

ABSTRACT

The College of Engineering, Architecture, and Technology (CEAT) students usually has a slow dispensation of electronic components that causes negative effects basically on the students' maximum time of executing the laboratory experiments because of the factors affecting the borrowing of the electronic components like collecting the group members' laboratory IDs, getting the borrower's slip form, filling it out, getting it signed by the instructor and queuing in the dispensing room.

The Automated Electronic Component Machine is a microcontroller-based dispensing machine of electronic components for Electronics 1 and 2, and Logic Circuits, subjects in CEAT. The researchers focused on three subjects, three experiments per subject and eight groups per experiment only.

The prototype must have a system unit to operate. There are several steps to dispense such experiment assuming the user is a bona fide student of such subject then the user can then dispense the selected experiment number, the admin account on the other hand will be in control for the inventory. The programs are created to integrate with the mechanical system to function. Lastly, to test the system for effectiveness.

The students experienced a convenient and innovative system of dispensing electronic components compared to the traditional manual borrowing of electronic components. The researchers focused on three subjects that usually uses electronic components only.