ABSTRACT

Health was a key factor in the success of a nation. However, the government's efforts to promote a healthy lifestyle, such as regulating calorie intake, were often hindered by various factors, such as the public's lack of understanding of the effects of excessive calorie consumption and the demands of daily life. People tended to consume high-calorie foods without paying attention to the balance between calorie intake and expenditure, which increased the risk of obesity and other serious health conditions. Several mobile applications, such as MyFitnessPal and MySugr, were developed to monitor calorie and sugar intake. MyFitnessPal focused on calorie counting and weight management, while MySugr helped diabetes patients control their sugar intake. Although these applications were proven effective, their use was limited due to the need for a subscription to access all features. This study developed the MyFoods mobile application as a solution to allow users to monitor their daily calorie intake without requiring a subscription. MyFoods was equipped with food scanning and calorie calculation features that facilitated users in tracking their daily calorie consumption. The development of MyFoods used the ICONIX Process to produce a high-quality application with minimal steps. The technology used included machine learning, the Express.js framework for the back-end, and the Flutter framework for the front-end. Black-box testing results indicated that the MyFoods application met all user needs and was expected to contribute to raising public awareness of the importance of healthy eating habits.

Keywords : MyFoods Mobile Application, ICONIX Process Method, Calories, Framework Express.js, Framework Flutter