

Universiti Teknologi MARA

**Scaffolded Multimedia Learning App
for Malaysian Sign Language**

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DECLARATION

I certify that this report and the research to which it refers are the product of my own work and that any ideas or quotation from the work of other people, published or otherwise are fully acknowledged in accordance with the standard referring practices of the discipline.



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ABSTRACT

Sign language is the most learned language in the world. After all, more than 466 million people have disabling hearing loss according to the World Health Organization (WHO). Sign language is commonly used by hearing-impaired people as well as people who can hear but cannot speak well. Most hearing-impaired people learned sign language to communicate with each other but unable to communicate with non-hearing-impaired people. To overcome this problem, this project aims to develop an application to teach sign language focusing on people who can hear. There are various applications and software available that can teach users sign language but not all of them are interactive and fun to use. Most of them use only static images to teach users sign language but it makes them feel boring and unsatisfied, causing users to feel demotivated to learn a new language. Thus, it is important to develop an application that is both entertaining and educational to the users.

The method used in the mobile application to make it easier and fun way to learn sign language is by using gamification in multimedia. The principle used as a guideline to develop a good gamification application is Scaffolded Learning. The educational concept of scaffolding is the application of tailored support to move the learner from their current level of learning to the next. Example of scaffolding is by using badges, progress bar, hints given when user unable to solve the problem after certain condition and more. The scope of this application is for public purpose. The application is created using Unity software. The model used to create the application is ADDIE model.

KEYWORDS: Sign language, Multimedia, Gamification, Scaffolding, Mobile Application

Table of Contents

| | |
|---|------|
| SUPERVISOR’S APPROVAL | i |
| DECLARATION | ii |
| ACKNOWLEDGEMENT | iii |
| ABSTRACT | iv |
| LIST OF TABLES | viii |
| LIST OF FIGURES | ix |
| CHAPTER 1 | 1 |
| INTRODUCTION | 1 |
| 1.1 Background of Study | 1 |
| 1.2 Problem Statement | 2 |
| 1.3 Objectives | 3 |
| 1.4 Project Scope | 4 |
| 1.5 Research Significance | 4 |
| 1.6 Outline of the Thesis | 4 |
| CHAPTER 2 | 5 |
| LITERATURE REVIEW | 5 |
| 2.1 Hearing Disabilities | 5 |
| 2.1.1 What is a hearing loss? | 5 |
| 2.2 Causes of Hearing Loss | 6 |
| 2.2.1 Congenital | 6 |
| 2.2.2 Acquired | 7 |
| 2.3 Effect of Hearing Loss | 7 |
| 2.4 Type of Deafness | 8 |
| 2.4.1 Conductive | 8 |
| 2.4.2 Sensorineural | 9 |
| 2.4.3 Mixed | 9 |
| 2.5 Sign Language | 10 |
| 2.5.1 Why Are There So Many Sign Languages? | 10 |
| 2.5.2 Malaysian Sign Language (MSL) | 11 |
| 2.5.3 Reasons to Learn MSL instead of KTBM | 12 |
| 2.6 Multimedia | 14 |

| | | |
|-------------------|---|------------|
| 4.5.5 | Quiz Module..... | 73 |
| 4.6 | Summary | 75 |
| CHAPTER 5 | | 76 |
| | DATA COLLECTION AND FINDING..... | 76 |
| 5.1 | User Testing | 76 |
| 5.1.1 | Range Specification | 78 |
| 5.1.2 | Usability Testing | 78 |
| 5.1.3 | User Acceptance Test..... | 90 |
| 5.2 | Summary | 93 |
| CHAPTER 6 | | 94 |
| | CONCLUSION AND RECOMMENDATION..... | 94 |
| 6.1 | Discussion | 94 |
| 6.2 | Limitations | 95 |
| 6.3 | Future Works Recommendation..... | 95 |
| 6.3.1 | Content | 96 |
| 6.3.2 | Customisation..... | 96 |
| 6.3.3 | Facial expression..... | 96 |
| 6.3.4 | Competitive element | 96 |
| 6.3.5 | Finishing module..... | 96 |
| 6.4 | Conclusion..... | 97 |
| REFERENCES | | 98 |
| APPENDICES | | 102 |