Maharashtra Academy of Engineering & Educational Research's

MIT POLYTECHNIC, PUNE

MICRO PROJECT REPORT

Academic year: 2022-23

Topic:- Attendance Management Project

Program: Information Technology **Program code: IF3I**

Course: Object Oriented Programming Using C++ **Course code: 22316**

GUIDED BY

(Prof. P. U. Nehete)

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Certificate

This is to certify that Mr. **Gaurav Balasaheb Mali,** Roll No. **12** of the 3rd semester of Diploma in **Information Technology** of Institute **MIT POLYTECHNIC, Pune** has completed the **Micro Project Report** satisfactorily in **Course: Object Oriented Programming Using C++** for the academic year **2022- 2023** as prescribed in the curriculum.

Place: Pune **Enrolment No: 2101480048**

Date: 10/05/2022 **Exam. Seat No: 170040**

Prof. P. U. Nehete	**Prof. M. P. Fatangare**	**Dr. R. S. Kale**
Subject teacher	Head of the Department	Principal

Institute seal

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This is to certify that Mr. **Jaydeep Sunil Kulkarni,** Roll No. **02** of the 3rd semester of Diploma in **Information Technology** of Institute **MIT POLYTECHNIC, Pune** has completed the **Micro Project Report** satisfactorily in **Course: Object Oriented Programming Using C++** for the academic year **2022- 2023** as prescribed in the curriculum.

Place: Pune **Enrolment No: 2101480037**

Date: 10/05/2022 **Exam. Seat No: 170030**

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This is to certify that Mr. **Sarth Suhas Sheth** Roll No. **05** of the 3rd semester of Diploma in **Information Technology** of Institute **MIT POLYTECHNIC, Pune** has completed the **Micro Project Report** satisfactorily in **Course: Object Oriented Programming Using C++** for the academic year **2022- 2023** as prescribed in the curriculum.

Place: Pune **Enrolment No: 2101480040**

Date: 10/05/2022 **Exam. Seat No: 170033**

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This is to certify that Mr.**Tanishq Tanaji Vhanmane,** Roll No. **25** of the 3rd semester of Diplomain **Information Technology** of Institute **MIT POLYTECHNIC, Pune** has completed the **Micro Project Report** satisfactorily in **Course: Object Oriented Programming Using C++** for the academic year **2022- 2023** as prescribed in the curriculum.

Place: Pune **Enrolment No: 2101480062**

Date: 10/05/2022 **Exam. Seat No: 170053**

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Subject teacher	Head of the Department	Principal

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Maharashtra State Board of Technical Education

Student/Group details:

Sr. No.	Name of Group Members/student	Roll no.	Enrolment no.	Seat no.
1	Jaydeep Kulkarni	02	2101480037	1770030
2	Gaurav Mali	12	2101480048	1770040
3	Sarth Sheth	05	2101480051	1770033
4	Tanishq Vhanmane	25	2101480071	1770053

Name of Guide:

Prof. P. U. Nehete

INDEX

ACTION PLAN

Sr. No	Details of activity	Planned Start date	Planned Finish date
1.	Discussion and finalization of the topic.	07/12/2022	07/12/2022
2.	Collection of Data from the website	07/12/2022	07/12/2022
3.	Collection of Data from the book	07/12/2022	07/12/2022
4.	Organize all the contents/organizing material required	07/12/2022	07/12/2022
5.	Assembling of the model (if any)	07/12/2022	07/12/2022
6.	Final submission of Micro Project& report.	07/12/2022	07/12/2022

Attendance Management Project

Concepts Used in Project :

- **Multilevel Inheritance**

Multilevel Inheritance

When a base class is derived by a child class which is further derived by another child class, then it is known as multilevel inheritance.

The syntax: of multilevel inheritance is given below:

```
class base_class_name
{
   properties;
    methods;

};

class intermediate_class_name:visibility_mode base_class_name
{
   properties;
   methods;

};

class child_class_name:visibility_mode intermediate_class_name
{
   properties;
    methods;

};
```

The class which provides a link between two classes is known as an intermediate base class.

Code :

```
#include<iostream>
using namespace std;
char choice1;
char choice2;
char choice3;
char choice4;
char choice5;
char choice6;
char choice7;
char choice8;
char choice9;
char choice10;
char choice11;
char choice12;

class Date
{
        public:
                char date[30];
                void date_d()
                {
                   cout <<"\nEnter Date :";
            cin.ignore();
                cin.getline(date, 30);
                }
                void disp_date()
                {
                        cout<<"\n\n\n\n------------------------------------------------------------";
                        cout <<"\nDate :"<<date;
                   cout<<"\n\n------------------------------------------------------------";
                }
};
class Piyush: public Date
{

        public:
                void piyush()
                {
                        cout <<"\n\n\nName = Piyush Yawatkar";
                        cout <<"\nRoll No = 1";
                        cout <<"\nEnter present or absent :";
                        cin >>choice1;
                }
```

```
		void disp_piyush()
		{
			switch(choice1)
		{
			case 'p':
				cout <<"\nPiyush Yavatkar = Present";
				break;
			case 'a' :
				cout <<"\nPiyush Yavatkar = Absent";
				break;
		}
		}
};
class Jaydeep :  public Piyush
{
	public:
		void jaydeep()
		{
			cout <<"\n\nName = Jaydeep Kulkarni";
			cout <<"\nRoll No = 2";
			cout <<"\nEnter present or absent :";
			cin >>choice2;
		}
		void disp_jaydeep()
		{
			switch(choice2)
			{
				case 'p':
					cout <<"\nJaydeep Kulkarni = Present";
					break;
				case 'a' :
					cout <<"\nJaydeep Kulkarni = Absent";
				break;

			}
		}
};
class Diksha :  public Jaydeep
{
	public:
		void diksha()
		{
			cout <<"\n\nName = Diksha Jadhav";
			cout <<"\nRoll no. = 3";
			cout <<"\nEnter present or absent :";
			cin >>choice3;
		}
```

```
        void disp_diksha()
            {
                        switch(choice3)
                {



                        case 'p':
                            cout <<"\nDiksha Jadhav = Present";
                            break;
                        case 'a' :
                            cout <<"\nDiksha Jadhav = Absent";
                            break;

                }
            }

};

class Avantika :  public Diksha
{
    public:
        void avantika()
        {
            cout <<"\n\nName = Avantika Bhatgave";
            cout <<"\nRoll no. = 4";
            cout <<"\nEnter present or absent :";
            cin >>choice4;
        }
      void disp_avantika()
        {
                        switch(choice4)
            {
                        case 'p':
                            cout <<"\nAvantika Bhatgave = Present";
                            break;
                        case 'a' :
                            cout <<"\nAvantika Bhatgave = Absent";
                            break;

                }
            }

};
```

```
class Sarth : public Avantika
{
	public:
		void sarth()
		{
			cout <<"\n\nName = Sarth Sheth";
			cout <<"\nRoll no. = 5";
			cout <<"\nEnter present or absent :";
			cin >>choice5;
		}


	   void disp_sarth()
		{
				switch(choice5)
			{
				case 'p':
					cout <<"\nSarth Sheth = Present";
					break;
				case 'a' :
					cout <<"\nSarth Sheth = Absent";
					break;

			}
		}
};
class Nehete_maam : public Sarth
{
	public:
		void nehete_maam()
		{
			cout <<"\n\n\nName = Pallavi Nehete";
			cout <<"\nTeacher ID  = 10";
			cout <<"\nEnter present or absent :";
			cin >>choice11;
		}
		void disp_nehete()
		{
				switch(choice11)
			{
				case 'p':
					cout <<"\nPallavi Nehete = Present";
					break;
				case 'a' :
					cout <<"\nPallavi Nehete = Absent";
					break;

			}
		}
};
```

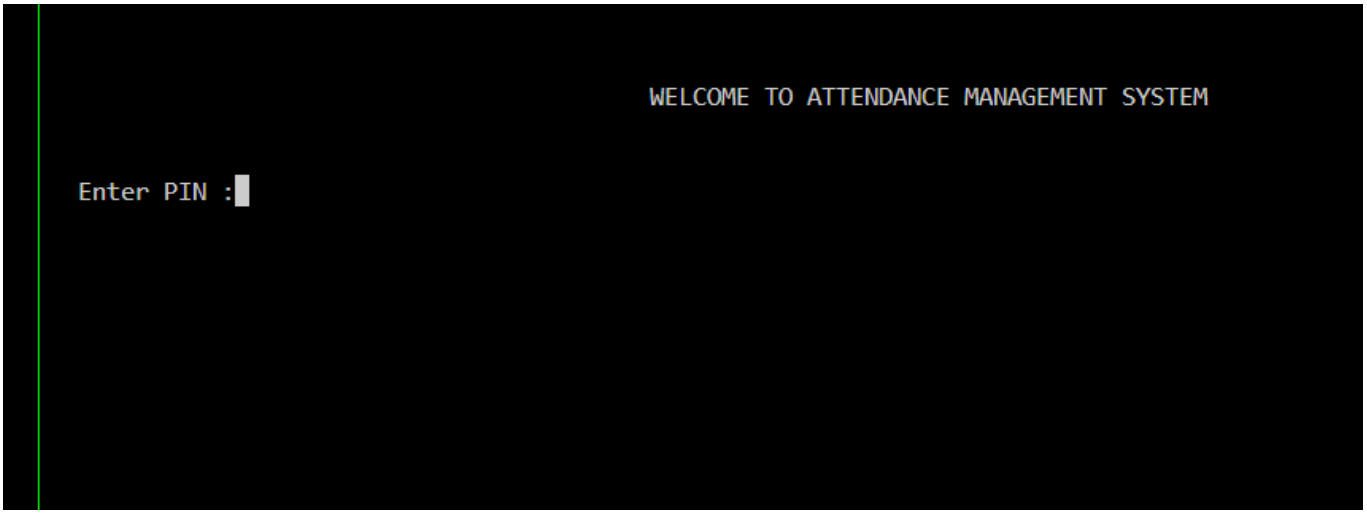
```
class Fatangare_maam : public Nehete_maam
{
        public:
                void fatangare_maam()
                {
                        cout <<"\n\nName = Mrunal Fatangare";
                        cout <<"\nTeacher ID  = 12";
                        cout <<"\nEnter present or absent :";
                        cin >>choice12;
                }
                void disp_fatangare()




                {
                                switch(choice12)
                        {
                                case 'p':
                                        cout <<"\nMrunal Fatangare = Present";
                                        break;
                                case 'a' :
                                        cout <<"\nMrunal Fatangare = Absent";
                                        break;

                        }
                }
};
```

```
int main()
{
        cout<<"\n\n\t\t\t\t\tWELCOME TO ATTENDANCE MANAGEMENT SYSTEM";
        int pin;
        while(1)
        {
                cout<<"\n\n\nEnter PIN :";
           cin>>pin;
                if(pin==1234)
           {
                    while(1)
              {
              int choice;
              cout<<"\n\n\n\n--------------------------------------------------------------------------------";
              cout <<"\n1. Student attendance";
              cout <<"\n2. Staff Attendance ";
              cout<<"\n3. Exit";
              cout<<"\n--------------------------------------------------------------------------------";
              cout <<"\n(Note - Enter 'a' for Absent and Enter 'p' for Present)";
              cout<<"\n--------------------------------------------------------------------------------";
              cout<<"\n\nEnter your choice :";
              cin>>choice;
```

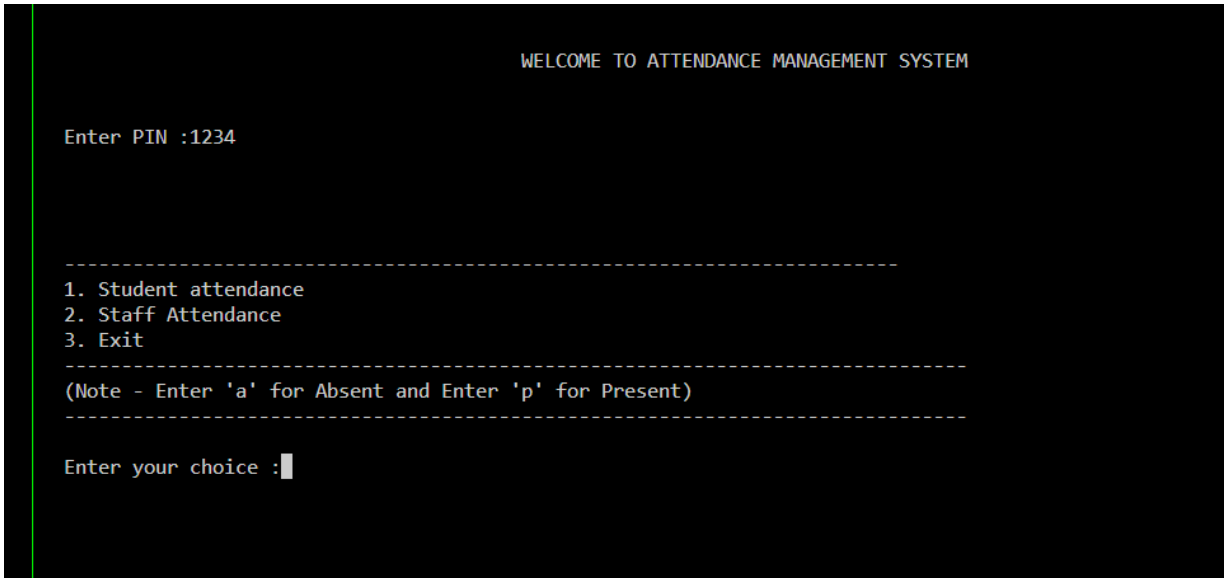
```
                    switch(choice)
            {

            case 1: cout<<"\n\n*** Take Student Attendacnce ****"<<endl;

            Sarth d;
            d.date_d();



            d.piyush();
            d.jaydeep();
            d.diksha();
            d.avantika();
            d.sarth();
            d.disp_date();
         d.disp_piyush();
            d.disp_jaydeep();
            d.disp_diksha();
            d.disp_avantika();
            d.disp_sarth();
            break;


            case 2 : cout<<" \n\n**** Take Staff Attendance ****"<<endl;


             Fatangare_maam f;
                f.date_d();
                f.nehete_maam();
                f.fatangare_maam();
                f.disp_date();
                f.disp_nehete();
                f.disp_fatangare();
                break;

            case 3 : exit(0);
            break;


        default : exit(0);
                }
       }
          }
          else
          {
                cout <<"\nWrong pin";
          }
        }
        return 0;
}
```

Output :

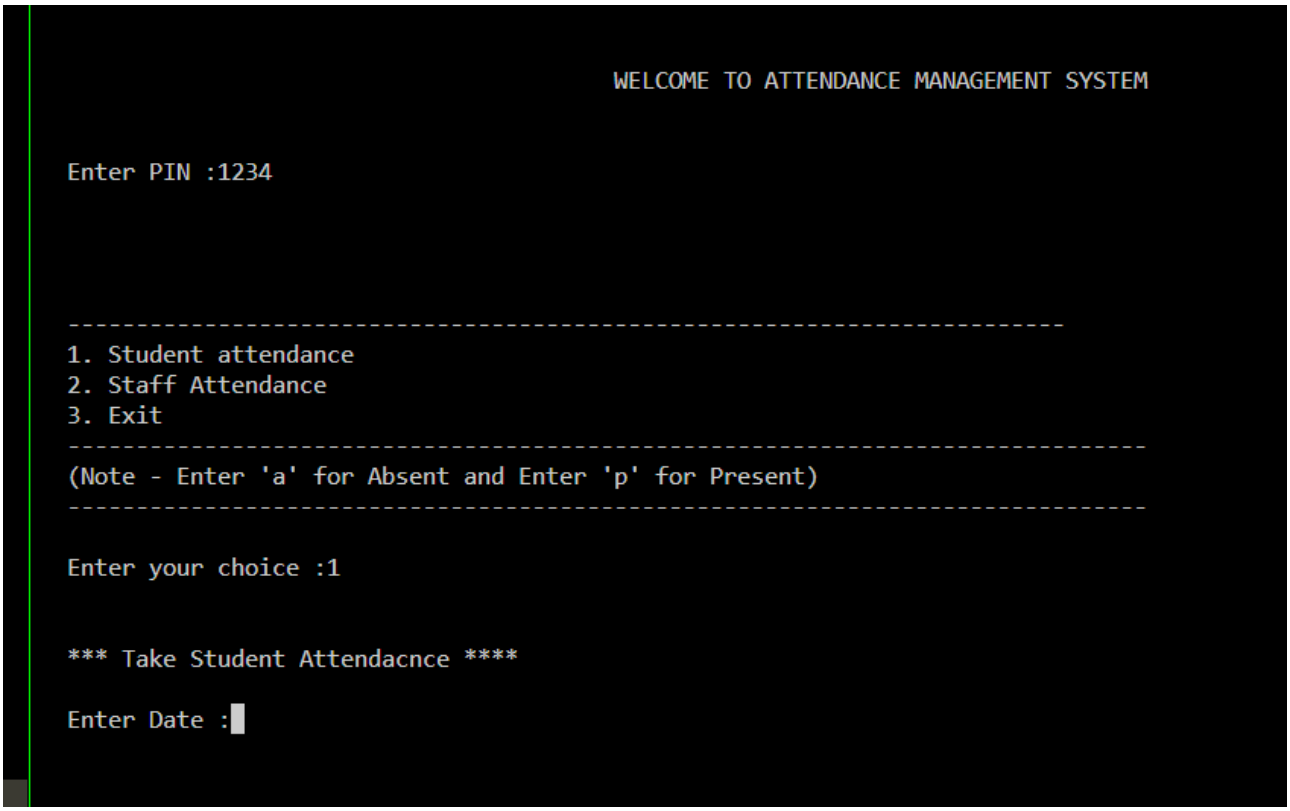
Hello you very welcome to Attendance Management Project



Enter pin as 1234 (If you enter other pins it will get in the loop.)



Hey Nice now you are welcome to take attendance, now just enter the choice (1,2,3) .

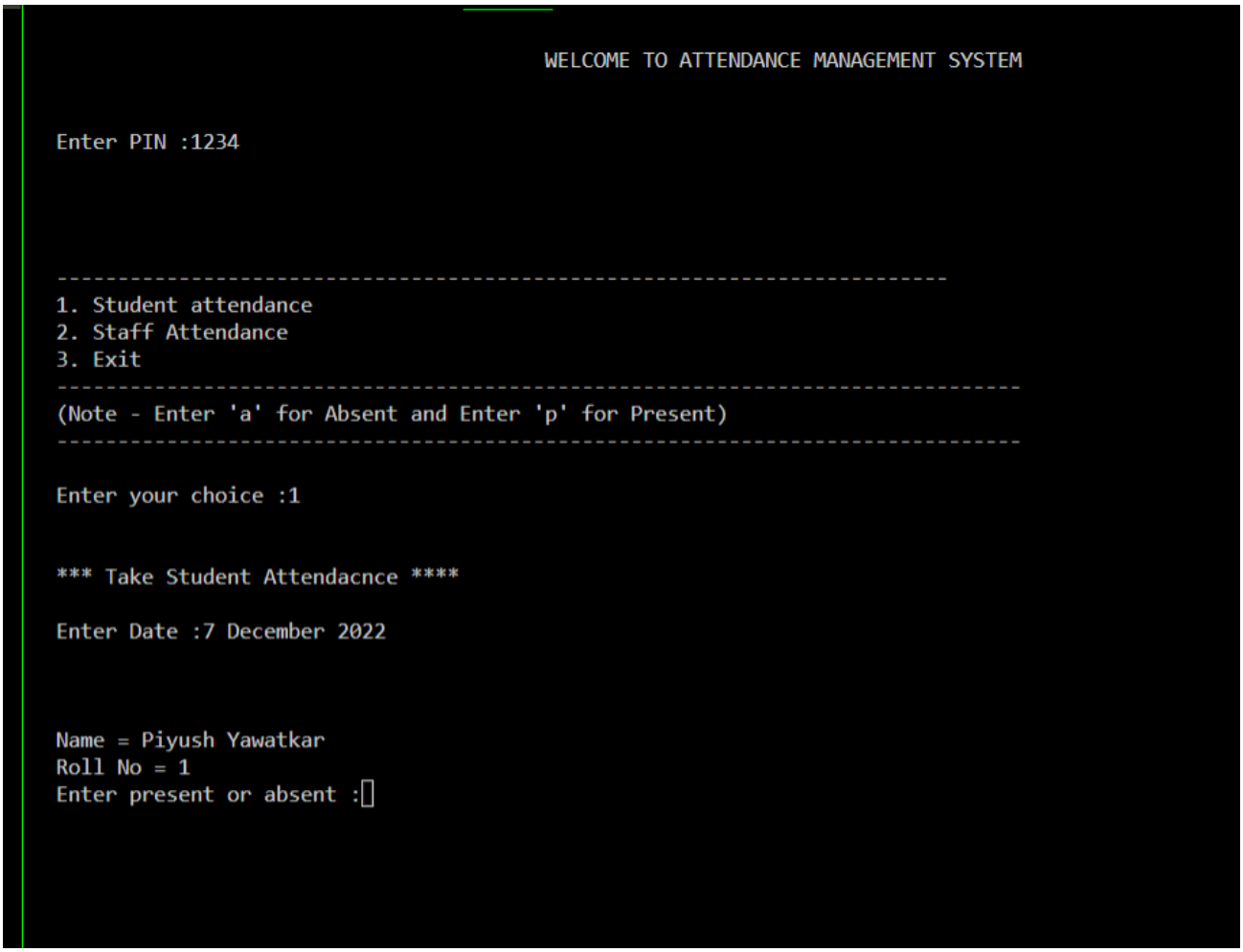


Now enter the date to get an accurate date of attendance. You can enter the date in any format like as below.

7.12.2022

7/12/2022

7 December 2022



Hey, nice now you can take attendance finally, Okay so now you have to enter ‘a’ or ‘p’ for **a** is for **absent** and **p** is for the **present.**

```
*** Take Student Attendacnce ****

Enter Date :7 December 2022



Name = Piyush Yawatkar
Roll No = 1
Enter present or absent :a


Name = Diksha Jadhav
Roll no. = 3
Enter present or absent :p


Name = Avantika Bhatgave
Roll no. = 4
Enter present or absent :a


Name = Sarth Sheth
Roll no. = 5
Enter present or absent :p




------------------------------------------------------------
Date :7 December 2022

------------------------------------------------------------
Piyush Yavatkar = Present
Jaydeep Kulkarni = Absent
Diksha Jadhav = Present
Avantika Bhatgave = Absent
Sarth Sheth = Present



------------------------------------------------------------------------
1. Student attendance
2. Staff Attendance
3. Exit
-------------------------------------------------------------------------------
(Note - Enter 'a' for Absent and Enter 'p' for Present)
```

After taking all the attendance, you can also discover staff attendance. Okay now if you enter 3 in the choice then you get out from the code. And if you enter the choice for 2 then it will go for taking attendance for staff.

1. Introduction

The title of the micro-project is the Attendance Management Project.

In this project, we are going to show our created program using the c++ programming language.

So, here we try to take attendance of class using the program.

By getting the concept of multilevel inheritance

We are making try to take attendance of class freely by just entering a and p letters.

2. Literature Review

We see in this project how to make a program using the multilevel inheritance concept.

We have studied in detail to apply concepts in c++ programming.

We see how the outcome comes after compiling the code.

Annexure-II A

PART B

To make a Website.

1.0 Brief Description

- In this project, we are going to see Attendance Management System.
- I try to cover more details sub-concepts in this project like taking conditions with Multilevel Inheritance.
- Here we try to cover all conditions that apply in the multilevel inheritance concept.

2.0 Aim of Micro Project

- To Make **Attendance Management Project.**

3.0 Proposed Methodology

- We are doing this micro project in a Team of 4 members.
- We also took the guidance of the internet for more accurateinformation.
- We tried our full hundred percent to present the full fact and full knowledge.

4.0 Course Outcomes Integrated

- To know everybody how this small concept is also important in our daily life problems, while we can make the program to make load free.

5.0 Details of Equipment

- Computer system
- Software (MS. Office Word)
- Web Browser (For compiling code)

6.0 Skills Developed from Micro Project

- From this Micro Project, we know how to apply conditions in Inheritance.
- To program freely in c++.
- Upgrade in logical level to thinking from all sides of the program, how can we execute the program best of the previous outcome.

Micro-Project Evaluation Sheet

Roll no.	Student Name	Enrollment number	Process Assessment		Product Assessment		Total Marks (10)
			Part A- Project Proposal (2)	Project Methodology (2)	Part B- Project report/ working model (2)	Individual Presentation/Viva (4)	
1	Jaydeep Kulkarni	2101480037					
2	Gaurav Mali	2101480048					
3	Sarth Sheth	2101480040					
4	Tanishq Vhanmane	2101480062					

Note: Every course teacher is expected to assign marks for group evolution in the first 3 columns and individual evaluation in the 4th column for each group of students as per rubrics.

Comments/Suggestions about teamwork/leadership/ interpersonal communication(if any)

We acquire some more essential skills in simulation software.

Any Other Comment:

I am thanking my friends and subject teacher for helping with this miraculous project.

Name and designation of the Faculty Member

Prof. P. U. Nehete

Object Oriented Programming Using C++

Signature