WHITE CANE

A Project Report

Submitted in partial fulfilment of the

Requirements for the award of the Degree of

BACHELOR OF SCIENCE (INFORMATION TECHNOLOGY) SEMESTER-VI EXAMINATION

 $\mathbf{B}\mathbf{v}$

Mr Vinay Shatrughan Singh BSCIT/VI-1819/3040585

APRIL, 2019

Under the esteemed guidance of

Ms. Gauri Ansurkar

Assistant Professor



DEPARTMENT OF INFORMATION TECHNOLOGY

KERALEEYA SAMAJAM (REGD.) DOMBIVLI'S

MODEL COLLEGE

Re-Accredited Grade 'A' by NAAC

DOMBIVLI, 421204

MAHARASHTRA

2018-2019

ABSTRACT

This project is about providing a gaming system for blind people. This application will be used by blind people for passing time. By using the application player can improve their reaction time. It can be used for stress relaxations. Voice command will improve the understandable ability of blind person.

Acknowledgment

It gives me a great pleasure to present my project on "WHITE CANE". This is my milestone in B.Sc. Information Technology.

I would like to express my sincere thanks to all the Teachers who helped me throughout The project. I would like to acknowledge the help and guidance provided by our Guide. Ms. Gauri Ansurkar in all places during the presentation of this project.

I am thankful to our honorable Principal Dr. Vinay Bhole. Onwards my project works, I am also thankful to the staff member of the computer department for their moral supports towards the project.

Declaration

I hereby declare that the project entitled, "WHITE CANE" done at Model College, has not been in any case duplicated to submit to any other university for the award of any degree. To the best of my knowledge other than me, no one has submitted to any other university.

The project is done in fulfilment of the requirements for the award of degree of **BACHELOR OF SCIENCE (INFORMATION TECHNOLOGY)** to be submitted as final semester project as part of our curriculum.

PROFORMA FOR THE APPROVAL PROJECT PROPOSAL

(Note: All entries of the proforma of approval should be filled up with appropriate and complete information. Incomplete proforma of approval in any respect will be summarily rejected.)

PNR NO.:		Roll no:
1. Name of the Student		
2. Title of the Project		
3. Name of the Guide		
4. Teaching experience of the Guide		
5. Is this your first submission?	Yes	No
Signature of the Student		Signature of the Guide
Date:		Date:
Signature of the Coordinator		
Date:		

TABLE OF THE CONTENT

Sr. No	INDEX	Page No.
1.	Introduction	01-02
	1.1 Background	
	1.2 Objective	
	1.3 Purpose Scope Applicability 1.3.1 Purpose 1.3.2 Scope	
	1.3.3 Applicability	
2.	Survey Of Technologies	03-04
	2.1 Python	
	2.2 Hardware requirement	
3.	Requirement and Analysis	05-14
	3.1 Purpose Scope Applicability 3.1.1 Purpose 3.1.2 Scope 3.1.3 Applicability 3.1.4 Voice command 3.1.5 Error management 3.2 Software Requirement and Specifications 3.2.1 Functional Requirements 3.2.2 Non-functional requirements 3.2.3 Planning and Scheduling 3.3.3 Gantt chart and network diagram 3.4 Software Requirements 3.5 hardware requirements 3.6 Risk identification	

4.	System Design	15-23
	4.1 Basic Modules	
	4.2 Procedural Design	
	4.3 Logic Diagrams 4.3.1 Flowchart diagram	
	4.3.2 Use Case diagram	
	4.3.3 Activity diagram	
	4.4 Application Interface	
	4.5 Graphical representation of gaming interface	
5.	Implementation and Testing	24-33
	5.1 Implementation Approaches	
	5.2 Coding details and efficiency	
	5.2.1 Code efficiency	
	5.2.2 Code Details	
	5.3 Testing Approach	
	5.3.1 Integration and System Testing	
	5.3.2 Introduction	
	5.3.3 Integration	
	5.3.4 Test Plan5.3.5 Critical Path Method	
	5.3.3 Chicai i aui Methot	
6.	Result and Discussion	34-42
	6.1 User Interface Output	

7.	Conclusions	43-45
	7.1 Conclusions and Significance of the system	
	7.2 Limitation of the system	
	7.3 Future Scope	
	7.3.1 Multilevel Game	
	7.3.2 Conceptual Diagram	
8.	References	46
	8.1 Applications	
	8.2 Websites	

LIST OF FIGURES

Fig no.	Name	Page no.
3.1	Gantt Chart-1	8
3.2	Gantt Chart-2	9
3.3	Gantt Chart-3	9
3.4	Gantt Chart-4	10
3.5	Gantt Chart-5	10
3.6	Gantt Chart-6	11
3.7	Gantt Chart-7	11
4.3.1	Flow Chart	16
4.3.2	Use case diagram	17
4.3.3	Activity Diagram	18
4.4	Application interface (main menu)	19
4.5	Graphical representation of gaming interface	20
4.5.1	First position	21
4.5.2	Second position	22
4.5.3	Third position	23
5.2.1	Code and Files Structure	28

Fig no.	Name	
		no.
6.1	When game starts user can listen to the story of the game.	34
6.2	In this he listen the key which are going to be useful for the game	35
6.3	If user press any wrong key.	36
6.4	when game started.(see the life and the score)	37
6.5	If pause event is called (by pressing space key) three option available	38
6.6	Menu options	39
6.7	Developer page player can listen the developer of the game and the college of the developer.	40
6.8	After the loss he can listen his score.	41
6.9	When player loss the game then he get to know his score and how well he played as per his score.	42
7.3	Conceptual Diagram	45

LIST OF TABLES

Table no.	Table Name	Page no.
2.1	Requirement	4
3.5	Hardware Requirements	12
5.3.1	For Right key	31
5.3.2	For LEFT key	31
5.3.3	For UP key	32
5.3.4	For DOWN key	32
5.3.5	For SPACE key	32