

“Title”

A

Project Report

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by

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ABSTRACT

“TSAR” – The Target Seeking Autonomous Robot is a project which is going to deal with the complexity of collision avoidance, computational processing, localization, environmental sensing and target seeking.

An autonomous robot is a self-piloted machine that does not require a human intervention to accomplish its tasks. These robots are designed to perform desired tasks in unstructured environments without continuous human guidance.

The goal of the project is to design and build a low cost autonomous vehicle control system for a ground vehicle. The vehicle must be able to navigate through the predetermined route (desired destination) and avoid obstacles while maintaining an optimum speed and also restoration of the original path to reach its predefined destination successfully.

The demonstrator system uses **BOE-BOT**. The bots are initially placed at some position (which is the referred as Home Position hereafter) and a target (Destination Address hereafter) is given to them. Then the required processing is done and the predefined path is analyzed and fixed for locomotion.

The bots are programmed such that they can detect as well as avoid all the objects in their path and no collision occurs. Collision avoidance is achieved by using infrared sensors. Once the Bot goes out of the predefined path the Path Restoration Technique comes into action in order to reach its original destination.

One possible task of an autonomous vehicle is to navigate a pre-programmed route while avoiding any obstacles the vehicle may encounter. This function is useful in applications such as

- Surveillance Robot,
- Safety System,
- House hold robots
- Autonomous Moving Robot
 - In the Air
 - On road
 - Underwater

TABLE OF CONTENTS

S.No.	Contents	Page No
1.	Introduction	1
1.1.	History	2
1.2.	Requirement Analysis	3
1.3.	Main Objective	4
1.4.	Sub Objectives	4
1.5.	Pert Chart Legend	5
2.	System Analysis	6
2.1.	Existing System	6
2.2.	Motivations	7
2.3.	Proposed System	7
2.4.	Modules	8
2.4.1.	Object Detection and Collision Avoidance	8
2.4.2.	Servo Motor Control	8
2.4.3.	Path Tracking	9
3.	Design	10
3.1.	Modelling in Robots	10
3.1.1.	Behaviour-based Robotics	10
3.1.2.	Use Case model for Requirement Analysis	11
3.1.3.	The design model	12
3.1.4.	Object and Class Design	13
3.1.5.	State Transition	14
3.1.6.	Activity Diagram	17
4.	BOE-BOT	18
4.1.	Boe-Bot Overview	18
4.2.	Basic Stamp –Boe-Bot’s Brain	19
4.2.1.	Technical Specifications	20
4.2.2.	Features	21

4.2.3 Architecture-memory organization	23
4.3. Programming the BOE-BOT	24
4.3.1. Quick Start Guide	24
4.4.Boe-Bot's Servo Motors	29
4.5.Infrared Sensors	30
4.6.Ultrasonic Sensors	32
5. Implementation	34
5.1. Path tracing using a Cartesian Co-ordinate System	34
5.2. Scenarios	36
5.3. Algorithms	39
5.3.1.Scenario -1 Co-ordinate Based Seeking	39
5.3.2.Scenario -2 Lookup Based Seeking	40
5.3.3.Scenario -3 Serpentine Scanning	
6. Output screens	44
7. Limitations and Future Enhancements	68
8. Conclusion	69
Appendix A: BASIC Stamp and Carrier Board Components and Features	70
Appendix B: Resistor Color Codes	72
Appendix C: Breadboarding Rules	73
References	76

LIST OF FIGURES

S.No.	Figure	Page No
1. Chapter 1		
	Fig. 1.1 Pert Chart	5
2. Chapter 2		
	Fig. 2.1 Servo Motors Overview	8
3. Chapter 3		
	Fig. 3.1 Use Cases Model for the System	11
	Fig. 3.2 Sequence Diagram	12
	Fig. 3.3 Class Diagram	13
	Fig. 3.4 State Transition Diagram for the detecting behavior	14
	Fig. 3.5 State Transition Diagram for the finding path behavior	15
	Fig. 3.6 State Transition Diagram for the obstacle avoidance behavior	15
	Fig. 3.7 State Transition Diagram for the restoring path behavior	16
	Fig. 3.8 Activity Diagram for the system	17
4. Chapter 4		
	Fig. 4.1 Boe-Bot	18
	Fig. 4.2. Basic Stamp® 2 Module on a Boe-Bot Robot	20
	Fig. 4.3 Basic Stamp 2	21
	Fig. 4.4 Basic Stamp 2 OEM	22
	Fig. 4.5 BS1-IC,BS1 Carrier Board, and BS1 Serial Adapter	25
	Fig. 4.6 BS2-IC and Board of Education	26
	Fig. 4.7 Test your PC connection to the BASIC Stamp	27
	Fig. 4.8 Entering the \$STAMP and \$PBASIC directives from the toolbar	27

Fig. 4.9 To run the program,you may use the task bar menu Or the Run icon	28
Fig. 4.10 Debug Terminal displaying Program Output	29
Fig. 4.11 Parallax Continuous Rotation Servos	30
Fig. 4.12 Object Detection with IR Headlights	31
Fig. 4.13 Infrared Module Parts	32
Fig. 4.14 Ultrasonic Distance Sensor	32
5. Chapter 5	
Fig. 5.1 Path tracing without obstacles	35
Fig. 5.2 Path tracing with obstacles	36
Fig. 5.3 Scenario-1 Co-ordinate based seeking	37
Fig. 5.4 Scenario-2 Lookup Based Seeking	38
Fig. 5.5 Scenario-3 Serpentine Scanning	38
5. Chapter 6	
Fig. 6.1 The Cartesian Co-ordinate System	44
Fig. 6.2 Scenario-1 without obstacles (1)	45
Fig. 6.3 Scenario-1 without obstacles (2)	46
Fig. 6.4 Scenario-1 without obstacles (3)	47
Fig. 6.5 Scenario-1 without obstacles (4)	48
Fig. 6.6 Scenario-1 without obstacles (5)	49
Fig. 6.7 Scenario-1 without obstacles (6)	50
Fig. 6.8 Scenario-1 with obstacles (1)	51
Fig. 6.9 Scenario-1 with obstacles (2)	52
Fig. 6.10 Scenario-1 with obstacles (3)	53
Fig. 6.11 Scenario-1 with obstacles (4)	54
Fig. 6.12 Scenario-1 with obstacles (5)	55
Fig. 6.13 Scenario-1 with obstacles (6)	56
Fig. 6.14 Scenario-1 with obstacles (7)	57
Fig. 6.15 Scenario-1 with obstacles (8)	58
Fig. 6.16 Scenario-2 without obstacles(1)	59
Fig. 6.16 Scenario-2 without obstacles(1)	59

Fig. 6.17 Scenario-2 without obstacles(2)	60
Fig. 6.18 Scenario-2 without obstacles(3)	61
Fig. 6.19 Scenario-2 without obstacles(4)	62
Fig. 6.20 Scenario-2 without obstacles(5)	63
Fig. 6.21 Scenario-3(1)	64
Fig. 6.22 Scenario-3(2)	65
Fig. 6.23 Scenario-3(3)	66
Fig. 6.24 Scenario-3(4)	67

Appendix-A :BASIC Stamp and Carrier Board

Components and Features

Fig. A-1 BASIC Stamp® 2 Microcontroller Module	70
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Components and Their functions

Fig. A-2 Board of Education® Rev C Carrier Board	71
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Appendix-B Resistor Color Codes

Fig. B-1 Resistor Color codes	72
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Appendix-C Breadboarding Rules

Fig. C-1 Prototyping Area	73
Fig. C-2 Part Drawings and Schematic Symbols	74
Fig. C-3 Example Schematic and Wiring Diagrams	75

LIST OF TABLES

S.No.	Table	Page No
1. Chapter 4		
	Table 4.1 BS2 Features	21
	Table 4.2 Basic Stamp 2 Pin Descriptions	23
	Table 4.3 RAM organization for all BS2 models	24
2. Appendix B:Resistor Color Codes		
	Table B-1 Resistor Color code values	72

1.

2.

3. INTRODUCTION (Chapter)

1. Laws of Robotics: By Isaac Asimov (Heading)

1.1. Sub- Heading

Jsfjdjfffdjj jkdfkvkjdfjljkj kfvkfvkl kdnfjkdnk kjenvkjdn kjnvjkdn jnfjv kvked kevk
kvnkevkd kvnenv kevnkfn knvekfn.

1.1.1. Sub Sub Heading

Jsfjdjfffdjj jkdfkvkjdfjljkj kfvkfvkl kdnfjkdnk kjenvkjdn kjnvjkdn jnfjv kvked
kevk kvnkevkd kvnenv kevnkfn knvekfn.

4. SYSTEM ANALYSIS

References

(As per their appearance in the chapters)