

## **ABSTRACT**

*Hydroponics is a method of farming using water as a growing medium. The function of the soil that was originally used as a planting medium can be replaced with other alternatives using the hydroponic method. Hydroponic plants require more care than plants grown using conventional methods. Therefore, plants grown with this method require good control in terms of nutrition, water quality, light intensity and air temperature in order to obtain quality results. This control difficulty is the main background of designing a monitoring website using the Internet of Things.*

*Internet of Things is a future concept where an object can send data with the internet as a medium without having to connect with humans. IoT itself has an ecosystem consisting of smart objects, smart devices, and smartphones. IoT serves to facilitate all the work that humans do, one of which is monitoring or controlling something only with a smartphone or gadget.*

*This website will use Firebase as a database to store data received from sensors connected to the main microcontroller. The data received by Firebase as a database will be sent to the API (Application Programming Interface) to be processed so that it can be viewed directly on the website. The data received include water quality, nutrition, temperature, and humidity.*

**Kata Kunci:** *Database, Website, Internet of Things, Padi.*