# Universiti Teknologi MARA

## (iSLEEP) – Development of Mobile Application to Assist Insomnia Patient using Islamic Approach

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### **ABSTRACT**

Sleep is actually one of the basic needs in our daily life as a human being in order for our body to get rest and for our organ to work and functioning well day-to-day. But, there is also an existence of sleep-deprived which is insomnia. Unfortunately, in Malaysia, the current method used still lag in terms of technology intervention. In addition, most insomnia related mobile application does not have Islamic values/features for Muslim user and only available in English. It will be hard for the user who does not frequently speak in English or who do not have more knowledge in English to understand some terms used. Therefore, the project is to propose a mobile application to assist the insomnia patient using an Islamic approach. The objective of this project is to identify the user requirements of an iSLEEP mobile application for insomnia patient, to design, and to develop an iSLEEP mobile application for insomnia patient. For scope, this project focusing on primary insomnia patient in Malaysia who is a Muslim regardless of age and gender. User can use the features which are hearing either Al – Quran, Dhikr or Dua' recitations and also sounds of nature and visualization to track their sleep. This project is in Bahasa Malaysia and available in Android. Next, Android Studio and visualization technique are being used to develop this project. This project also used MADLC as the methodology but until the testing phase only. Based on the result of user testing, it shows positive feedback from the user and expert. As a conclusion, an iSLEEP mobile application can assist insomnia patient in order to reduce their sleep problem.

Keywords: sleep, insomnia, technology intervention, Islamic approach, recitations, MADLC

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#### CHAPTER 1

### INTRODUCTION

This chapter will cover the background of this project and this chapter provides the project background, problem statement, project objectives, project scope, and project significance of the project.

### 1.1 Project Background

Sleep is actually one of the basic needs in our daily life as a human being in order for our body to get rest and for our organ to work and functioning well day-to-day. Mignot (2008) stated that approximately one-third of our lives, we spend to sleep. Apart from that, Bahammam (2011) also cited that, in Islam, sleep is one of the important things in human's life and one of the greatest power of Allah's creation as from the Quran also, there are many times Allah mention about sleep.

Most of the sleep-deprived is insomnia. Mustapha (2018) highlights that in Malaysia, there are about 35 percent from all the Malaysians had insomnia problems while 12.2 percent has chronic insomnia. According to Cunnington, D., & Junge, M (2016) insomnia will become chronic where the sleep-deprived occur for almost three times in a week and it continuously happens for at least three months in a row.

According to Crosta (2017) insomnia happens when the individuals find it is to either fall asleep or staying asleep. As a result, there will be some negative effects of having not enough sleep in terms of physical health and also emotional health.