

# **AUTOMATED DMS FOR LABORATORY MONITORING**

This thesis is presented in partial fulfillment for the award of the Bachelor of the  
Electrical Engineering (Hons.)

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## ACKNOWLEDGEMENT

“With the name of Allah the most Gracious, the most Merciful creator,

I seek His Blessing on His Prophet Muhammad s.a.w”

All praise and glory be to Allah S.W.T whose infinite generosity has given me the strength to complete this final project in time.

My sincere gratitude, thanks and most appreciation goes to Pn. Mahanijah Bt. MD Kamal as my project supervisor for her guidance, encouragement, comments and references. She is such a great person who has paved the way for me throughout the overall research project and fully support throughout this time in completing this project.

I would also like to express my grateful thanks to all my colleagues for their opinion, suggestion and cooperation they gave. Also thanks for their morale support during the months I spent preparing this final project.

To my beloved parents, En. Mohd Redzuan Bin Mohd Zain and  
and families, who are always there for me whenever I need them and million of thanks for all the supports, blessing, loves and financial support they give to me.

Finally, to whom I failed to mentioned, who directly contributed to this project, thank you very much.

## **ABSTRACT**

This paper presents the development of software programming to manage data for laboratory monitoring application. This system use personal computer (PC) or laptop as a processor device in conjunction with analog and digital input or output from the oscilloscope and the signal source by using interface technology. The software use windows-based application and graphical user interface (GUI) support. The system will show the output signal wave form at the panel interface that was design for further analysis. The system also will show the result value of voltage and frequency from the output signal wave. The appropriate subsystem, Microsoft Visual Basic 6.0 is used as the programming language to perform the task associated with the analysis of the wave from the signal generator.

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# CHAPTER 1

## INTRODUCTION

### 1.0 Overview

In the new era of technology, much emphasis has been laid to impart computer aided courses to electrical engineering students. This led to a growing trend of developing computer software model for various application uses in laboratory.

The availability of this system in laboratory will help students to do testing, analysis and research work on related subject. The development of graphical user interface (GUI) on PC based experimental can performed data management, measurement, calculation, interactive system operation and showed graphical of the output signal [5].

Thus, the system will help to maximize the efficiency of the data management from the experimental setup and therefore will improve the user's productivity. The system operation is controlled by software written in Microsoft Visual Basic 6.0 programming language. The operation of the system is shown in Figure 1.0:

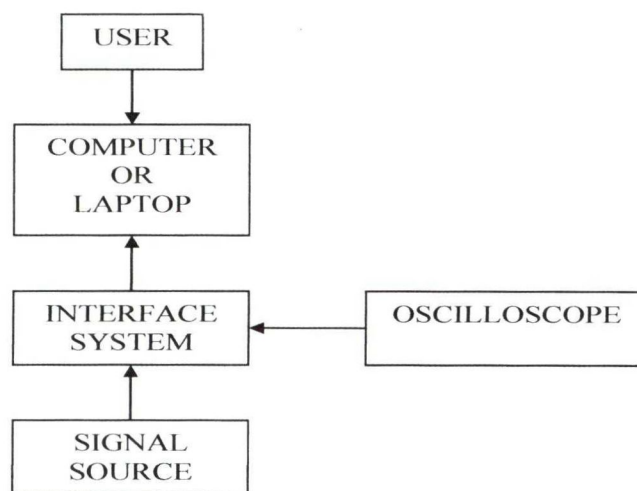


Figure1.0: Block Diagram of System Operation