Beacon-integrated Attendance App

Abstract

Taking attendance in class is still practised in many institutions of higher learning. With the advent of technologies, the conventional practice with pen-and-paper is deemed inefficient and time consuming. On top of the possible human-error in taking the attendance and also the ease of tampering with the data, manually taking attendance is very time-consuming. There are many apps developed to tackle these issues. However, many of these apps merely transform the practice from physical pen-and-paper to electronic touch-and-click in which the attendance is still taken by the instructor. In this paper, we propose the use of a beacon device to verify the attendance and it can be configured for automatic attendance taking. On top of that, other functionalities such as attendance report, submission of letter of absent, assign demonstrator/tutor to take attendance, manual attendance for those without smartphones are also included.