DESIGNING AND DEVELOPING CENTRALIZED INTERNET CAFE BILLING SYSTEM WITH NEAREST LOCATION SEARCH FEATURE BASED ON SMS AND WEB

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Abstract

In this final assignment, I built a centralized internet cafe billing system with the nearest internet cafe location search features based on SMS and web that allows users to find the nearest Internet cafe from where his place with the number of units available. This system also allows the manager or admin of the internet cafe to view the financial statements of all branches of the internet cafe with just one access to the central server.

During this time, internet cafe billing mostly a desktop applications and only work on one branch of the internet cafe. With this system, users have the alternative of a web-based billing application that can manage many branches of the internet cafe. The features of this application is very useful for users because internet cafe users does not bother to know the branch nearest Internet cafe and the number of units available. Simply by sending text messages the user can obtain such information.

Billing application is built using PHP programming language, with mysql database. Then to manage the sms, gammu is used as sms gateway. While the algorithm that used to find the nearest internet cafe is dijkstra algorithm.

This system works by taking data from branches of internet cafe and store it at the central server. Data that being taken is the availability of units and usage report of the internet cafe at each branch. Data availability for the unit was taken every few minutes, while the cafe usage report data taken every 24 hours.

SMS gateway that works in the background receive sms from customers who ask for the nearest internet cafe and enter that
information into the database. Next, this sms are processed using dijkstra algorithm based on map and the availability units in each branch of the internet cafe which has been obtained previously. Once the process is complete, the result is the nearest Internet cafe recommendations sent via sms gateway to the customers number. With this system, the internet cafe customers can find out information of the internet cafe easily.

**Keywords:** central billing, web application, sms gateway, dijkstra algorithm.