

CHAPTER 3

RESEARCH METHODOLOGY

There are six steps in this project : Testing sensors, Set up and attach the Arduino Lilypad to the glove, Preparing software and program, Sending data to MySQL server from sensors, Collecting data, Analyzing data.

3.1 Testing sensors

The sensor tested for this project are : Pulse sensor, IR Thermometer sensor, ESP8266 Wifi module. All the sensors tested with Arduino Lilypad.

3.2 Set up and attach the Arduino Lilypad to the glove

To simplify the use of sensors when used, it can be done by sewing Arduino Lilypad into gloves using thread, so the sensors don't fall when used.

3.3 Preparing software and program

This project used Arduino IDE software to load program in Arduino Lilypad. By using PHP programming to display data obtained from sensors.

3.4 Sending data to MySQL server from sensors

To send data from Pulse sensor and IR Thermometer sensor using ESP8266 Wifi module then data send to MySQL server used php code.

3.5 Collecting data

By the glove that has been installed with sensors worn on someone within an hour, to find out the heart rate and temperature data of the person's body that will be sent to MySQL.

3.6 Analyzing data

Data which inside MySQL is converted into a graph with php code used for analyze.