**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**

**By**

**Mr Raju Bhaskar Sherla**

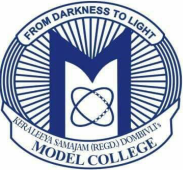
**BSCIT/VI-1819/3040571**

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.

Thank You

**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?  Signature of the Student | Yes |  | No  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. Background   2. Objective   3. Purpose Scope Applicability      1. Purpose      2. Scope      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   * + 1. Applicability     2. Voice command     3. 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** |
|  | * 1. Implementation Approaches   2. Coding details and efficiency   5.2.1 Code efficiency  5.2.2 Code Details   * 1. Testing Approach      1. Integration and System Testing      2. Introduction      3. Integration      4. Test Plan      5. Critical Path Method |  |
| **6.** | **Result and Discussion** | **34-42** |
|  | 6.1 User Interface Output |  |
| **7.** | **Conclusions** | **43-45** |
|  | * 1. Conclusions and Significance of the system   2. Limitation of the system   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** | **Page 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 |