

This work presents a framework for interactive application on a distributed network of lighting devices based on Espressif ESP32-S3 modules. The framework locates devices by measuring their mutual distances. There are two types of devices, fixed stations and mobile devices, due to the intended use of the framework. The work also includes a helping application for a PC that visualizes the localization and allows direct control of devices. The framework uses Bluetooth mesh for communication and WiFi FTM (RTT) for distance measurement. To test the framework, physical devices were designed and fabricated. The framework and fabricated devices are demonstrated in a ‘Find Your Color’ game where the goal is to bring mobile device to a fixed station with the same color as the mobile device.