

Universiti Teknologi MARA

**Learning the Malaysian Sign Language
On Android Platform**

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ABSTRACT

Sign language is well-known among people which has been used in community of hearing-impaired (HI). Malay Sign Language (MSL) is a language that has been used by the deaf and hard-of-hearing community in Malaysia to communicate among them as well as with normal people also. The deaf and HI people go to special school to learn the sign language. In Malaysia, there are increasing amount in community of hearing-impaired every year. Because of the population of the community increase, the needs for normal people to know the sign language is important as they have friends among them. Nowadays, normal people are facing difficulty to apply the sign language in their daily life. In current age, technology could be utilized in order to overcome the problem. This project proposes an idea to develop a sign language learning application for normal people. The research methodology used in this project is ADDIE model. The phases in ADDIE model stated what have been done and what will this project proceed next time. For the evaluation phase, this project used summative evaluation to evaluate the result. This project is targeting the users at age 13 to 17 years old who are normal teenagers in Malaysia. As for the result, this project's objective is firstly to develop a mobile application using multimedia elements in Android platform and secondly to test the effectiveness of the mobile application whether the normal teenagers can use that platform better.

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CHAPTER 1

INTRODUCTION

1.1 Project Background

The United Nations found that the number of persons with disabilities (PWD) in Malaysia is about 2.8 million (Zulkipli, 2011). According to Malaysian Social Welfare Department, there are more than 30,000 deaf people who are officially registered, out of the country's population of approximately 24 million in Malaysia. As the numbers of people with disabilities are increasing, many researchers try to develop new technologies that can aid the disabled people to live their life confidently (Abdul Mutalib et al, 2011).

The phrase of 'hard of hearing' is meant by the people who are with hearing loss ranging from mild to severe. They often use the spoken language to socialize with people around them and also assisted by hearing aids, cochlear implants and other aid devices. The meaning of the 'deaf' is the people who permanently lose their hearing ability (World Health Organization, 2015).

This hearing impaired person uses the sign language to communicate with normal people and between themselves. Malaysian Sign Language (MSL) or Bahasa Isyarat Malaysia is a language applied by the hard-of-hearing people in Malaysia (Abdullah, 2012). As stated by Hurlbut (2010), it has emerged from American Sign Language (ASL), which was introduced to the Penang School for the Deaf in the mid-1970s. The language has been increased in terms of type of signs where many local signs have been added and now has about 75 percent resemblance with ASL. The Deaf of Malaysia chose to apply the national language term for their communication language which is Bahasa Isyarat Malaysia (literally 'Language of Signs of Malaysia').