

# **Web-based CEAT Laboratory Inventory and Remote Equipment Monitoring System**

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## **ABSTRACT**

Pieces of equipment placed in every classrooms at Candido Tirano Hall(CTH) are vital for the student's learning outcome. Some of these pieces of equipment are expensive and need to be monitored all the time to ensure their availability and for security purposes. The problem would be, not all the time do these pieces of equipment are monitored because of various reasons. Another problem would be, chances are the number of laboratory pieces of equipment on every classroom is not enough to accommodate the number of students assigned to have laboratory classes in these rooms. And in borrowing equipment in the laboratory dispensing room the personnel in the dispensing room don't know the schedule of the student who are borrowing the equipment so they just lend them even if they don't have a laboratory schedule on that specific date and time.

As a solution, a tracking device is to be placed on pieces of on every classroom especially the equipment at laboratory rooms and another device is to be placed at the doors. These devices monitor the pieces of equipment and alert the server when equipment is take out in the room. This will not only secure the laboratory pieces of equipment but also will monitor the number of pieces of equipment inside a laboratory room so that sufficient numbers of pieces of equipment are placed on every room. The laboratory personnel will be also aware that an equipment from a room is taken out, and will make it easier to know if the students borrowing the equipment have schedule during the time that they are borrowing equipment.

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