ABSTRACT

Flooding is a natural phenomenon that usually occurs in areas that are often drained by rivers. The impact of flooding can be reduced if the community is better prepared to face future floods. One of the areas where floods often occur when rainfall is high is Bandung Regency, the area around the Citarum River. One of them is the construction of a spillway that is equipped with the use of technology in the form of the Internet of Things in an effort to prevent flood disasters. The author will focus on making a simulator of the spillway designed with RasberryPi and integrated with the website as a data monitoring control. This system is designed to prevent water from overflowing into water bodies by dumping excess water into the reservoir using an ultrasonic sensor to detect changes in water level. This research will focus on developing a website that is used for monitoring data. This study uses the Prototyping method for software development. The website is also equipped with a water level detection feature by predicting based on existing water level data using the Linear Regression method. This method is used to measure the level of change in the water level line, so that it can be predicted that the water level in the future will be medium, high or shallow.

Keywords— *flood, monitoring website, prototyping method, linear regression*