CHAPTER 1

INTRODUCTION

1.0 Introduction

From year to year, the population of older people increases gradually. In 2014 the World Health Organization (WHO) reported that the population over 60 years is expected to reach 2 billion from 605 million living worldwide over the same period between 2000 and 2050 [1]. The increasing number of older people will influence the increasing the risk of chronic disease [2]. This disease will affect the quality of life of the older people over the time due the progressive of chronic disease. Undeniable older people is the person who lead us to this world and teach us many things when we still younger. Therefore, it is our responsibility to take care the older people like how they take care us when we are young. We need to managing older people from their daily life activities and some that might have health problem. For the daily life activities, we need to take care of their meals, bathing, dressing, taking medicine and many more. These are the basic activities that we should do every day even the older people have health problem. Sons and daughters often face difficult decisions as their parents enter their golden years. Particularly if one parent has passed away, deciding how to best provide for an aging parent once it’s clear they can no longer live independently is difficult [3].

However, managing older people is not easier because it take time. This make their family need take time for them to take care the older people, but some of them be forced to send the older people to the nursing home reluctantly due their busy work. So it is needed some help from technology or other peoples to help us take
care of their older people. One of the suitable technologies that can help older people is the mobile application. Nowadays, most of the people having at least one mobile phone no matter are having by child or older people. This is convenient for the people who want to manage older people or older people themselves by using the mobile application for managing.

The mobile application may be can like an audio reminder application that can remind older people doing their daily activities on time, especially for the Alzheimer’s people that easier to lose memory even for their daily life activities. In addition, the remote control of mobile phone also can let the caregivers or their family easier to control the mobile phone of Alzheimer’s people. Therefore the society can let them stay safely at home without any further worry during their working hour for the office guys or office ladies. The older people also will feel comfortable to stay at home without sending them to another place such as nursing home which is fully new environment to them and need they take some times to adopt the environment. Some of them, may be still cannot adopt it for stay a long time at there.

1.1 Problem Statement

From the knowledge as we know, the Alzheimer’s disease is not a disease like high blood pressure or diabetes that can recover or maintain by just taking medicine on time without specific help from others to take care or managing them. Alzheimer’s disease let the patient easier to lose memory of what they had done even a minute ago. So they need some specific applications to take care and remind them of what they should do. Therefore some parties had developed some applications to help and managing them.

The computer-aided telephone system that developed by other parties to help and enable Alzheimer’s people to make phone calls to their family members or friends independently. They no need to memorize the telephone number that they want to make phone call, they just need to select the name or photo which show in
the computer-aided telephone system. Another example application that can help managing Alzheimer’s people is the environment-aware system. It is a remote monitoring system that has a device that able to monitor the humidity and temperature of the environment, patient’s location and even the patient’s movement by using the sensors and GPS. Then the device will sends this information to the caregivers through SMS. Besides that, the iWander system that developed by other parties is a mobile application that can navigate the Alzheimer’s people to a safe location or back home via the help of GPS when they are wandering outside. Then it also will notify the caregivers about the current location of the patient and let the caregivers can do the further step of how to manage the situation of the Alzheimer’s people.

All of this solution to help Alzheimer’s people not just give the advantage for us to managing Alzheimer’s people, but it also has the limitation too. For example, the computer-aided telephone system just has the solution for the patient make phone call independently, but it can’t let the patient do their daily activities independently. Make phone call is just the small thing that involve in our life and sometimes the Alzheimer’s people will forget who they should to make phone call due to memory lose. Whereas the environment-aware system need to purchase the sensors and locate at home just can help to monitor the patient. The purchase fee for some family might be a burden to them and they may not be able to afford it. Sometimes, the sensors also will lose functioning accidently and it will break the function of monitor the patient as well. In addition, the iWander system needs GPS to guide the patient and the GPS need the internet connection just can function. If the Alzheimer’s people walk to an area that can’t access to the internet, the caregivers also can’t know the exactly location of the patient.

Nevertheless still had other parties developed the smart phone application nowadays which has the function of daily living reminder, picture-dialing and one hour reminder to help and managing the Alzheimer’s people in their daily life. However there is still no has any party developed the mobile phone controlling for managing the older people with Alzheimer’s disease. It influence the caregiver can’t fully control and view the smart phone which taking by the Alzheimer’s people directly when they are not around with Alzheimer’s people.