ABSTRACT

Gardening in the private lawn has become a hobby among the metropolitan citizen. Popular plants such as ornamental plants, organic crops, as well as herbs The goals is diverse, ranging from decorating homes, commercial, or personal consumption. However, plant's treatment often gets less attention for growth, because of trivial things such as forgot to water plants. In result of these plants withered and disposed into organic waste that would be a waste if not managed well.

According to This final task provides the solution to control plant's watering on a system called APA (AQUAPONIC AUTOMATIC). This system utilizing the REST protocol based on android and web with case studies on private lawn. This system performs remote watering by making use of the weather information on the cloud, do plant monitoring, see the weather statistic, and set the periodic automatic watering.

According to the test, This system do remote watering with time response 0,1617 ~ 0,5631 second, provides weather information on device location with time response 0,676 ~1,9 seconds, do plant monitor by photo with response 3,5877 ~ 5,5710 seconds until the image downloaded , also set the regulation of automatic watering with response 0,1533 ~ 0,5605 second that can be run on android and using cloud service.

Keywords : Watering, Cloud Service, Weather Service, REST protocol, Android.