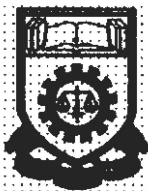


**CAR WASH SYSTEM
SOFTWARE DESIGN USING PROGRAMMABLE LOGIC
CONTROLLER AND QBASIC LANGUAGE**

**This thesis is presented as part of a fulfilment for the award of the
Advanced Diploma in Electrical Engineering of
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Abstract

This thesis describes a general view of the software design of a car washing system which has the ability to improve the operation of the car wash system in Malaysia. The system uses a programmable logic controller (PLC) unit and a host link system as a communication module from PLC to computer. The PLC will control the system by controlling the input and output devices. Any information about the condition of the system, will be sent by PLC to the computer through the host link system. This information is presented through the graphics display unit as a supervisory facility in order to have an efficient operation. All the sequences of the process such as washing, drying and polishing will automatically be controlled by the PLC.

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CHAPTER 1

1. INTRODUCTION

Nowadays, the automatic car washing system is getting its popularity in Malaysia. It is not difficult to see why such a trend is becoming prevalent here. One reason is because many car owners, especially those who are kept busy by their job schedules and activities, are not able to find time to wash their cars. Others simply are not interested in taking up the cleaning work while some prefer the job to be done by somebody else. Consequently, all these car owners turn to the car wash center to wash their car.

In the present system, it has one gantry with the washing and drying cycle carried out by the same gantry which moves automatically along rails fixed to the ground. There are two vertical and one horizontal brushes with the patented swing system which will automatically operate to the profile of the bodyworks. The present system is consists of one self gantry. It involved with washing and drying processes. It has three brushes. Two vertical and one horizontal brush attached to the gantry. It also have two blower fan for a drying process which is blow dry simultaneously sides of vertical. The sequence of washing of the gantry is as follows :

- a) wetting, shampooing and washing (first forward run)
- b) rinsing and washing (first return run)