Abstract

Water quality in aquascape is very influential for existence water habitats. Measurement of water quality includes physical and chemical parameters, such as water temperature and pH value. Water temperature will be ideal if the water temperature is 20-28 degrees Celsius. While, pH value ideal between 6.8 - 8.0. This project will designed a automatic system to aquascape drainage. Aquascape will installed sensor to measuring the value of temperature and pH which will be used as inputs for system using fuzzy logic. If the system shows the water quality does not match the specified parameters, the system will send an command to replace water in aquascape automatically using water pump which functions as a water filling regulator. The results is success how when pH and air temperature not in accordance with the ideal parameters, the system will do automatic drainage and user can know the condition of the temperature and pH of the air through a monitoring system on the mobile.

Keyword: Aquascape, water quality, sensor, pH, temperature, water pump, fuzzy logic, monitoring.