

## **ABSTRACT**

*Nowadays there are many payment system processes in the apartments bill are still using manual by paying cash or through banking accounts transfer. The apartment's occupants should do the payment by come to the office or cashier's apartment or transfer their payment to apartment's bank account. There are some inefficient things in this debt payment way. It will be difficult if the occupant run out the KWH of electricity because they have to rebuy and refill the electricity tokens and also the occupants have more obligation to pay other bill such as security and cleaning due. They way of this apartment's bill payment require much time to be spend for the occupants for paying the bill.*

*From the problem above a system that can include all bill in one payment are needed. This system will facilitate the occupants in easy apartment bill payment. So there's a chance for the occupants for the easier way of payment by using an ID card where the occupant should fill the card's balance to get the access. The occupants can use the ID card for their apartment's bill payment by choose the payment menus and check out their left balance. Beside for the payment, the occupants also can refill their electricity tokens for their room as needed and other payments as well. This ID card can be used through a reader card tool that will be placed in every single room of occupants.*

*This tool is using Raspberry Pi that connected with RFID and NFC as the reader of occupant's card. After connected to a LAN and with apartment management server to store all payment data and confirm each payment made by the occupants*

**Keywords:** *payment system, apartement, RFID, NFC, raspberry pi, server*