

## **ABSTRACT**

Baggage counters could be found in almost all grocery stores. They serve as one of the stores' line of defence against theft. They are usually found near store entrances with a lot of shelves and with an employee managing all processes (specifically: depositing, inventorying and claiming) while at the same time, providing some degree of security by watching over the deposited baggage. One such counters exists in Aklatang Emilio Aguinaldo.

The main objective of this study is to create a Biometric controlled baggage counter system to replace the manual baggage handling procedure of Aklatang Emilio Aguinaldo.

The design involved the development of both hardware and software components. Hardware component development included the integration of a fingerprint scanner and the creation of an add-on frame that was installed in the existing cabinets of the library. This frame housed most of the proposed system's electronics and added doors for every slot of the cabinet. Software component development included the creation of a database that logged all of the proposed system's activities.

The study proposed an installable system that improved the overall performance of the current baggage handling system used by Aklatang Emilio Aguinaldo.