

ABSTRACT

Body weight is one of the parameters in kilograms (kg) that used for the measurement of body. In the body weight can be seen a variety of information to analyze the condition of one's body as a body mass index (BMI). At present, weight measurement is done by using tools such as scales that not everyone has. It will be difficult if they are needed in a time of urgency. In addition, other problems that might arise is when the system applied for health use such as at the hospital. It will need lot of time and lot of tools that used.

Because of the above problems, this final project will discuss how to design a system that can measure body weight with the input of the digital image with the approach from Body Surface Area (BSA) formula that taken from front and side view and will be processed by utilizing a pixel by way of cropping that image. After that, the pixels that have been obtained will be input into the formula to get the object body weight. Besides being able to determine the object body weight, system can produce an output of body mass index (BMI) object.

Based on test results have been obtained system at a maximum system accuracy of 95.63% at a distance of 470 cm.

Keyword : *Body weight, Body Surface Area, Body Mass Index*