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ABSTRACT

Obesity is a medical condition characterized by an excessive accumulation of body fat, which can have negative effects on health. It is typically measured using the body mass index (BMI), where a BMI of 30 or above is classified as obese. Obesity increases the risk of various health problems, including heart disease, diabetes, high blood pressure, certain cancers, and joint issues. The "ObesityDetection Using Machine Learning" project is focused on detecting and diagnosing obesity.

From the three papers, we get to know that different approaches are used for the detection of obesity. The main theme of the first paper is the application of machine learning algorithms to predict obesityrisk. The second paper deals with the application of machine learning techniques to predict overweightand obesity. Third paper aims at the prediction of obesity levels using a trained neural network approach optimized by Bayesian techniques.

The system is the comparative study of Logistic Regression and Random Forest. The models will classify obesity under seven classes which are Underweight, Normal Weight, Overweight Level I, Overweight Level II, Obesity Type I, Obesity Type II and Obesity Type III. By comparing these algorithms, the project aims to determine which model offers the highest accuracy and reliability indetecting obesity.

The dataset is taken from Kaggle repository. The dataset contains 2111 sample observations and has 17columns including 1 identifier, 1 class variable and 16 features. The dataset contains Numeric and Categorical values.

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