

## **Abstract**

Keeping marine fish is a hobby of people who are interested in ornamental fish. Usually cultivated to decorate rooms, living rooms or can be bred for sale. So far, marine fish farming has only used old methods such as feeding manually and checking alkalinity or pH levels, which are rarely treated, causing the fish to get sick and die quickly. Choosing a suitable place is very important to make the fish comfortable and like in their natural habitat. This prevents stress in marine fish which will lead to death, therefore the care required for cultivating marine fish is by using clear water and normal pH levels, the pH value has a water level of 0 to 14 with a number that is A lower number indicates that the water is more alkaline and a higher number indicates that the water is more acidic. Feeding sea fish is also important because it can cause the fish to become weak and lazy to move. Sometimes providing feed for marine fish cultivation has a certain time. The automatic feeding system means that cultivators have flexible time and do not need to feed manually. Sometimes manual feeding is often irregular because it is often hampered by other activities.

To monitor the quality of water and feed for raising marine fish, an automatic system was created in the aquarium with Arduino as a microcontroller, pH sensor, ds18b20, turbidity sensor and servo motor. To send a database of report results, an Arduino UNO is needed which can access reports from the system to the monitoring application. Arduino IDE which is used to control several components such as pH sensors and servo motors as automatic fish feed.