

## **ABSTRACT**

*The population, which is increasing and developing every day, will be inversely proportional to the land available for farming. Problems will arise if city residents want to grow crops but there is no land for farming. This is what made the hydroponic farming method emerge, this method uses the yard as land and paralon media as the planting medium. Several methods that are often used in hydroponics, one of which is the Deel Flow Technique (DFT) System. Many plants and vegetables can be cultivated hydroponically. One of them is Spinach. Technological developments can solve the problems that occur, namely growing spinach hydroponically with the DFT system using IoT devices to control the nutrient water in the DFT hydroponic system. This system consists of temperature, pH, TDS and DS18B20 sensors which are installed on a nutrient reservoir with a Node MCU for sending data to a database and can be read by users via MIT via Android. The output of this research is that data can be sent in real time and the system can work well. This research test resulted in a pH sensor testing accuracy percentage of 3.4%, TDS sensor of 0.34%, temperature sensor of 1.52%.*

**Keywords:** *Internet of Things, Hydroponics, DFT, Spinach.*