

## **Abstract**

Very high rainfall and large river currents in an area often make the river postman difficult to measure the river water height and discharge. Therefore the river postman often unable to measure the river water height and discharge although sometimes in the river there is already a line of water height. Although from government agencies such as BBWS Citarum already have a sensor tool that helps the river postman to measure the river water height and discharge, but still it is not fully helpful because the tool is often damaged, there is no monitor, no notification when the river water overflows, and then the resulting data is still web based.

So, with increasingly technological developments now, it can be more helpful with technology IoT (Internet of Things) applied to measuring devices consisting of sensors, cameras, and microcontrollers. Data taken from the sensor ultrasonic processed by using microcontroller Raspberry Pi 3, and then stored into the database server become a JSON (JavaScript Object Notation) which then the data taken by the mobile app based android.

**Keywords:** the river postman, river, sensor ultrasonic, mobile app, android