Electronic Water Balancing Tool

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Abstract. This document consists detail of project report, in which the title is electronic water balancing tool. The concept and background knowledge of the title has been studied and objectives has been set to investigate the interaction between the SN-IMU5D-LC gyro sensor with accelerometer and the Arduino UNO with servo motor as output. For that purposed, the gyroscope which produces analogue signals is connected to the Arduino through the analogue pins. The signals from the sensor will be processed by the Arduino and interpreted into the motion of two servo motors that are connected to the digital outputs of the Arduino. Thus, the movement of the device (specifically gyroscope) produces the motion effects of both servo motor either to right or left. The directions (angle) of servo motors could be negative or positive in x- and y-directions. Throughout the project, the group members have gained knowledge in creating developing an application for the SN-IMU5D-LC gyro sensor with accelerometer using Arduino IDE software and the wiring the circuit diagram of the product.

Keywords: Water balancing tool, SN-IMU5D-LC, gyro sensor, accelerator.