

**UNIVERSITI TEKNOLOGI MARA**

**ASTHMA SELF – MANAGEMENT  
APPLICATION (ASMA)**

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**January 2015**

## **ACKNOWLEDGEMENT**

Alhamdulillah, praise and thanks to Allah because of His Almighty and His outmost blessings, I was able to finish this research within the time duration given. Firstly, my special thanks go to my supervisor, Puan Zatul Amilah Shaffiei and Puan Saidatul Rahah Hamidi who guide me during the development of this project and the correction with the report. My appreciations also go to Puan Nor Diana Ahmad because she has thought us step by step in developing my project from CSP600 until CSP650 for two semesters.

Special appreciation also goes to my beloved parents because of their moral support and support for other necessity things such as money and ideas while developing my project.

I also want to thanks Dr Shawaludin bin Haji Husin one of the doctors at Klinik Noridah at Sek 7 Shah Alam who agreed to spent his time so I can interview him even though he need to treat his patient. From the interview there is a lot of information about asthma in developing my project.

Last but not least, I would like to give my gratitude to my dearest classmate CS2406A in helping me in term of moral support and help me to solve my problem, giving an explanations to me if I found any difficulty in programming and giving an idea to be implemented in the project.

## **ABSTRACT**

The usage of smartphones has increased drastically because the user wants better specification or technical standard that could support all the software and the other application for example applications for games, education, mobile banking and application for health. Pusat Kesehatan UiTM has a record book complete with asthma action plan for asthma patients but as the smartphone technology grows the patients prefer to have an application that could manage their asthma through mobile phones. Asthma is a chronic inflammatory disease of the airways which is associated with exaggerated airway where it narrowing response to triggers, such as allergens and exercise that leads to recurrent symptoms such as wheezing, shortness of breath, chest tightness and coughing. Asthma Action Plan is self-management education and specific advice as to how to recognize loss of asthma control. The action plan is based on zones of asthma care defined by the peak expiratory flow (PEF) rate and symptoms. A peak expiratory flow (PEF) is a way to measure how much air patients can blow out of their lungs in one second. The discovery phase and the design phase of Enterprise Mobile Application Lifecycle includes interview with Dr. Shawaludin bin Haji Husin from Klinik Noridah, which helps in determining the requirements. The ASMA was designed and a prototype was developed.

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# CHAPTER 1

## INTRODUCTION

This chapter will be included with the project background, problem statement, project scope, research question, objective of the project as well as significant of the research.

### 1.1 Research Background

A consultant physician and respirologist, Dr Zainudin said that one of the common diseases all over the world including Malaysia is prevalence in asthma (Eek, 2005). He also states that in our country, asthma affects approximately 10 to 13 percent of the total population. That is almost three-and-a-quarter million people suffering from asthma, a large majority of who are under-treated and having a very poor quality lives. According to Yadav (2009), in Malaysia about 80 to 90 percent have asthma allergic mostly prevalent suffers in children and young adults meanwhile 20 percent are non-allergic asthma that is frequently found in middle-aged and elderly individuals. According to Schiffman (2014), An Asthma cannot be cured but the symptoms and attacks can be improved with treatment or with time.

According to Malaysian Thoracic Society, the incidence of asthma has increased and 13.8 percent of them are primary school children in Kuala Lumpur. In 2010, poor awareness on the sudden asthma attacks and lack of preparation for any emergencies has caused 9 deaths.

A written action plan has been introduced to the patient especially to parents who have an asthmatic child on how to determine the early stage of asthma