

## ABSTRACT

Comfort while shopping is a priority which is expected by all consumers. However, the consumer will be annoyed if they have to wait a long time while stuck in a queue at the shop or in the payment process. Advances development in world technology allows consumers to make the process of shopping faster without having to get stuck in the queue and do process payments faster without having to spend real money. For those reasons, designed a system of electronic payments and mobile applications using smartphone android platform.

Android is an operating system for smartphones and tablet PC (Personal Computer) based on Linux which is opensource. By implementing android in the electronic system, it will produce an application that can replace the product booking and payment system today. With this application, consumer just detect QR code posters of some products and then can order the product and do the electronic payment process with a payment voucher type (balance). Through this way, the process of product ordering and payment process can be done more quickly and efficiently. Overall, this application used the Android smartphones with the Java programming language and Android SDK. Servers built with PHP (Hypertext Preprocessor) programming language, (Structured Query Language) SQL and XML (Extensible Markup Language).

Result of this final project is a software application that can replace the product ordering and system payment today. From the results of alpha testing, beta testing, and performance analysis of this application, showed that the application can run all functions and features. This application can detect QR Code posters of some products, then place an order for some products and then do payment process, and this application can prints payment transaction that have been succeed.

Keywords: QR Code, Android, Java