COLLEGE OF COMMUNICATION AND INFORMATION TECHNOLOGY

AUTOMATED POOL WATER SURFACE TRASH COLLECTOR WITH WATER QUALITY MONITORING SYSTEM

A Thesis Project
Presented to the Faculty of the
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President Ramon Magsaysay State University
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In Partial Fulfillment of the Requirements for the Degree
Bachelor of Science in Computer Engineering

By

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CERTIFICATION

This thesis entitled "**AUTOMATED POOL WATER SURFACE TRASH COLLECTOR WITH WATER QUALITY MONITORING SYSTEM**", prepared and submitted by **Joseph A. Agmata Jr., Mhelben Joy M. Metran, Justine Joy L. Quines and Shiela Mae M. Qiutoriano** in partial fulfilment of the requirements for the degree **Bachelor of Science in Computer Engineering**, has been examined and recommended for Oral Examination.

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APPROVAL

Approved by the Panel of Examiners of Oral Examination on May 10, 2020 with the grade of ____.

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ABSTRACT

Automated Pool Water Surface Trash Collector with Water Quality Monitoring System is a project design that can help in maintaining the cleanliness of the pool's water surface. It has an ability to scoop or collect debris that are floating in the water surface using the net that is attached in the device. It will help the pool owners to monitor the water surface of the pool and its chemicals that helps to retain the cleanliness and sanitation of the pool. It can also indicate the water quality of the pool using the ORP Probe and pH Sensor and display the level of its cleanliness by using an RGB colored LEDs for every level of cleanliness. This project is a battery operated that is capable to clean one standard size pool. The system will help to reduce the cleaning time that the cleaner will spend in the pool to save time and to easily monitor the water quality.

The researchers have used the descriptive research method wherein the study focused on the current situation, and purposive sampling in determining the respondents of the study.

This project was tested and evaluated on the following; Effectiveness of the project design; The Evaluation of Device Quality of Automated Pool Water Surface Trash Collector with Water Quality Monitoring System as perceived by the respondents; The evaluation of Acceptability of Automated Pool Water Surface Trash Collector with Water Quality Monitoring System as perceived by the respondents.