

**DEVELOPMENT OF FISHPOND AUTOMATED FISH FEEDER SYSTEM
PROTOTYPE WITH GSM NOTIFICATON**

JANEA ROSE L. ENANORIA

**CAPSTONE PROJECT SUBMITTED TO THE FACULTY OF
THE INSTITUTE OF COMPUTING, ENGINEERING AND
TECHNOLOGY (ICET), DAVAO DEL SUR STATE
COLLEGE, MATTI, DIGOS CITY, DAVAO DEL
SUR, IN PARTIAL FULFILLMENT OF
THE REQUIREMENTS FOR
THE DEGREE OF**

BACHELOR OF SCIENCE IN INFORMATION TECHNOLOGY

JUNE 2024

ABSTRACT

ENANORIA JANE A ROSE L. Davao del Sur State College (DSSC), Institute of Computing, Engineering, and Technology (ICET), Mati, Digos City. June, 2024. **DEVELOPMENT OF FISHPOND AUTOMATED FISH FEEDER SYSTEM PROTOTYPE WITH GSM NOTIFICATION.** Undergraduate Capstone Project.

Adviser: **FELOMINO P. ALBA IT. D**

Fish farmers rely on aquaculture as their primary source of income, so they are looking for ways to produce higher quality of fish. Effective methods can help produce a lot of aquaculture products. The study aimed to develop a fishpond automated fish feeder system prototype with GSM notification for adult tilapia fish, addressing the persistent challenges of inconsistent feeding and insufficient awareness of water conditions. The system successfully monitors the status of water, including pH using the pH sensor and water temperature using the water temperature sensor; it also monitors the feed level in the tank using the ultrasonic sensor and the time of feeding using real-time-clock (RTC). The study made it ideal for fish farmers. This reveals that using the prototype greatly enhances the agriculture field's performance, enabling the fish farmers to maintain stable growing conditions and the growth of their tilapia fish, as well as the

successful sending of the readings from the sensor through SMS notification. Above all, the implementation of the fishpond automated fish feeder system prototype with GSM notification was successful in providing a convenient way for fish farmers to monitor their fish.

Keywords: *Fishpond, Automated Fish Feeder System, GSM Notification, Arduino Uno, Water conditions.*