Universiti Teknologi MARA

Dietary Food Recommendation Using Case- Based Reasoning Technique

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Thesis submitted in fulfilment of the requirement for Bachelor of Computer Science (Hons.) Faculty of Computer and Mathematical Sciences

January 2017

ACKNOWLEDGEMENT

Alhamdulillah, praise to the Almighty and His utmost blessing for giving me such an honour opportunity for me to come up with the Dietary Food Recommendation using Case- based Reasoning Technique. The system is one of the conditions for me to graduate my degree in Bachelor of Computer Science (Hons).

First of all, I would like to give my deep gratitude to my supervisor, Engku Zain Engku Azam for supervising me and give a valuable guidance throughout the project completion. A special thank you and appreciation to my lecturer of Project Formulation (CSP600) and Project (CSP650) Dr. Hamidah Jantan.

Above ground, I am indebted to my family whose value to me only grows with age. Finally, I acknowledge my friends, my classmates who helping in me in giving support and boost my spirit as well as encourage me to complete this project.

ABSTRACT

Hyperlipidemia is one of the diseases that increase the risk of cardiovascular disease. To overcome the risk of the disease, a proper diet and exercise should be followed. The patients need to consult with the dietitian on the proper diet and recommendation so that the patient follows the right plan. But then, the problem troubles the patients as patients need to consult with the dietitian before taking the meals. Dietary Food Recommendation is an application that aims to recommend and help the Hyperlipidemia patient with the right dietary food according to the total calories of the patients based on Body Mass Index (BMI). The project uses Case- based reasoning technique to suggest a diet plans taken from the existing cases in the system. The patients requirements needed to be matched with the cases and then, the matched cases will be selected to be recommended to the patients. The recommendation consists of dietary meals for the patients for breakfast, lunch and dinner menus as well as the total calories for each meal. The result of the project shows that 7 out of 10 cases recommended by the system are similar to the recommendation by the dietitian using the reliability test. Therefore, the system is reliable to be used by the Hyperlipidemia patients. For the future work, the application should be able to recommend a variety of meals for Hyperlipidemia diet plan.

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