DESIGN AND DEVELOPMENT OF IP-BASED SURVEILLANCE CAMERA SYSTEM

Design Project

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DESIGN AND DEVELOPMENT OF IP- BASED SURVEILLANCE CAMERA SYSTEM

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ABSTRACT

Ocampo, Virgilio G., Samonte Syder, Panganiban Frederick, and Lagasca, Ryanne Mil G.. Design and Development of an IP-Based Surveillance Camera System. Undergraduate Design Project. Bachelor of Science in Computer Engineering. Cavite State University, Indang Cavite. February 2009. Adviser: Mrs. Emeline Guevara.

The Design and Development of an IP-Based Surveillance Camera System was constructed at Bancod Indang, Cavite. The design project was embodied by the general objective of designing and developing an IP-Based surveillance camera system.

The design project has three important ideas: monitoring the events inside the laboratory rooms, provides a different type of recording option using the camera and viewing of events within the university intranet using internet browsers.

The Design and Development of an IP-Based Surveillance Camera System focused on using the existing network of the university in the installation of surveillance cameras.

The system provides several recording options like motion detection, automatic recording and manual recording (or as set by the administrator). The system allows remote local access through internet browser, inside the university Local Area Network as shown in Figure 8.

The design project was presented to the proponents' design project adviser, technical critic and some of the College of Engineering faculty members for initial evaluation last January 2009 at the Department of Computer and Electronics Engineering Building.

Also, the final evaluation of the design was conducted at the Department of Computer and Electronics Engineering Building on February 2009. The whole system underwent a series of testing and evaluation through actual presentations and the faculty members shared their ideas regarding the system like audio recording and night vision functions.

Results of the evaluation revealed that the IP-Based Surveillance Camera System has obtained all the objectives of the study. The design project provides more accessible remote monitoring functions.

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[1/]An undergraduate design project outline presented to the faculty of the Department of Computer and Electronics Engineering, College of Engineering and Information Technology, CvSU, Indang, Cavite in partial fulfillment of the requirements for graduation with the degree of Bachelor of Science in Computer Engineering (BSCoE) with contribution No. BS CoE-2008-09-009. Prepared under the supervision of Ms. Emeline Guevarra.

INTRODUCTION

An Internet Protocol Camera is a stand-alone device which allows viewing of live, full motion video from anywhere in the world. IP Cameras can be used for surveillance of both homes and businesses. With the ability to record live video to a remote location, IP Camera allows safety for recorded video by storing it at a location that only the allowed individual may have access.

An IP Camera is a true networking device containing an embedded OS (Operating System), supports multiple users, and can be viewed using any web browser. It does not require additional hardware to operate and therefore has the flexibility to be located anywhere with a network connection.

The Central Computer Laboratory of the College of Engineering and Information Technology is one of the important buildings in the campus because it contains the