TABLE OF CONTENTS

1. **Certificate..... …I**
2. **Declaration.....II**
3. **Acknowledgement…,,,III**
4. **Abstract……...IV**

CHAPTER 1

Introduction

1.1 Objective and Scope .....…….02

1.2 Purpose of the Project…….....02

1.3 Methodology……03

1.4 Project timeline……...04

1.5 Gantt Chart…….07

1.6 Technical Details…..... .05

1.7 Advantages and Disadvantages…..... .05

CHAPTER 2

Implementation/Technology Environment

2.1 Explanation…….…..…..09

2.2 Tools and Technology…….…….09

2.3 TKINTER…….……10

2.4 OS…….…….10

2.5 PYTHON TIME…….……..11

2.6 PYTHON DATE-UTILS ……..…..11

2.7 OPENCV……..…..11

2.8 NUMPY…….…11

2.9 PANDAS… 12

2.10 PILLOW 12

2.11 PYTHON CSV……12

2.12 HAARCASCADE…..... 12

2.13 LOCAL BINARY PATTERN HISTOGRAM…….……13

2.14 Technology Environment…….……..13

2.15 Introduction to Visual Studio……...13

2.16 Gitbash……..……..17

2.17 PYTHON 3.6.7……..…….…18

CHAPTER 3

Coding

3.1 Total Files in the Project…..... 20

3.2 Attendance folder……...21

3.3 Images……..21

3.4 Students Details……..22

3.5 Training iamge…….……..22

3.6 Training Lables…….…….23

3.7 haarcascade_frontalface_default.xml…….....23

3.8 main.py……..….24

CHAPTER 4

Testing and Result

4.1 Basic view of the project.....42

4.2 When someone register yourself 42

4.3 Face registration 45

4.4 Attendance by face recorgnization.....48

4.5 Attendance Marked……50

CHAPTER 5

Conclusion…….……..…53

Future Scope…….……...……..…53

BIBLOGRAPHY…….…….……..……54

REFERENCES……..…….……..…..…...55

LIST OF FIGURES

Figure No.	Title	Page No.
1.	Agile methodology	03
2.	Gantt Chart	04
3.	Getting start with visual studio	15
4.	Menus in visual studio	16
5.	Toolbar	16
6.	Git setup	17
7.	Git Bash	18
8.	Python 3.6.7	19
9.	Python Shell	19
10.	Total files in the project	20
11.	Attendance folder	21
12.	Attendance file	21
13.	Images	21
14.	StudentDetails	22
15.	StudentDetails.csv	22
16.	Trainingimage	22
17.	TrainingLables	23
18.	haarcascade_frontalface_default.xml	23
19.	Basic view of the project	42
20.	Abhinav's registration	42
21.	Muskan's registration	43
22.	Ravi's registration	43
23.	Shalu's registration	44
24.	Kavita's registration	44
25.	Face Registration of muskan	45
26.	Face Registration of shalu	45
27.	Face Registration of ravi	46
28.	Face Registration of abhinav	46
29.	Face Registration of kavita	47
30.	Admin password for registration	47
31.	Attendance by face recorgnition of muskan	48
32.	Attendance by face recorgnition of shalu	48
33.	Attendance by face recorgnition of abhinav	49
34.	Attendance by face recorgnition of ravi	49
35.	Attendance by face recorgnition of kavita	50

36.	Muskan’s Attendance Marked	50
37.	Ravi and abhinav’s attendance marked	51
38.	Shalu and Kavita’s attendance marked	51
39.	Attendance.csv	52
38.	Attendance.csv	52