

**UNIVERSITI TEKNOLOGI MARA**

**MOBILE APPLICATION TO ENCOURAGE FIBROIDS  
SYMPTOMS TRACKING USING PERSUASIVE  
SYSTEM DESIGN MODEL**

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**BACHELOR OF COMPUTER SCIENCE (HONS.)**

**AUGUST 2023**

## **SUPERVISOR'S APPROVAL**

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## **ABSTRACT**

Global mobile phone penetration has expanded at an unprecedented rate, and the prevalence of mobile phone applications among users has increased. The number of health-related apps published on the two most popular platforms, iOS and Android, surpassed 100,000. However, there is a lack of health-related apps that can enhance changes in people's health-related behaviours in order to efficiently track symptoms continuously. Through the development of a mobile application that is accessible to users, this project aims to encourage fibroids patients to monitor their symptoms on a regular basis and improve their behaviour. The methodology used in this project is Mobile Application Development Life Cycle (MADLC) that contains of 4 phases which is identification, design, development and testing. During the development and design of the mobile application, the theory of the Persuasive System Design Model is applied in an effort to influence the users' behaviour. The mechanisms of behaviour change were codified and analysed. The majority of study participants agreed or strongly agreed that app use increased their motivation to encourage users to regularly track fibroids symptoms, improved their self-efficacy, and increased their desire to set and achieve goals. The findings of this study indicate that the use of mobile applications is associated with changes in health-related behaviour. Consequently, health-related applications that focus on enhancing motivation, desire, self-efficacy, attitudes, knowledge, and goal setting may be especially beneficial. As the number of health-related apps continues to increase, developers should consider incorporating relevant theoretical constructs for health behaviour change into newly developed mobile applications.

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