**Integration Log for Smart Security System**

**Date: 11th December 2023**

**Integrated Components**

1. **Hardware**
2. **Raspberry Pi 4**
3. **0.91” OLED Display**
4. **Red LED**
5. **Green LED**
6. **4x4 Keypad**
7. **Jumper Wires**
8. **Software**
9. **Raspberry Pi OS Lite**
10. **Python 3**
11. **Luma-oled library**
12. **Paho MQTT Library**

**Challenges Faced**

1. **Having the appropriate LED light based on the input of the PIN by the user**
2. **Inability to view content on the OLED display**
3. **Publishing messages to MQTT broker**
4. Subscribing to MQTT Topic

**Solutions**

1. **Having the right wiring is important for this. The corresponding GPIO pin should be connected the right LED on the breadboard.**
2. **Changed the library from Adafruit to Luma**
3. **Implemented TLS connectivity on the application and also utilization of the cluster username and password.**
4. **Still troubleshooting the receipt of messages on the website after subscription to topic.**