");
```

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}
void handle_play37() {
  mp3.play(37);                 // play 0037.mp3 (garlic)
  Serial.println("HTTP: play37 called -> MP3(37)");
  server.send(200, "text/plain", "OK");
}

// ---------------- Setup ----------------
void setup() {
  Serial.begin(115200);
  Serial.println("Initializing ESP32 with 6 HX711 + WiFi + MP3 + Telegram
+ Flame Sensor + Buzzer...");

  scale1.begin(DOUT1, SCK);
  scale2.begin(DOUT2, SCK);
  scale3.begin(DOUT3, SCK);
  scale4.begin(DOUT4, SCK);
  scale5.begin(DOUT5, SCK);
  scale6.begin(DOUT6, SCK);

  delay(1000);

  scale1.tare(); scale2.tare(); scale3.tare(); scale4.tare();
scale5.tare(); scale6.tare();
  scale1.set_scale(420);
  scale2.set_scale(420);
  scale3.set_scale(420);
  scale4.set_scale(420);
  scale5.set_scale(420);
  scale6.set_scale(420);

  WiFi.begin(ssid, password);
  Serial.print("Connecting WiFi");
  while (WiFi.status() != WL_CONNECTED) {
    Serial.print(".");
    delay(500);
  }
  Serial.println("\nWiFi connected!");
  Serial.print("ESP32 local IP: ");
  Serial.println(WiFi.localIP()); // <-- Note this IP and put it into
ESP32-CAM

  client.setInsecure();

  // register HTTP routes
  server.on("/play35", handle_play35);
  server.on("/play36", handle_play36);
  server.on("/play37", handle_play37);
  server.begin();
  Serial.println("HTTP server started on port 80");

  Serial2.begin(9600, SERIAL_8N1, RX_PIN, TX_PIN);
  Serial1.begin(9600, SERIAL_8N1, MP3_RX, MP3_TX);
  if (!mp3.begin(Serial1)) {
    Serial.println("DFPlayer not found!");
    while (true);
  }
  mp3.volume(25);
  Serial.println("DFPlayer Mini online.");

  pinMode(FLAME_PIN, INPUT);
  pinMode(BUZZER_PIN, OUTPUT);
  digitalWrite(BUZZER_PIN, LOW); // Buzzer off initially
}

void sendTelegram(String message) {
  if (bot.sendMessage(CHAT_ID, message, "")) {
    Serial.println("Telegram sent: " + message);
  } else {
    Serial.println("Telegram send failed");
  }
}

// ---------------- Loop ----------------
void loop() {
  // handle HTTP requests quickly
  server.handleClient();

  float w1 = scale1.get_units(5);
  float w2 = scale2.get_units(5);
  float w3 = scale3.get_units(5);
  float w4 = scale4.get_units(5);
  float w5 = scale5.get_units(5);
  float w6 = scale6.get_units(5);

  Serial.printf("W1: %.2f  W2: %.2f  W3: %.2f  W4: %.2f  W5: %.2f  W6:
%.2f\n", w1, w2, w3, w4, w5, w6);

  // --- Check Serial2 for UNO commands ---
  if (Serial2.available()) {
    String cmd = Serial2.readStringUntil('\n');
    cmd.trim();
    Serial.println("Received: " + cmd);

    if (cmd == "HELLO") { mp3.play(1); }
    else if (cmd == "RICE") { sendTelegram("Order placed: 2 kg Rice");
mp3.play(2); }
    else if (cmd == "SUGAR") { sendTelegram("Order placed: 2 kg Sugar");
mp3.play(2); }
    else if (cmd == "SALT") { sendTelegram("Order placed: 1 kg Salt");
mp3.play(2); }
    else if (cmd == "OIL") { sendTelegram("Order placed: 2 litre Oil");
mp3.play(2); }
    else if (cmd == "ONION") { sendTelegram("Order placed: 2 kg Onion");
mp3.play(2); }
    else if (cmd == "POTATO") { sendTelegram("Order placed: 1 kg
Potato"); mp3.play(2); }
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    // ---------- Servo 1 ----------
    else if (cmd == "SERVO1_ACTIVE") {
      mp3.play(3);
      Serial.println("Servo 1 â†’ MP3(3)");
      delay(1000);
      if (w1 >= 0 && w1 <= 50) { mp3.play(11); Serial.println("W1:
0â€“50g â†’ MP3(11)"); }
      else if (w1 >= 51 && w1 <= 100) { mp3.play(12); Serial.println("W1:
51â€“100g â†’ MP3(12)"); }
      else if (w1 >= 101 && w1 <= 200) { mp3.play(13);
Serial.println("W1: 101â€“200g â†’ MP3(13)"); }
      else if (w1 >= 201 && w1 <= 300) { mp3.play(14);
Serial.println("W1: 201â€“300g â†’ MP3(14)"); }
      else { Serial.println("W1 out of defined range."); }
    }

    // ---------- Servo 2 ----------
    else if (cmd == "SERVO2_ACTIVE") {
      mp3.play(4);
      Serial.println("Servo 2 â†’ MP3(4)");
      delay(1000);
      if (w2 >= 0 && w2 <= 50) { mp3.play(15); Serial.println("W2:
0â€“50g â†’ MP3(15)"); }
      else if (w2 >= 51 && w2 <= 100) { mp3.play(16); Serial.println("W2:
51â€“100g â†’ MP3(16)"); }
      else if (w2 >= 101 && w2 <= 200) { mp3.play(17);
Serial.println("W2: 101â€“200g â†’ MP3(17)"); }
      else if (w2 >= 201 && w2 <= 300) { mp3.play(18);
Serial.println("W2: 201â€“300g â†’ MP3(18)"); }
      else { Serial.println("W2 out of defined range."); }
    }

    // ---------- Servo 3 ----------
    else if (cmd == "SERVO3_ACTIVE") {
      mp3.play(5);
      Serial.println("Servo 3 â†’ MP3(5)");
      delay(1000);
      if (w3 >= 0 && w3 <= 50) { mp3.play(19); Serial.println("W3:
0â€“50g â†’ MP3(19)"); }
      else if (w3 >= 51 && w3 <= 100) { mp3.play(20); Serial.println("W3:
51â€“100g â†’ MP3(20)"); }
      else if (w3 >= 101 && w3 <= 200) { mp3.play(21);
Serial.println("W3: 101â€“200g â†’ MP3(21)"); }
      else if (w3 >= 201 && w3 <= 300) { mp3.play(22);
Serial.println("W3: 201â€“300g â†’ MP3(22)"); }
      else { Serial.println("W3 out of defined range."); }
    }

    else if (cmd == "SERVO4_ACTIVE") {
      mp3.play(6);
      Serial.println("Servo 4 â†’ MP3(6)");
      delay(1000);
      if (w4 >= 0 && w4 <= 50) { mp3.play(23); Serial.println("W4: 
0â€“50g â†’ MP3(23)"); }
      else if (w4 >= 51 && w4 <= 100) { mp3.play(24); Serial.println("W4: 
51â€“100g â†’ MP3(24)"); }
      else if (w4 >= 101 && w4 <= 200) { mp3.play(25); 
Serial.println("W4: 101â€“200g â†’ MP3(25)"); }
      else if (w4 >= 201 && w4 <= 300) { mp3.play(26); 
Serial.println("W4: 201â€“300g â†’ MP3(26)"); }
      else { Serial.println("W4 out of defined range."); }
    }
    else if (cmd == "SERVO5_ACTIVE") {
      mp3.play(7);
      Serial.println("Servo 5 â†’ MP3(7)");
      delay(1000);
      if (w5 >= 0 && w5 <= 50) { mp3.play(27); Serial.println("W5: 
0â€“50g â†’ MP3(27)"); }
      else if (w5 >= 51 && w5 <= 100) { mp3.play(28); Serial.println("W5: 
51â€“100g â†’ MP3(28)"); }
      else if (w5 >= 101 && w5 <= 200) { mp3.play(29); 
Serial.println("W5: 101â€“200g â†’ MP3(29)"); }
      else if (w5 >= 201 && w5 <= 300) { mp3.play(30); 
Serial.println("W5: 201â€“300g â†’ MP3(30)"); }
      else { Serial.println("W5 out of defined range."); }
    }
    else if (cmd == "SERVO6_ACTIVE") {
      mp3.play(8);
      Serial.println("Servo 6 â†’ MP3(8)");
      delay(1000);
      if (w6 >= 0 && w6 <= 50) { mp3.play(31); Serial.println("W6: 
0â€“50g â†’ MP3(31)"); }
      else if (w6 >= 51 && w6 <= 100) { mp3.play(32); Serial.println("W6: 
51â€“100g â†’ MP3(32)"); }
      else if (w6 >= 101 && w6 <= 200) { mp3.play(33); 
Serial.println("W6: 101â€“200g â†’ MP3(33)"); }
      else if (w6 >= 201 && w6 <= 300) { mp3.play(34); 
Serial.println("W6: 201â€“300g â†’ MP3(34)"); }
      else { Serial.println("W6 out of defined range."); }
    }
    else { sendTelegram("Unknown order: " + cmd); }
  }

  // --- Flame Sensor + Buzzer ---
  int flameState = digitalRead(FLAME_PIN);
  if (flameState == LOW) { // Flame detected
    Serial.println("Flame detected! Playing MP3(9) & Buzzer ON");
    mp3.play(9);
    digitalWrite(BUZZER_PIN, HIGH);
  } else {
    digitalWrite(BUZZER_PIN, LOW); // turn off buzzer if no flame
  }

  delay(1000);
}
```