

Bank Locker Security System - Full Arduino Code

```
#include <WiFi.h>
#include <SPI.h>
#include <MFRC522.h>
#include <Servo.h>
#include <TinyGsmClient.h>

#define SS_PIN 5
#define RST_PIN 27
#define SERVO_PIN 18
#define BUZZER_PIN 19
#define RXD2 16
#define TXD2 17

Servo lockerServo;
HardwareSerial sim800(1);
MFRC522 mfrc522(SS_PIN, RST_PIN);

String authorizedUID = "12345678"; // Replace with your actual RFID tag UID

void setup() {
    Serial.begin(115200);
    sim800.begin(115200, SERIAL_8N1, RXD2, TXD2);
    SPI.begin();
    mfrc522.PCD_Init();
    lockerServo.attach(SERVO_PIN);
    pinMode(BUZZER_PIN, OUTPUT);
    Serial.println("Bank Locker System Initialized (ESP32)");
}

void loop() {
    if (!mfrc522.PICC_IsNewCardPresent() || !mfrc522.PICC_ReadCardSerial())
        return;

    String uid = "";
    for (byte i = 0; i < mfrc522.uid.size; i++)
        uid += String(mfrc522.uid.uidByte[i], HEX);

    Serial.println("Scanned UID: " + uid);

    if (uid == authorizedUID) {
        Serial.println("Access Granted");
    }
}
```

```
    lockerServo.write(90);  
    delay(5000);  
    lockerServo.write(0);  
} else {  
    Serial.println("Access Denied - Sending Alert");  
    digitalWrite(BUZZER_PIN, HIGH);  
    sim800.print("AT+CMGF=1\r");  
    delay(1000);  
    sim800.print("AT+CMGS=\"+919876543210\"\r"); // Change to your mobile number  
    delay(1000);  
    sim800.print("Unauthorized Access Attempted!");  
    sim800.write(26);  
    digitalWrite(BUZZER_PIN, LOW);  
}  
delay(2000);  
}
```