ABSTRACT

The researcher's thesis entitled, "NFC-Based Digital Wallet System" is a digital wallet system that allows students to pay and load bills using their own school ID that has a built-in NFC chip inside. The research only caters to the students of De La Salle University – Dasmariñas, shop merchants inside the school and the administration. The research is composed of hardware, software, and database parts. For the hardware part, the researchers made a kiosk for loading station and a transaction module for payment.

The research used the students' university ID to serve as the digital wallet card. The students need to load their ID in the loading kiosk and insert the cash in the bill acceptor in the kiosk. After loading, the student can now use their ID to pay bills for the merchants at the food square canteen. After the student chooses the menu, the merchant will input the total amount in the transaction module and the student will tap their ID. The student is then asked to input their PIN code and the merchant will confirm it. After the process has been done, the transaction is complete.

With the implementation of this system to the existing technology present in the campus, it greatly helped the efficiency between the student and sop merchants. Unlike the conventional wallet, the digital system improved the security of the students' money due to the additional safety features implemented. This system brought a more versatile way of transaction in the school premises therefore lead to a more productive and healthy school activities.