ABSTRACT

The quality of life activities in our society nowadays is immensely developing as a result of available technologies. In traditional shopping systems, customers need to physically purchase product, carry cash or card along with them and wait in long queue for making payment. Near Field Communication (NFC), a wireless interconnection technology used of data transfer, that works in close range. NFC combined with electronic device has become an inherent mode for two NFC enabled devices to exchange information when in close range. NFC technology is thriving among other wireless technologies because of its simplicity. This thesis proposes an alternative method of doing shopping using NFC which aims to be easy, user-friendly, and more convenient. In the proposed system the supermarket or mall with an existing electronic shopping system will incorporate the NFC technology. The ability of two NFC enabled devices to exchange information when in close range will grant easy and exchange of information between customer and shop admin, hence reducing extra overhead in shopping. The application would be used by the customer to scan the barcode or QR code on the products in the store. All of the items to be purchased will be listed on the application. At the cashiers’, the iOS or Android NFC enabled phone is swiped over an NFC reader and the information on the customer’s phone is transferred to the cashiers’ computer then payment is made. The application is developed with React Native which enables building applications with a rich user interface. The method used for initializing and developing the application is Expo. Expo has useful features like Barcode scanner, Image picker and so much more. Expo eases the burden of building binaries for the iTunes store and Google Play store.