

VOICE SYNTHESIZER (SOFTWARE DEVELOPMENT)

**This is presented in partial fulfilment for the award of the
Advanced Diploma in Electrical Engineering of
INSTITUT TEKNOLOGI MARA**



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JUN 1996**

ABSTRACT

This thesis proposes the software development of a computer based security system which can transmit and speak the Malay language messages automatically when a breach of security or form of emergency occurs in the building. The system is very useful to locate the place where the breach of security or emergency had occurred. The security system of the building can be more safer and the man power need for controlling the building can be reduced.

ACKNOWLEDGEMENT

In the name of Allah swt, The Most Gracious who has given me the strength and ability to complete this project. All perfect praises belong to Allah swt, Lord of the universe. May blessings upon the Prophet Muhammad s.a.w. and member of his family and companions.

I would like to express my deepest appreciation to my project supervisor Puan Habibah Hashim for her guidance, ideas and patience in advising and assisting this project. My gratitude also goes to all lecturers for their guidance and willingness in sharing their knowledge.

Also thanks to my family for their support especially to my mom and my classmates for their suggestion and contribution to this project.

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CHAPTER 1

1.0 INTRODUCTION

The objective of this project is to develop a computer based security system which can transmit and speak messages in clear spoken Malay language when an emergency occurs in the building. The system uses the voice synthesizer technique. In this project, the stored speech is being used. This type of voice synthesizer used is the ADPCM speech synthesizer with external EPROM for speech data storage. This system can be connected to the telephone network via modem. The block diagram of the system is shown in Figure 1.0. The project is divided into two parts where the first part is hardware and the second part is software. The messages are stored in the EPROM where the users can store the voice messages used to get immediate help. The messages can be changed depending on the application.

The implementation of the project is as follows:

- i) Voice is stored in the EPROM on a voice output card.
- ii) When an emergency occurs, the microprocessors will give out the specific codeword based on the type of emergency. This enables the voice output card to generate the relevant audio signal.
- iii) The status of the telephone line will be checked first and if it not busy, the software will then dial automatically the police, ambulance, fire brigade or public defence and