## **Abstract**

The field of agriculture is very important to meet basic human needs. While the population is increasing, the need for vegetables also increases. As we know, after the farmer is done harvesting, the vegetables will be sent to the supplier and in the supplier the vegetables will be stored in some storage. Therefore, fresh and hygienic storage is needed so that the freshness and quality of vegetables is maintained, but still the storage does not consider the conditions of the room that makes the quality of vegetables doubtful.

This application is done so that vegetable storage will remain fresh and is expected to last longer. The sensor will collect temperature and humidity data. If the temperature and humidity is below the specified value, the relay will give a signal and water sprinkler will on, of course, this is done using a method that has been propose which is the Decision Tree method.

Based on the testing and analysis that has been conducted, which are showing the accuracy of the method that used in this system which is Decision Tree and also comparing the freshness of two vegetables that put in different scenario, the accuracy that gain using Decision Tree method is 89,79% label is correctly classified and it cause the vegetable that put in the vegetable storage will remain fresh until a day.

**Keywords: Prototype, Decision Tree.**