

UNIVERSITI TEKNOLOGI MARA

**DEVELOPMENT OF MOBILE
APPLICATION OF THE EMPOWER-
SUSTAIN CARDIOVASCULAR RISK
SELF-MANAGEMENT TOOL WITH
DYNAMIC VISUALIZATION**

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ABSTRACT

The empower sustain cardiovascular risk self-management tool is a healthcare mobile application. It will be used by patient with cardiovascular disease risk. Patient and provider use distinct type of mobile health technology to enhance medical care and well balance administrative works. The easiest way in represent data for better understanding visual presentation is using graph and charts. Using this cardiovascular risk self-management tool mobile application, patient could complete cardiac rehabilitation without problem. Physician could entertain all their patient as they less likely to be occupied. This is from the help of mobile phone application. The public medical facility is not congested anymore. Consequently, doctor is always available in treating and monitoring patient. The data shown is easily being translated. The aim for this development are to study and identify flaws of the existing cardiovascular risk self-management tool. To design and develop sustainable with innovative technology to empower people and could exchange information with primary health care together with dynamic visualization. To evaluate the mobile application through functionality test. This study focusses on developing android mobile application, creating dynamic visualization from intricate data. The platform use is Android Studio, Bootstrap framework, Adobe Dreamweaver, Notepad++ software, PHP, HTML, JavaScript, CSS languages and MySQL for the database. The methodology used are agile method. It consists of requirement, design, development, testing, evaluation and release phase. The coding and database were done step by step. With this tool, patient had awareness and knowledge inn what happen to their body. This also help them achieving treatment target. Thus, complication for cardiovascular risk patient could be prevented. Lastly, this mobile application consists of numerous function that could help patient and doctor. Hence, the problem with barrier attending rehabilitation, shortage care, extra charge and unsightliness of data as stated in the problem statement was solved.

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CHAPTER 2

LITERATURE REVIEW

This chapter provide the search and evaluation of the available area. The area which has similarity to the development of mobile application of the empower-sustain cardiovascular risk self-management tool will be conducted in this chapter.

2.1 Introduction

There are four main objectives in this phase which are doing literature surveys within chosen area of study, for example diseases, mobile application. Next, synthesises the information from all kind related literature into a summary. Then, critically analyses the information gathered by identifying gaps in current knowledge, showing limitation of theories and point of view and formulating areas for further research and reviewing areas of debate. Finally, present the literature in an organised way.

2.2 Medication and Diseases

Medication is a drug or medicine. It can be called as the administration of the drug or medicine. Medical definitions of the disease state are lacking or insufficient. An attempt is presented to separate core or primal from conditioned disease. Core disease is defined as a verifiable, self-conscious sensation of dysfunction or distress that is felt to be limitless, menacing and aid-requiring. In contrast, conditioned diseases are states labelled as disease by consensus on prevalent sociocultural and medical values. (Kottow, 1980)