

Abstract

Indoor Positioning or indoor localization is a technology that is being studied in recent years. The technology used for Indoor Positioning is Bluetooth Low Energy (BLE) technology. One of the implementations of BLE is Beacon. Beacon is a device that is used to emit a Received signal strength indicator (RSSI) signal from BLE. In this Final Project examine the position layout in the Bandung Geological Museum Building. With a complex building layout and visitor mobility, the need for positioning in the room and navigation system will continue to grow. The plan of the Bandung Geological Museum Building will be mapped into a 2-Dimension (2D) based Mobile Operating System (OS). One algorithm that can be used for indoor positioning using Device Beacon is positioning algorithm. Positioning Algorithm utilizes the Received signal strength indicator (RSSI) signal to determine the position of an object (Smartphone). to find the position of the object (Smartphone), the distance of the distribution of RSSI values that can be captured by objects (Smartphones) using a trial scenario of taking distance and getting the maximum distance that can be captured by an object (Smartphone) is 6 meter. the result of the distance that has been determined from the experiment can be made as a distance between the beacons and other beacons and placing Beacom's position in accordance with the area of the room contained in the Bandung geological museum.

Kata Kunci : *Positioning algorithm, Bluetooth Low Energy (BLE), Received Signal Strength Indicator (RSSI), Device Beacon.*