

**UNIVERSITI TEKNOLOGI MARA**

**LOCATION BASED REMINDER  
USING GEOFENCING**

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## **ABSTRACT**

Reminder applications are becoming the must have applications on mobile devices as it can help users to remind themselves on a specific task that must be accomplished. Nowadays, reminder applications become more effective and gain its popularity as it can ease the users in their daily life. Currently, most of the reminders are triggered by time which is not really appropriate as the users do not know when they will be at that location. By solving this problem, reminder based location can be used as most of the mobile devices have localization sensors which can make reminder have additional functionality. The location-based reminder will combine time-based and location-based as it will only alert if the reminder satisfy with both conditions. The reminder triggered only when the user is in the radius of location and geofencing is used to track a user's current location. Geofencing technology uses GPS to track location in the 1000 metres. Besides, the location based reminder also will have additional features which are able to alert for enabling GPS and have snooze time.

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# CHAPTER 1

## INTRODUCTION

This chapter will explain about the project background, problem statements, objectives, scope and project significance of Location Based Reminder using Geofencing.

### 1.1 Background of Study

Forgetfulness is a persistent failure to remember. It results from changes in the brain and can be a normal part of aging. Besides, a symptom of another condition or disease also can cause forgetfulness (Forgetfulness, 2015). When people experience forgetfulness, they may notice that it takes longer to learn new things, harder to form new memories and difficult to recall information or events (Forgetfulness: Knowing When to Ask for Help, 2015). Forgetfulness is closely related to recall something to do in future as people mostly tend to forget what they need to do. With forgetfulness problems, people may have a cue to do something which leads to recall task that must be performed. It is very important to help people in their daily life especially for busy people (Tartakovsky, 2015). However, forgetfulness can be enhanced with help of cues such as reminder.

Nowadays, there are many smart devices that are equipped with high precision localization sensors that usually based on GPS (Global Positioning System) and access point. According to the additional functionality which is localization sensors, the location based reminder has been introduced (Zhao, Li & Xue, 2013). Location based reminder is a reminder that a person can add a location based on their task. The reminder will give a notification message when users pass by at that place (Duffy, 2014). The technology that can be used in location based reminder is geofencing technique.