Universiti Teknologi MARA

Fast Track: Fasting Replacement Recommender Mobile Application Using Rule-Based

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ABSTRACT

Fasting during the month of Ramadan is obligatory to all the Muslim. However, menstruating women are forbidden to fast during Ramadan. This reason causes the Muslim female necessary to do the fasting replacement later in the year. However, if they are not able to finish their fasting replacement within the specified timeframe, *Fidyah* will be charged. Based on survey upon Muslimah, it was found 84% of the Muslimah tend to delay fasting replacement and forget to replace it until the coming Ramadan. Therefore, the focus of this project is to develop a mobile application for fasting replacement recommendation. The project aim is to give suggestion day for the user to do fasting replacement. With the rapid growth of smart phone technology nowadays, it is necessary to have this kind of mobile application to remind the user about fasting replacement. The mobile application for fasting replacement recommendation may be able to help user to remember about how many days the user are not fasting during Ramadan as well as it will help user to organize the fasting replacement days. To develop this mobile application, ruled-based technique is used. The suggestion day based on the rules obtained from an expert. In this project, an adapted Mobile Application Development Lifecycle (MADLC) have been utilized. Findings for this project was getting from the survey that have been conducted to random number of menstruating women and an interview have done with an expert. From the survey, it shows that 95% of respondents agreed to have fasting replacement recommendation application. From the survey, 84 percent of respondents tend to forget about fast replacement. As a conclusion, the project's objectives are achieved and there are some recommendations to improve the project.

Keywords- fasting replacement recommendation, mobile application, Muslimah, Ramadan

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CHAPTER 1

INTRODUCTION

1.1 Background of Study

Ramadan is the ninth month of the Islamic lunar calendar. The fourth pillar of Islam is to fast during this month. Every single day during Ramadan, all the Muslims who are physically able are required to fast from sunrise to the sunset. The fast of Ramadan according to the *Quran* and *Sunnah* is obligatory to those who are physically able. According to verse 185 of *Surah al Baqarah*, fasting is obligatory on those who are in the month of Ramadan for 29 or 30 days (Al-Quran).

Menstruating women or also known as Muslimah are included as people who left the fast of Ramadan (Pusat Pungutan Zakat, 2014). Islam forbid those Muslimah who are menstruating in month of Ramadan from fasting. Therefore, menstruating women need to make up an equal number of days left later in the year (Mohamad, 2014). Fasting replacement is mandatory if Muslimah are not able to fast during Ramadan. If Muslimah not perform the fasting replacement until new Ramadan is coming, that Muslimah need to pay fidyah (Mohamad,2014; Pusat Pungutan Zakat, 2014). *Fidyah* is the paid fines imposed on those who fail to replace the fast of Ramadan in a year until the next Ramadan arrives. According to Yunus (2010), verse 184 of *Surah al Baqarah* states that, people who are failed to fast during Ramadan, they must feed a needy person for every day they missed.

Nowadays, rapid changes and development in mobile technology have affected various area of life including how human works and thinks. Human daily activities also affected by this technology including religious practices (Bell, 2006). Based on preliminary survey, Muslimah often to delay fasting replacement. As Ramadan comes nearer, they are not alert about fasting