

ONLINE PROGRAMMING SYSTEM FOR A ROBOT

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ABSTRACT

This paper concern with the design of online programming system that program a robot before it can be used to do a desired job. The programming system was developed using visual basic software. After this task a program and robot can be uses at actual job or environment by loading a programming from database. Same with this project, it will program robots by human manually and then the desired program will be download to robot, lastly robots can run automatically. In this project ROB3 from EUROBTEC robot was used to interface a program. This thesis is all about the “Online Programming System for a Robot” using the Visual Basic 6.0

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CHAPTER 1

INTRODUCTION

1.1 Background

In real world, robot trainers are developed by Japan, USA and etc [1]. Because an expansive a trainer, it is because why this project must be created. Almost all robot trainers available in market are very expensive, as a result the project has been proposed for my final year project. In world wide industrial robot is designed to be able to perform a specific work. Before a robot is able to do certain tasks, it has to be trained by human [1][2][3]. About that robots can do what a desired task of human. The important parts of programming are:

1. Actual time to do some job
2. Choose a right motor to move a part of robot
3. Achieve the objective (desired task of human)

Nowadays, there are so many ways in constructing robots, but it's too expensive to be used as a beginner's robot teaching model. The first objective of the project is to develop or create a cheaper programmable robot for teaching purposes. The structure must be simple but still fulfill the requirements and the program must be easy to understand, also can be selected either manually or by automatic controls.

Robot can be classified as programmable robot and non-programmable robot. Non-programmable robot usually limited for toy robot, fix application robot and others. User can not change the program according to their requirements and therefore it is called as unfriendly user equipment. For the programmable robot, user can used the task or movement that provided by the original program through the controller. The controller can be computer, remote control and others; this type of robot is user friendly equipment.