

ABSTRACT

In classroom every student and lecturer using laptop and smartphone to support teaching and learning activities, the Wi-Fi network is one of the supporting facilities for these activities. Therefore, Wi-Fi network is available in classrooms. However, either students or lecturers are often having difficulty to connect to Wi-Fi network that is available in the classroom because the capacity of users which Wi-Fi can hold is limited.

This final project will be done by creating High Density Wi-Fi network using Raspberry Pi as access point in classrooms to alleviate user needs in using Wi-Fi network with 802.11n protocol which is a common protocol for devices such as laptops and smartphones that are used in classroom. Moreover, the High Density Wi-Fi network that will be provided with FTP server as media of exchange data between users and Raspberry Pi.

With The High Density Wi-Fi network that will be created in this final project can solve the difficulty of user to connect to Wi-Fi network because many users are accessing the Wi-Fi at the same time.

Keywords: High Density Wi-Fi, Raspberry Pi, 802.11n, FTP Server