Abstract

The use of credit and debit cards has become a method of payment that is very widely used by people, usually people use credit and debit cards for shopping. The use of card payments creates several problems, such as loss of cards, card duplication and fraud that takes personal information to harm others, to use a credit card a user must carry and maintain the card so that it is not damaged and enter a password or PIN. Passwords are the most basic security method that has been used for a long time. Often these methods are manipulated and there are loopholes of crime. In this final project proposes a payment plan using fingerprint authentication to replace payment using a card. This final project focuses on simplicity of use and speed of transaction processing. For the case study using transactions at the coffee shop. The fingerprint payment system to be built uses a module with components including an optical fingerprint scanner, 4x4 keypad, Arduino uno, 16x2 Liquid Crystal (LCD). The results obtained from fingerprint payments are analyzed with the ROC curve and DET curve which are expected to have a higher level of security and speed of use compared to conventional payments.