

ABSTRACT

Nur Azmi Zulfikar, 28114150

MICROCONTROLLER-BASED SMART HAMSTER CAGE WITH A WEB INTERFACE

A Scientific Research. Computer System. Faculty of Computer Science and Information Technology, Gunadarma University, 2017

Keywords: Web Interface, Hamster, Microcontroller Raspberry Pi, Relay Module, Fan, Lamp, temperature and humidity sensors
(xiii + 54 + Appendieces)

Microcontroller-based Smart Hamster cage with a Web interface is a system for the maintenance of the hamster. This tool is used for easy keepers efficiently for owners who are far away from the everyday activities because of the hamsters cage outside the House, so the hamster can live with oxygen and temperature sirkuasi smooth and great for health on the growth of the hamster.

Making tools control is explained in the block diagram that consists of three blocks, the first block diagram input temperature and humidity sensors in the form of DHT 11, block the process consists of the main controller of Pi as the Raspberries with the relay module as a switch (switch) which operated in the electricity for the lights and the fan (fan) and the web interface to display the results of the temperature and humidity are generated on the temperature and humidity sensor DHT 11 , the lights and the fan (fan).

From the results of a test that has been determined that this research can control temperature monitoring with a web interface hamster cage as fans and lighting controller or as a monitoring. The results of the status of the enclosure temperature conditions and the status of the fan and the lights on or off.

Bibliography (2008 - 2017)