

## **ABSTRACT**

Maintaining ornamental fish is a fun hobby for some people . Having exhausted all day undergoing solid activity , see ornamental fish can cure our boredom . Besides colorful ornamental fish are able to provide a sense of tranquility and peace in soul . However, many of the ornamental fish owners do not have much free time to care for the fish . As a result , the existing ornamental fish are not well maintained due to irregular feeding and water conditions in the aquarium is not clear . Because at least spare time you have, we need a tool that is able to overcome this problem .

Tool that serves to control the aquarium in order to feed and drain water remotely using Arduino UNO as the central control system . This tool is able to be controlled remotely using SMS , so that the owner can feed the fish and change the water whenever and wherever . This tool works after the owner sent an SMS to 1 then servo motor moves , so that the valve will open and eat meal will come out . In addition, if the owner sends SMS 2 , then the water from the aquarium would be replaced with tap water . Water out of the aquarium through an electric solenoid valve as the valve is actuated by an electric switch a relay . Then go to the aquarium water from the faucet through which the electric solenoid valve is activated when energized by the relay . This tool will send an SMS to the owner of the fish through GSM modem when stock feed that is live a little by the light received by the sensor LDR .

With this tool no need for the owner of the fish in the aquarium location when wanting to feed and change the water . Being able to perform the treatment wherever and whenever .

**Keywords : Aquarium, GSM Modem, Arduino UNO, LDR Sensor, Electric Solenoid Valve, Servo Motor, Relays**