ABSTRACT

Location Based Service is a kind of service that combines three technologies, which is: Geographic Information System, Internet and Mobile Devices. There are three components that involved in LBS. The first one is the customer of the *content*s. The users can access the *content*s of LBS via their cellular phone or other communication devices. The second component is *Service Provider* that provides information wanted by the customer from available data. Third component is the operators of cellular network that playing role as network provider and also provide the location of user.

Until now, available LBS *content* is still based on SMS. To achieve information about desired location of some facilities and places, users can send a SMS with some defined formats to a defined number, and then user will receive SMS containing address of desired location. This information will be useful if user already knows the given address. But will be not useful if user do not know it. Because of this problem, we need to design LBS that can provide visual information, so the information will be usable for all users.

The purpose of application design is to design a system that can provide visual information about location of the user and location of desired facilities, so the information will be usable for all users. In this research problem solving systematic is divided to six phases. The study phase, phase of initialization, modeling and system design phase, phase of testing and model and verification, phase of implementation and analysis, phase of summary and suggestion.

The summary of this research is to provide visual information about desired location of some facilities and places, the map of locations should be stored on the application server to simplify modification of data.

Key Word: *Geographic Information System, Location Base Service, Facility Location*