

ABSTRACT

Information systems can provide information that is received from a device that has been equipped with a supporting component in order to be connected with information systems. Tool monitoring system can also benefit from the information to display, store data that has been obtained from the monitoring tool. Information system monitoring tool that integrates with *berupah* helmet project that detects the temperature of the environment, the user's heart rate and helmet, buzzer, to facilitate a coordinator overseeing the conditions of workers in the field.

To overcome these problems, in this final project created a website *berupah* information system that can transmit information conditions of workers, by way of storing and displaying data that has been retrieved from the "Helmet Project Arduino-based" that can send user environment temperature data helmet, the helmet, the user's heart rate mendeteksi gas exist around the helmet users and information systems can also perform controls on the helmet by turning on the buzzer in the helmet project-based Arduino. All danger being detected every notification there will be sensors either on the website *berupah* are red and the writing on his helmet is marked with *menyalannya* buzzer if gas sensors and temperature sensors detect danger with a tone that is different from the controls through the website

Of the subjective test results, obtained score 3.8866 Then *performasi* application website for monitoring user helmet-based Arduino stated quite well and the results of testing the functionality successfully 100%. Thus it can be said with the presence of workers, monitoring of the website easier and more efficient.

Keywords: *Helmet project, Arduino, website, monitoring.*