BikeMate: An Android App with Data Analytics for BMI Monitoring

Myra G. Flores Buenaventura Alandy National High School

ABSTRACT

Body mass index (BMI) is a way to measure the calories based on ones' weight relative to the height [25]. It is relatively important to determine whether a cyclist is physically fit to ensure the safety while biking. Cyclists need an application that help them monitor their BMI, an application that can be used in planning a trip and finding a shortest trajectory. BikeMate is an android app that measured the body mass index of the cyclist that processed by the data analytics. Data analytics measures the quantitative process and techniques to gain and enhance productivity [24]. The main objective of this study is to develop an android application for monitoring BMI, plan a trip, and searching for a shortest trajectory. The researcher use rapid application development in developing the said android app. As a result, it can be inferred that the developed app is functional, reliable and easy to use. From the five (5) android characteristics that were evaluated, result shows that portability and functionality got the highest rating. The system was acceptable based on the result of system testing with the weighted mean of 4.94 in terms of portability and functionality. It indicates that the ultimate achievement of this developed android application is the compatibility of the android application in the different operating system for Android phones and the computation of body mass index and directing the android application using voice navigation. This serve as the key factors that assist cyclist in their journey.

Keywords: data analytics, BikeMate, BMI, android application, google maps, bikers, cyclist