ABSTRACT

Pedometer is a portable tool designed to calculate each step of a person by detecting the vibrations that occur in that person. According to some studies, walking 10,000 steps a day is very effective to maintain the condition of the body.Using a pedometer can also inspire and motivate someone to walk on foot more often. And along with its development, mobile devices have dominated human life. Created mobile applications is also developing and growing along with the community who always put the needs of efficiency.

In this research, was designed a pedometer application based accelerometer sensor on Android smartphone. This application implements the functionality of a pedometer to count the number of footsteps,and adding features to calculate the travel time while doing the activity, the distance that has been reached, average speed while doing the activity, and calories burned. Applications built using Android programming language based on the Java programming language. Designed onEclipse with SQLite database .

System testing is done by testing the accuracy of result obtained from application and pedometer device. Result obtained from both application have similarities up to 95%. This application resource usage size is 4.14MB while data usage size is 16KB so that the required size of storage needed to install this application is 4.15 MB. On user friendly test optained result that this application is easy to use and the features it has corresponding with the requirement.

Key Words: *pedometer, accelerometer, android mobile, java, sqlite.*