Universiti Teknologi MARA

Heart Disease Symptom Checker Application using 2D Image and Rule Based Expert System

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STUDENT DECLARATION

I certify that this report 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 acknowledged in accordance with the standard referring practices of discipline.

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ABSTRACT

Heart health is important at every age. Heart disease is one of the leading deaths in Malaysia and around the world and this percentage continues to increase throughout the year. However, due to the packed schedule and time constraint, society seems to ignore the importance of checking their health. To reduce this problem, the individual should be given an alternative to check for the symptom coming on all the way through their body. The main purpose of the project is to develop an expert system with 2D image in android platform to help user to detect early sign of symptoms that may lead to heart disease. The application will help user that only have limited time to go for medical checkup and to facilitate self-checking of heart disease before meeting doctor. The methodology use in this project is System Development Life Cycle while the technique in this project is rule based expert system with 2D image data manipulation. User will choose for their symptom by selecting the list of symptom in the 2D image and the rule based will generate the result based on the symptoms selection by user. User will either get result of possibility of stable angina, unstable angina, unlikely or indeterminate. The heart disease symptom checker help user to take proper action after noticing their symptom is risk enough to be diagnosis with heart disease. The accuracy testing has been conducted for this project; the results of heart disease condition obtained in this application are accurate and matching with result by expert. For future work, other major disease in Malaysia will be added into the application as for now it only focuses on heart disease.

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