

ABSTRACT

Transactions involving basic utilities have long been universally accepted to constitute long waiting-lines. This could be observed in health services, government offices and school enrollment procedures. However, more often than not, taking DLSU-D enrollment seasons to be observed and serve as an example, the mixing of minor and major transactions not only lengthens the waiting-lines longer than is necessary, but also inconvenience students only requiring simple and non-time-consuming transactions as well as leaving them stranded. The group decided on pursuing "Development of Payment Queuing System with Android Application" to help solve and alleviate these issues through transaction categorization and separation, and service time estimation functionalities.

The system had 4 different types of application developed, namely: a server program; client terminal application; cashier program; and an android application.

The system as a working whole was composed of a client program that accepts user input regarding transaction information, a MySQL server serves as a backend database, and a P.O.S. (point of sale) program allows the user to view and process transactions in queue. In addition, a separate notification program outputs to a monitor the current transactions being serviced and its corresponding P.O.S. terminal, it also displays as well the current queue length of both minor and major transactions. The interfacing of all involved components is managed by a wireless router hosting a local area network. All components are connected through cat5 cables with the exception of the android client program which interacts wirelessly.

