Universiti Teknologi MARA

DietAid: Food Consumption Tracker Using Mobilenet Model

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SUPERVISOR APPROVAL

DIETAID: FOOD CONSUMPTION TRACKER USING MOBILENET MODEL

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STUDENT DECLARATION

I certify that this thesis and the project to which it refers is the product of my own work and that any idea or quotation from the work of other people, published or otherwise are fully acknowledge in accordance with the standard referring practices of the discipline.

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ABSTRACT

Human are provided with a wide array of choice of foods in everyday life, "we are what we eat" that why we should be concern about what and how much food we need to eat. Most people do not know how much left they need to consume. So, people needs an application that can help them to easily track their food consumption, which also able to help with their diet plan. Different people require different daily nutrition for their body, this is due to gender, age, height, weight and daily activity. The purpose of this project is to develop mobile application to track food consumption by recording the calories of food eaten. The food type is recognized by using Mobilenet model which implemented in Tensorflow Lite. This application was built using Android Studio, for the interface Adobe XD is used and the model is trained in cloud using Teachable Machine platform. The model that has been chosen can be applied to mobile application as it will be easy to be used by all users anytime anywhere. Currently, only 30 types of food and its calories can be recorded. The results of testing the application is 86% which shown that it is able to correctly identify the food type and record the calories to track each required user food consumption. As for the future recommendation for this project, it should provide a capability to record more food types as there are many various of food available. On the other hand, enable user to record multiple food at once which could improve the exactness of nutrition consumption taken.

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