# Universiti Teknologi MARA

# A Web-Based Diet Management System Using Web Scraping Technique

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### ABSTRACT

Due to busy lifestyle, following a healthy diet is quite challenging. People nowadays are very concerned about their health but, most of them lack knowledge about how to choose and what kind of food servings that is suitable for their body. Rising cost of living make people to eat fast food rather than healthy food. The number of people diagnosed with obesity and other non-communicable diseases increasing year by year. The diet management system was developed to give user recommend food based on their calorie needs or single food recommendation with calorie stated with it where they can organize their own diet. This system also intended to help users who concern with their weight or want to live in a healthy lifestyle. Users will require different calorie intake based on their body needs because have variations in height, weight, age and daily activity level. In this paper, the proposed work is implemented with PHP, HTML and CSS by using Laravel while web scraping technique used to extract food name and calorie data from other websites. Diet Management System are expected to potentially improve the overall health and reduce the risk of chronic diseases of individuals. In future work, I will implement a sophisticated auto-help tools applications or web applications to the end users to maintain their weight while enjoying Malaysian food.

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#### **CHAPTER 1**

#### **INTRODUCTION**

This chapter provides the background and rationale for the study. It also gives details of the significance, the issues and problems that led to this project.

#### **1.1 Background of Study**

Nowadays an increasing number of people are aware of the importance of eating a healthy diet. The phrase "you are what you eat" is a commonly used phrase that essentially means that the foods and drinks that place in our bodies have a significant influence on our wellbeing and health (Christ, n.d.). A healthy diet provides our body the nutrients and it needs to function correctly (Krans, 2020). Nutrition is important to every of each people. According to the literature, improved nutrition we take in daily life is a major cause of increased lifespan in the last two centuries (Le Couteur et al., 2016; Bunker, 2001, as cited in Ribeiro et al, 2017). Good nutrition is related to a healthy lifestyle. The food should be high in vitamins, minerals and nutrients to help you remain healthy (Pappadopulos, 2018).

According to the World Health Organization (2018), a healthy diet contains fruits and vegetables, whole grains, fibers, nuts and seeds, and with limited free sugars, sugary snacks and beverages, processed meat and salt. In a healthy diet, saturated and industrial trans-fats are replaced with unsaturated fats. The number of calories in the food refers to the amount of energy stored in the food (Krans, 2020). Our body uses calories from food to walk, think, breathe, and other important functions. Lee (2020) stated that according to