

## ABSTRACT

Make fish for a pet is one of activity which mostly interested by many people nowadays. Commonly, the high class fish lover's only have time to enjoy the beauty of their fish but doesn't have enough time to maintaining them. One of the important factor to maintaining is giving food, *because the fish can be dead*. Not only that, water environment can make effect on health of the fish.

On this final task will planned and realizations a automation aquarium system with microcontroller based which can control maintenance of the fish food and refills the aquarium water if water condition is dirty and mud. Thus that can making easier to maintaining the fish. Input of this equipment is time, which we can set for operation time (hour and minute) and that will be an input through keypad. Then the system will have them saved on the database and make appeared on LCD (Liquid Crystal Display). The system will have microcontroller support to running instruction for maintaining fish food on the time that had been inputted.

Equally from that, if aquariums water condition in mud, the water mud sensor will works and makes report to the microcontroller that water condition is muddy. Then microcontroller will make an instruction to recycling aquarium water with the fresh water