ABSTRACT

Nowadays mobile phones are no longer as a luxury, but already become public

consumption things. Devices that were formerly serve as a communication tool has been

transformed into something that is sought by most people. Not only adults and adolescents

who have this device, even children are accustomed to using devices that could be

considered a toy of their daily lives. There are so many advantages provided by mobile

phones, in addition to high mobility, these devices also have considerable functionality.

Another advantage is the device is traded with ease, so do not be surprised if many people

have this device. Even parents give this device to their children early for being easier to

monitor their children. However, most children feel that they are no longer a little child

who needs to be supervised at all times so sometimes make parents worry about that

problem. Mobile phones come with the solution as a device to tracking other mobile phone

to facilitate parents control their children without their children attention.

Location Based Service (LBS) is a technology that provides service to find person

position. In this thesis the author design a software to track a mobile phone by utilizing the

internal GPS in a mobile phone that implements A-GPS method in LBS as a method to

find the position of a cell phone. There are two kind of software that is designed by author,

the first side that is in a user who will track (as a remote control) and the second in a user

who will be tracked (as position counter). This software will be designed based on J2ME.

The test results obtained that the software will work optimally in conditions where

there is no obstacle or loss condition with latitude deviation about (+/-) 5.52 meter,

longitude deviation about (+/-) 8.90 meters and altitude deviation about (+/-) 12.05

meters. The delay for one tracking process about 23.24 s. The cost to access the software

is accordance to SMS rate each mobile operator. The cost of GPS only **Rp. 5** that used to

lock one location for once.

Keywords: Assisted-GPS, LBS, J2ME

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