ABSTRACT

Garuda Frequent Flyer or commonly abbreviated as GFF, is a program created by one of Indonesia national airline, Garuda Indonesia. GFF created as a token of appreciation to its loyal customers, allowing members who follow this program have the opportunity to make the flight for free. Opportunities are accumulated based on the amount of miles, or the total distance traveled which is already taken by the customer. Also based on the GFF membership level, members are able to have exclusive rights such as check-in counters, priority satnd-by, and extra luggage. In acquiring the exclusive rights, members just need to show his/her GFF membership card to the clerk.

The process which is fairly manual become problems in the modern world because almost all activities have been done electronically and automatically. It becomes an opportunity to build a more flexible application to replace the existing services. This application was composed of two main parts, namely the application on the client side based on the android and java-based server.Then the last is an additional applications, which is a boarding pass scanning application that uses NFC technology to replace the current process of checking boarding pass. Scanning is done using an external NFC reader. Communications beetwen server and client is done through HTTP request and HTTP response. The client sends the parameters which is specified in the URL, and the server will response by a data that has been encapsulated in a JSON format which will be returned to client.

Set of functions within the application server can serve features that are accessed via the client application quite well. The function processing time also quite good because it has an average time 0.02 second. The scanning application have sufficient reliability with a percentage of 73.33% scan success, and the percentage which klien got the message is 56.67%. Overall application runs well.