Warner: Student Monitoring System (WSMS)1.0

DISSERTATION SUBMITED AS "MINOR PROJECT" IN
PARTIAL FULFILMENT OF THE REQUIREMENTS
FOR THE AWARD OF THE DEGREE
BACHELOR OF TECHNOLOGY (B.TECH.)
IN
COMPUTER SCIENCE & ENGINEERING (CSE)
OF
MAULANA ABUL KALAM AZAD UNIVERSITY OF TECHNOLOGY,
WEST BENGAL
(formerly known as WEST BENGAL UNIVERSITY OF TECHNOLOGY)

Submitted by

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UNDER THE GUIDANCE OF

Mr. Sandip Roy

Assistant professor

Department of Computer Science & Engineering

SABITA DEVI EDUCATION TRUST-BRAINWARE GROUP OF INSTITUTIONS
398, RAMAKRISHNAPUR ROAD, BARASAT
KOLKATA-700 124

TO WHOM IT MAY CONCERN

This is to certify that the project report entitled

"Warner: Student Monitoring System (WSMS) 1.0"

Prepared By

Name	University Roll No.	Registration No. of year 2014 – 2018	Semester	Stream
Arpan Gupta	**27000115063**	152700120001	4th	CSE
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Suman Das	**27000115071**	152700120009	4th	CSE

Submitted in partial fulfillment of the requirements for the award of the degree of
BACHELOR OF TECHNOLOGY
IN
COMPUTER SCIENCE & ENGINEERING (CSE)
of
Maulana Abul Kalam Azad University of Technology, West Bengal

have completed their minor project work entitled **Warner: Student Monitoring System(WSMS) 1.0** They have fulfilled these requirements and the project can be successfully implemented. To far my knowledge goes their work was not submitted to any other University/Institution for the award of any degree, diploma, fellowship or other similar titles or prizes and the work has not
been published in any journal or magazine.

Mr. SANDIP ROY
Assistant professor
Department of Computer Science & Engineering

SDET-BRAINWARE GROUP OF INSTITUTIONS
398, RAMAKRISHNAPUR ROAD, BARASAT
KOLKATA-700 124

Date :

TO WHOM IT MAY CONCERN

This is to certify that Arpan Gupta, Pratim Ghosh , Rimpa Das, Sankar Prasad Biswas, Soumitra Mondal and Suman Das of 2nd year 4th Semester students of the Computer Science & Engineering course of Sabita Devi Education Trust-Brainware Group of Institutions, under Maulana Abul Kalam Azad University of Technology, West Bengal undertook a project as 'MINOR PROJECT', entitled **Student Monitoring System (SMS) 1.0** under the supervision of Mr. Sandip Roy, assistant professor of Brainware group of institutions during Session 2015-2016 on Microsoft Visual Basic 6.0. They worked sincerely and regularly on this project and completed their assigned work satisfactorily.

Mr. JAYANTA AICH
Teacher-in-Charge
Department of Computer Science & Engineering

SDET-BRAINWARE GROUP OF INSTITUTIONS
398, RAMAKRISHNAPUR ROAD, BARASAT
KOLKATA-700 124

Date:

DECLARATION

This is hereby declared that We, Arpan Gupta, Pratim Ghosh and Rimpa Das , Sankar Prasad Biswas, Soumitra Mondal, Suman Das students of 4th semester of Computer Science & Engineering have carried out our 4th semester project work entitled **Warner: Student Monitoring System(WSMS) 1.0.** under the guidance of Mr. Sandip Roy, assistant professor, Computer Science & Engineering SDET-Brainware Group of Institutions and is done by ourselves in the fulfillment for the award of the degree of B.Tech in Computer Science & Engineering and Information Technology respectively from Maulana Abul Kalam Azad University of Technology. It is further declared that the project work has not been submitted to any other academic university for the award of any degree of examination. The said project work will not be under any circumstances be used for any university or institution examination except for Computer Science & Engineering of Maulana Abul Kalam Azad University of Technology.

ARPAN GUPTA CSE-4tn Semester	PRATIM GHOSH CSE-4tn Semester	RIMPA DAS CSE-4tn Semester
SANKAR PRASAD BISWAS CSE-4tn Semester	SOUMITRA MONDAL CSE-4tn Semester	SUMAN DAS CSE-4tn Semester

Date:

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ACKNOWLEDGEMENTS

We have received the assistance and cooperation of quite a number of people during our project **Warner: Student Monitoring System (WSMS) 1.0**. So we hereby take the opportunity to extend our sincere gratitude to all those who have provided their assistance and cooperation and valuable suggestion from time to time in spite of their busy schedule.

First we would like to thank our project guide Mr. Sandip Roy. He has not just helped us but provided his valuable suggestions from time to time. We would like to extend our sincere gratitude to Mr. Jayanta Aich and all other faculty members, entire technical Assistant team of Computer Science & Engineering for their encouraging support and for providing us a pleasant atmosphere during the period of project development.

Lastly, we would like to thank our parents for their overall support.

ARPAN GUPTA	PRATIM GHOSH	RIMPA DAS
CSE-4th Semester	CSE-4th Semester	CSE-4th Semester
SANKAR PRASAD BISWAS	SOUMITRA MONDAL	SUMAN DAS
CSE-4th Semester	CSE-4th Semester	CSE-4th Semester

Date:

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Abstract:

Student Monitoring System (SMS) 1.0 is software developed for maintaining a healthy relationship between students & teachers in school, colleges and institutions. It facilitates to access the nonacademic feedback of particular student of particular class. The information is sorted by operators which will be provided by the teachers for a particular class. This system will also help on mutual interaction between student and institutions.

Study of Existing System:

The Student Monitoring process starts on October; 2015.At the present system the whole work was done by paper. It is on monthly basis, students are informed to contact their corresponding mentor to give a nonacademic feedback about the institutions (canteen, hostel , library etc.) . The whole report will be stored in register and at the end of the month, it is given to the departments head . We are not interested to generating report at the middle of the month because it takes more time to make a complete database of students.

Disadvantage of Existing System:

- **Not User Friendly: The** existing system is not user friendly because the retrieval of data is very slow & data is not maintained efficeiently;
- **Difficulty in report generating: We** require more calculations to generate report so it is generated at the end of the month.
- **Manual Control:** All calculation to generate report are done manually so there is a greater chance of errors.
- **Lots of Paperwork:** Existing system requires a lots of paper work. Loss of a even single record led to difficult situation. Because all the papers are needed to generate reports.
- **Time Consuming:** Every work is done manually so we cannot generate report monthly or weekly as per the requirement because it is very time consuming process.

1. Metamorphosis:

It contains the necessary information related to project about the problems solved by the project, the purpose of undertaking the project and the benefits of the system on the whole.

1.1 Problem statement:

The purpose of **Student Monitoring System** is to computerized the tradition way of taking feedback. Another purpose of generating this software the report will automatically generated at the end of the month.

1.2 Objectives:

Since this application will contain some basic information's about the student, he/she can be identified if require and also it can show that does he/she is still having any link with the institution. The information's will also helpful to know some whereabouts of that student if any other body come in search of him/her.

1.3 Benefits of the new system:

- **User Friendly:** The proposed system is user friendly because the retrieval and storing of data is fast and data is maintained efficiently. Moreover graphical user interface is provided in the proposed system, which provide user deal with the friend easily'
- **Reports are easily generated:** Reports can easily generated in the proposed system so user can generate the report as per requirement(monthly/weekly).
- **Very Less Paperwork:** The proposed system required very less paper work. All the data are feted into the computer immediately & reports can generate through computers. Moreover task become more easy because there is no need of data keep on papers.
- **Computer operator control:** Computer operator control will be therefore so there is no chance of errors. Moreover storing and retrieving of information is easy. So work can be done easily and in time also.

2. Requirement Analysis:

2.1 Introduction:

Requirements analysis in systems engineering and software engineering, encompasses those tasks that go into determining the needs or conditions to meet for a new or altered product, taking account of the possibly conflicting requirements of the various stakeholders, analyzing, documenting, validating and managing software or system requirements. Requirements analysis is critical to the success of a systems or software project. The requirements should be documented, actionable, measurable, testable, traceable, related to identified business needs or opportunities, and defined to a level of detail sufficient for system design.

2.2 Information requirements:

Information requirement are the information needed to support a business or other activity. Systems analysts turn these information requirements into functional specifications of an information system. The information requirements for any project need to be discussed and identified to ensure that the correct information is gathered or collected from the most appropriate source.

Discovering information requirements can be done most effectively by:

1. Understanding the purpose of the overall project including specific goals to be achieved.
2. Identifying and Understanding user's requirement about the application.
3. Finding the information that can be helpful for the user to use the application.
4. Documenting the Information Requirements.

2.3 Software Requirement Specification:

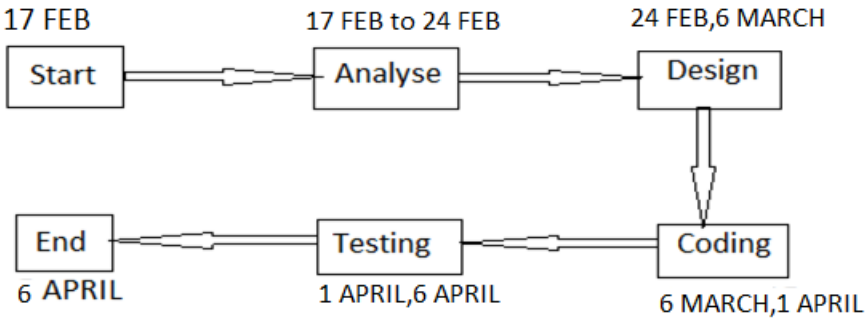
The Minimum requirements to run the application are:-

- Pentium® 90MHz or higher microprocessor.
- VGA 640x480 or higher-resolution screen supported by Microsoft Windows.
- Microsoft Windows NT 4.0 or later or Microsoft Windows 95 or later.
- 24 MB RAM for Windows 95/98, 32 MB for Windows NT.
- Microsoft Internet Explorer version 4.01 or later (version 4.01 Service Pack 1 or later for DHTML application developers, and 4.*x* for end-users of these applications).
- Disk space requirements:
    - Standard Edition: typical installation 48 MB, full installation 80 MB.
    - Professional Edition: typical installation 48 MB, full installation 80 MB.
    - Enterprise Edition: typical installation 128 MB, full installation 147 MB.
    - Additional components (if required): MSDN (for documentation): 67 MB, Internet Explorer 4.x: approximately 66 MB.
- CD-ROM (no MS-DOS support assumed).
- MS ACCESS 2000 or Later.

3. Scheduling Analysis:

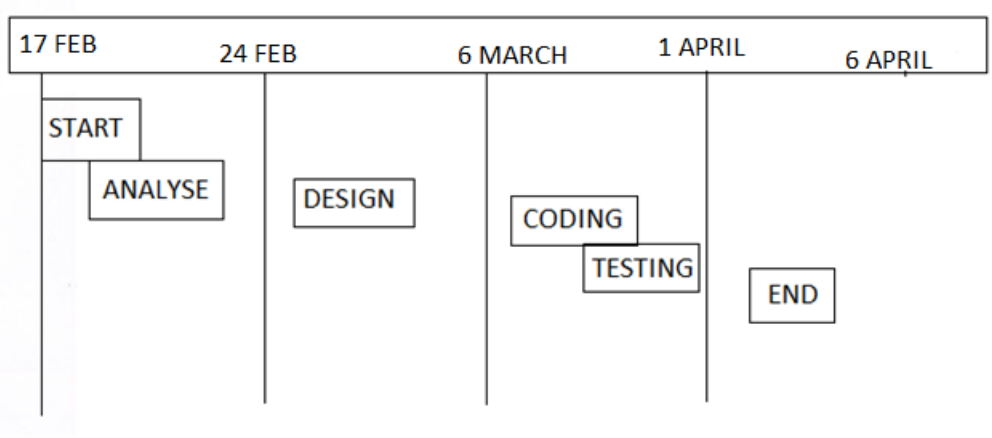
3.1. PERT:

A PERT Chart is a network of boxes and arrows. To create PERT chart, first weneed to list all the activities required for completion of the project and estimate how long each will take. Then we must determine the dependence of activities on each other. The PERT chart gives a graphical representation of this information. PERT chart is always used by the project manager to answer the questions like which all activities are necessary or there in the project and how long each will take.



6.2. Gantt Chart:

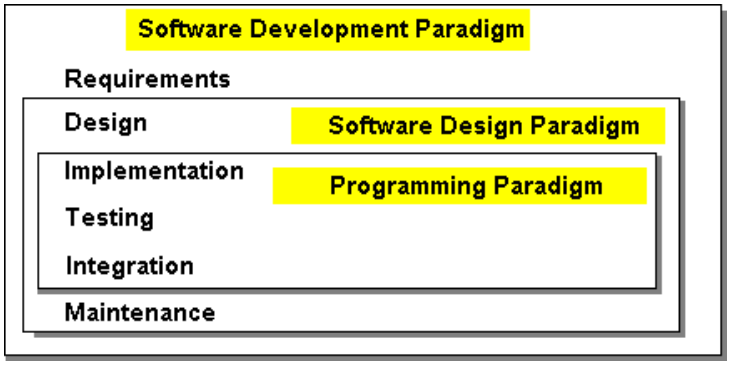
GANTT charts are a project control technique that can be used for several purposes, including scheduling, budgeting, and resource planning. A Gantt chart is a bar chart, with each bar representing an activity. The bars are drawn against a time line. The length of each bar is proportional to the length of time planned for the activity.]



4. Planning of Project:

4.1. Software Development Paradigm:

“Paradigm" (a Greek word meaning example) is commonly used to refer to a category of entities that share a common charactaristic. We can distinguish between three different kinds of Software Paradigms. Software development paradigm is one of them.



4.2 Team Structure:

Our team consists of six members and each of us make its effort to develop this project

4.3 Cost Estimation:

No such cost is need in this project.

4.4 Software Size Estimation:

This is a medium size software with all the necessary items.

4.5 Estimated Time Scheduling:

About six-seven weeks is need in this project.

5. Design Analysis:

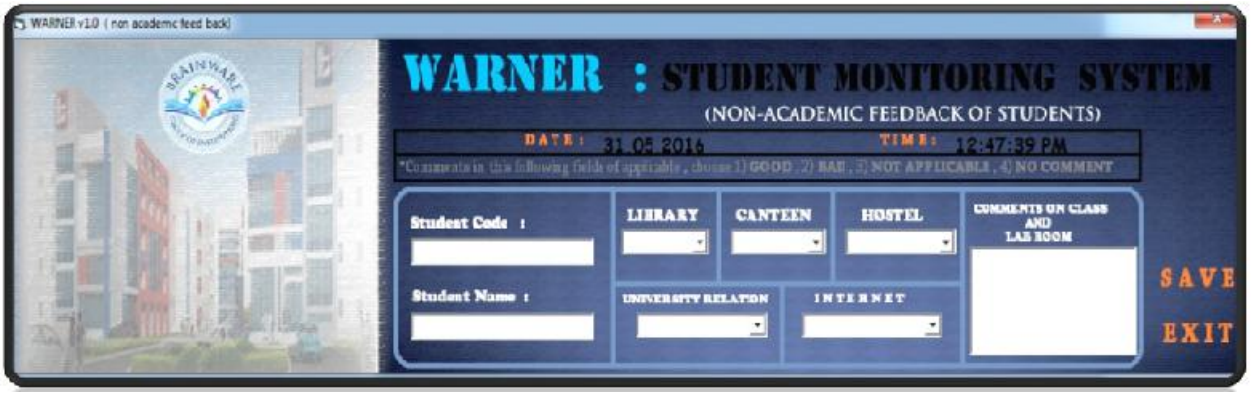
5.1 Logical Design:

Systems design is the process of defining the architecture, components, modules, interfaces, and data for a system to satisfy specified requirements. One could see it as the application of systems theory to product development. There is some overlap with the disciplines of systems analysis, systems architecture and systems engineering. If the broader topic of product development "blends the perspective of marketing design".

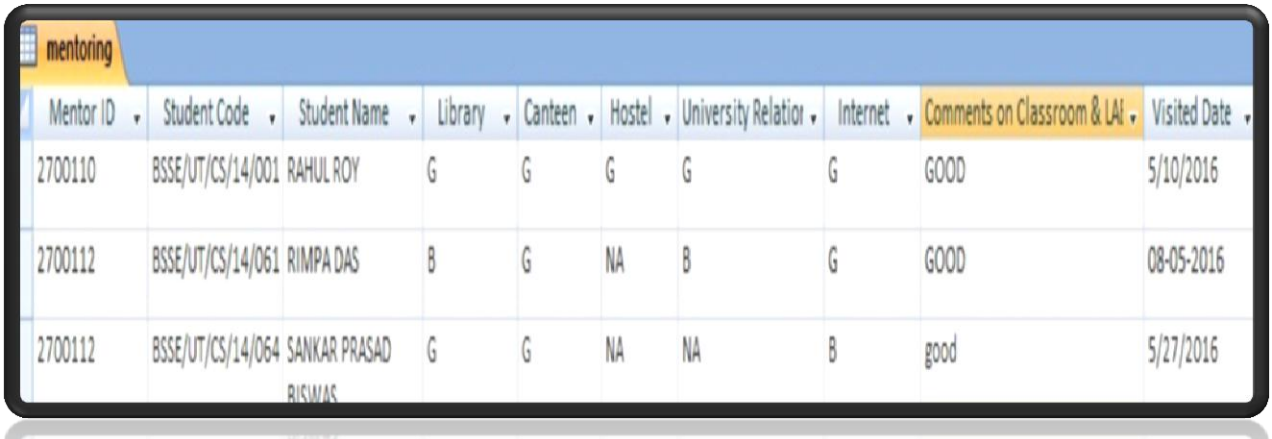
In our system user and admin can jointly operate this software. Admin can change the necessary data in database and user can also book tickets.

5.2 Physical Design:

Input Design:

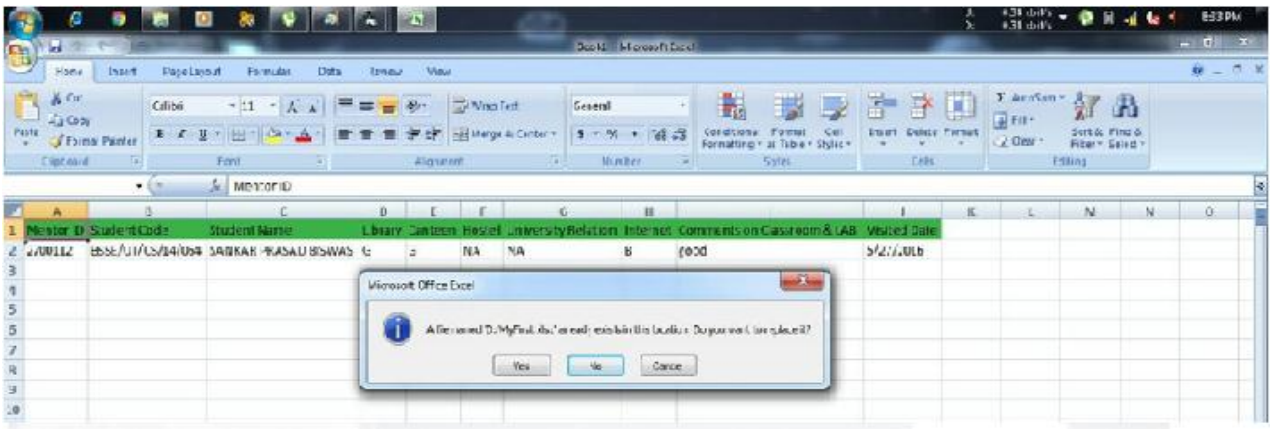


Output Design :



mentoring

Mentor ID	Student Code	Student Name	Library	Canteen	Hostel	University Relatior	Internet	Comments on Classroom & LAI	Visited Date
2700110	BSSE/UT/CS/14/001	RAHUL ROY	G	G	G	G	G	GOOD	5/10/2016
2700112	BSSE/UT/CS/14/061	RIMPA DAS	B	G	NA	B	G	GOOD	08-05-2016
2700112	BSSE/UT/CS/14/064	SANKAR PRASAD BISWAS	G	G	NA	NA	B	good	5/27/2016



6.Conclusion:

6.1 Overview of the whole project:

This project on visual basic has been made by the help of our respected professors and faculty members and there have also been a good team work. We have made this project by using some very simple software's and also this application have been made very user-friendly where there is no need of having a lot of knowledge about the system giving great number of information's but it requires only some really basic software's in the market.

6.2 Limitations:

1. In this application, one who is trying to get some information's can get disappointed as he/she will not get much information about the person who is been looking for.
2. Since very old version of software's has been used this application may not work properly in highly advanced operating systems like Windows 10, Windows 10 Upgrade etc.
3. In case of database, since we have used 2007 version of MS Access so there is definitely a word/character limit in every text fields given, and one may never cross that limit for a successful registration.

Appendix A: CODE SNIPPETS

Figure 1.1: Loading of the System

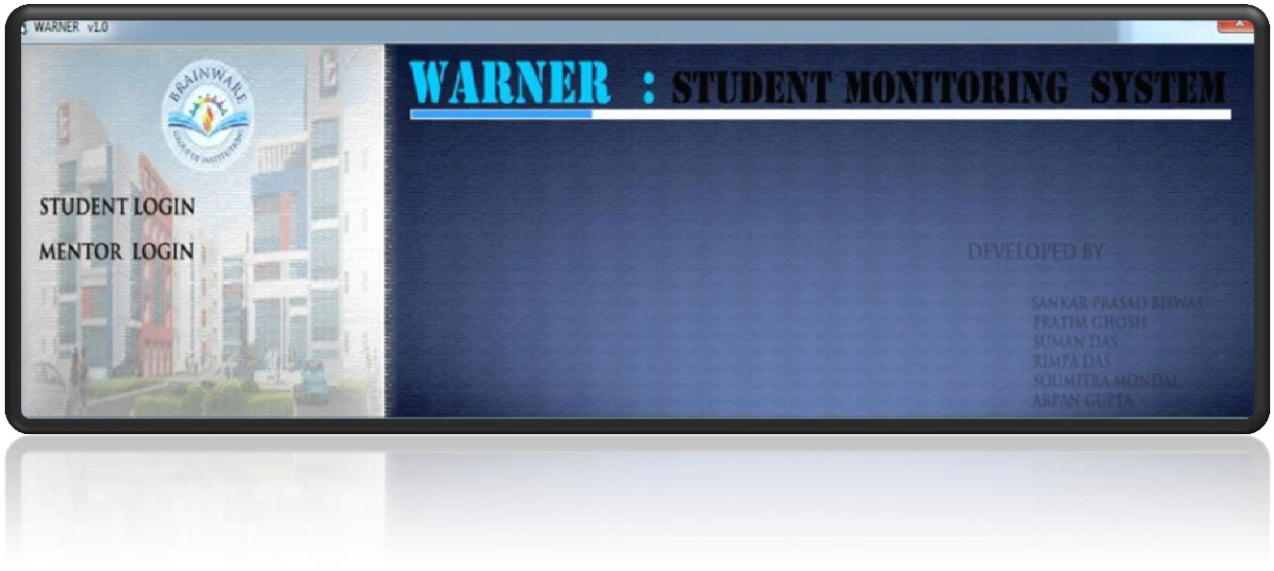


Figure 1.2: Welcome Form

```
Dim con As New ADODB.Connection

Dim rs As New ADODB.Recordset

Dim d As Date

Private Sub Form_Load()
```

```
ProgressBar1.Visible = False

dtpfrom.Value = Date

dtpto.Value = Date

If con.State = adStateOpen Then

con.Close

End If

con.Open "mentor"

rs.Open "select * from mentoring", con, adOpenDynamic, adLockOptimistic, adCmdText
```

```
Private Sub Image2_Click()

Label1.Visible = True

Label2.Visible = True

Label3.Visible = True

Image3.Visible = True

txtmentor.Visible = True

cbodept.Visible = True

dtpto.Visible = True

dtpfrom.Visible = True
```

```
Private Sub Image1_Click()

Label1.Visible = False

Label2.Visible = False

Label3.Visible = False

Image3.Visible = False
```

```
txtmentor.Visible = False

cbodept.Visible = False

dtpto.Visible = False

dtpfrom.Visible = False


ProgressBar1.Visible = True

Timer1.Enabled = True

-----------------------------------------------------------------------------------------------------------------------------------

Private Sub Image3_Click()

If Len(txtmentor.Text) <> 7 Then

   MsgBox "Please Enter Your Correct Mentor ID before proceed.THANK YOU."

   txtmentor.Text = ""

   cbodept.Text = ""

   Exit Sub

   End If


Dim ex As New Excel.Application

Dim exwb As Excel.Workbook

Dim exst As Excel.Worksheet

Dim exSelection

Set ex = CreateObject("excel.application")

Set exwb = ex.Workbooks.Add

ex.Visible = True

Set exSelection = ex.Selection

Set exst = exwb.Worksheets(1)
```

```
exst.Cells(1, 1) = "Mentor ID"

exst.Cells(1, 2) = "Student Code"

exst.Cells(1, 3) = "Student Name"

exst.Cells(1, 4) = "Library"

exst.Cells(1, 5) = "Canteen"

exst.Cells(1, 6) = "Hostel"

exst.Cells(1, 7) = "University Relation"

exst.Cells(1, 8) = "Internet"

exst.Cells(1, 9) = "Comments on Classroom & LAB"

exst.Cells(1, 10) = "Visited Date"

exst.Range("A1:J1").Interior.Color = RGB(59, 179, 73)

i = 1

While rs.EOF = False

If rs(0).Value = txtmentor.Text Then

For d = dtpfrom To dtpto

If rs(9) = d Then

i = i + 1

For j = 1 To 10

exst.Cells(i, j) = rs(j - 1)

Next j

End If

Next d

'rs.MoveNext

'Else

'rs.MoveNext
```

```
rs.MoveNext
ElseIf rs(0).Value <> txtmentor.Text Then ' Or rs(9) <> d Then
rs.MoveNext
'Next d
End If
'Next d
Wend
exst.Columns.EntireColumn.AutoFit
exwb.SaveAs ("D:\Record")
FlashScreen.Show
MsgBox "Please Check D drive for Excel Sheet"
Label1.Visible = False
Label2.Visible = False
Label3.Visible = False
Image3.Visible = False
txtmentor.Visible = False
cbodept.Visible = False
dtpto.Visible = False
dtpfrom.Visible = False
txtmentor.Text = ""
cbodept.Text = ""
dtpto.Value = Date
dtpfrom.Value = Date
'ex.Quit
```

```
'rs.Close

'con.Close

-----------------------------------------------------------------------------------------------------------------------------------------

Private Sub txtmentor_KeyPress(KeyAscii As Integer)

Dim ch As String


   ch = Chr$(KeyAscii)

   If Not ( _

      (ch >= "0" And ch <= "9") Or _

      (ch = vbBack) _

   ) Then

      ' Cancel the character.

      KeyAscii = 0

   End If

-----------------------------------------------------------------------------------------------------------------------------------------

Private Sub Timer1_Timer()

ProgressBar1.Value = ProgressBar1.Value + 1

If ProgressBar1.Value = 99 Then

ProgressBar1.Value = ProgressBar1.Value + 1

non_academic.Show

ProgressBar1.Visible = False

If ProgressBar1.Value >= ProgressBar1.Max Then

ProgressBar1.Value = 0

Timer1.Enabled = False

End If
```

End If

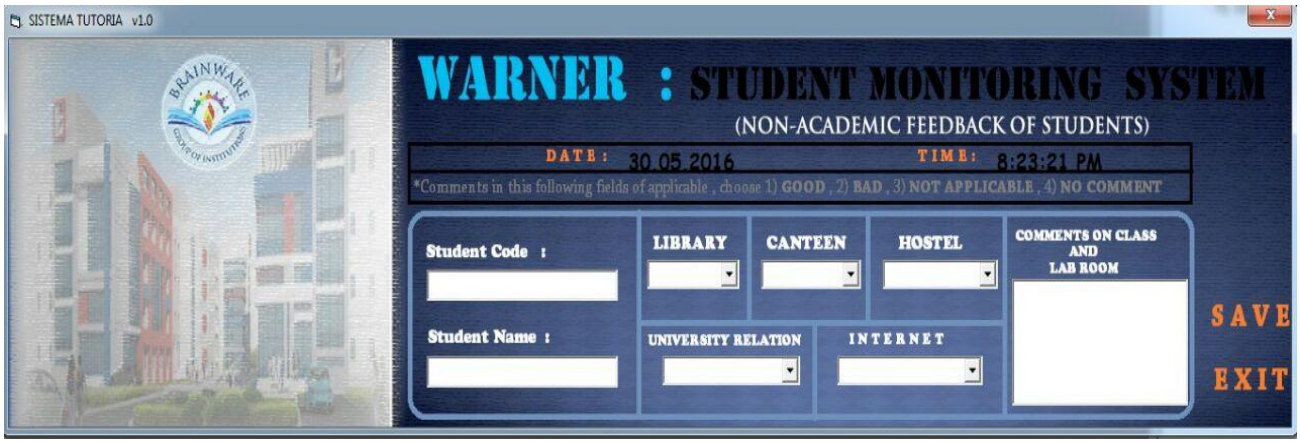


Figure 1.3: Non Academic-Feedback Form

```
Dim con As New ADODB.Connection

Dim rs As New ADODB.Recordset

Dim str1 As String

Dim str2 As String

Dim strdate As String

Dim stryear As String

Dim i As Integer


Private Sub cmdexit_Click()

Unload Me

FlashScreen.Show
```

```
Private Sub cmdmentor_Click()

feedback_record.Show
```

```
Private Sub cmdsave_Click()

------------------------------------------------

Private Sub Form_Load()
lbldate.Caption = Format(Date, "dd.mm.yyyy")
lbltime.Caption = Time
If con.State = adStateOpen Then
con.Close
End If
con.Open "mentor"
rs.Open "select * from mentoring", con, adOpenDynamic, adLockOptimistic, adCmdText
---------------------------

Private Sub Image1_Click()
If Len(txtcode.Text) <> 17 Then
MsgBox "Please Enter Your Correct Student Code before proceed.THANK YOU."
txtcode.Text = ""
txtname.Text = ""
Exit Sub
End If

rs.AddNew
str1 = Mid(txtcode.Text, 12, 2)
```

```
str2 = Mid(txtcode.Text, 15, 3)


For i = 1 To 20
If Val(str1) = 14 Then
If Val(str2) = i Then
rs(0) = 2700110
End If
End If
Next

For i = 21 To 40
If Val(str1) = 14 Then
If Val(str2) = i Then
rs(0) = 2700111
End If
End If
Next

For i = 40 To 72
If Val(str1) = 14 Then
If Val(str2) = i Then
rs(0) = 2700112
End If
End If
Next
```

```
rs(1) = txtcode.Text

rs(2) = txtname.Text

rs(3) = cbolib.Text

rs(4) = cbocanteen.Text

rs(5) = cbohostel.Text

rs(6) = cborelation.Text

rs(7) = cbointernet.Text

rs(8) = txtcomment.Text

rs(9) = Date


MsgBox "Record Updated"

txtcode.Text = ""

txtcomment.Text = ""

cbointernet.Text = ""

cborelation.Text = ""

txtname.Text = ""

cbolib.Text = ""

cbocanteen.Text = ""

cbohostel.Text = ""


rs.MoveLast

-------------------------------------------------------


Private Sub Image2_Click()
```

```
Unload Me

FlashScreen.Show

---------------------------------------------------------------------------------------------------------------------------------------------

Private Sub Timer1_Timer()

lbldate.Caption = Format(Date, "dd.mm.yyyy")

lbltime.Caption = Time

---------------------------------------------------------------------------------------------------------------------------------------------

Private Sub txtcode_KeyPress(KeyAscii As Integer)

KeyAscii = Asc(UCase(Chr(KeyAscii)))

 Dim ch As String


   ch = Chr$(KeyAscii)

   If Not ( _

      (ch >= "a" And ch <= "z") Or _

      (ch >= "A" And ch <= "Z") Or _

      (ch >= "0" And ch <= "9") Or _

      (ch = vbBack) Or _

      (ch = "/") _

   ) Then

      ' Cancel the character.

      KeyAscii = 0

   End If

   Private Sub txtname_Change()

strdate = Mid(rs(9), 4, 2)
```

```
stryear = Mid(rs(9), 7, 4)
While txtcode.Text <> rs(1)
rs.MoveNext
If rs.EOF = True Then
rs.Close
rs.Open
Exit Sub
End If
Wend
If txtcode.Text = rs(1) And Month(Date) = Val(strdate) And Year(Date) = Val(stryear) Then
MsgBox "You have already given Feedback for this month on " & rs(9) & ".THANK YOU."
   txtcode.Text = ""
   txtname.Text = ""
   Exit Sub
End If
```

```
Private Sub txtname_KeyPress(KeyAscii As Integer)
KeyAscii = Asc(UCase(Chr(KeyAscii)))
 Dim ch1 As String
ch1 = Chr$(KeyAscii)
   If Not ( _
      (ch1 >= "a" And ch1 <= "z") Or _
      (ch1 >= "A" And ch1 <= "Z") Or _
```

```
    (ch1 = " ") Or _
    (ch1 = vbBack) _
) Then
    ' Cancel the character.
    KeyAscii = 0
End If
```

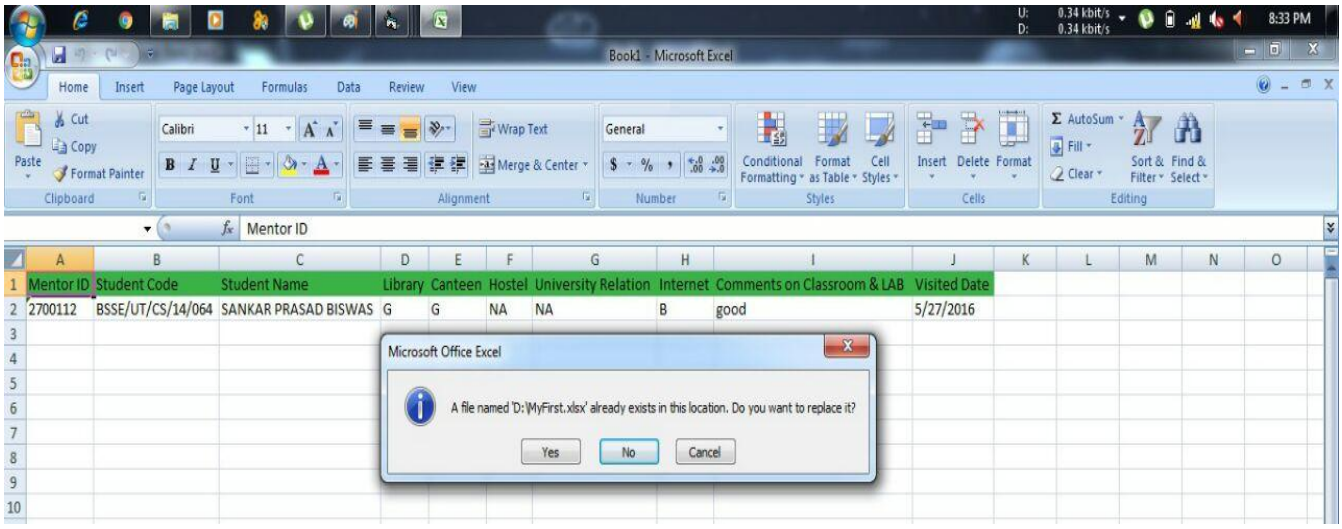


Figure 1.4: Feel free to print out the excel file

Appendix B: BIBLIOGRAPHY

1. Haggard, Gary, Hutchison , Wade, Shibata ,Christy,(2012), "*Introduction: Visual BASIC 6.0",* Booboo .

2. Jerke , Noel,(1999), "Visual Basic 6: The Complete Reference", McGraw Hill Education.

Appendix C: WEB REFERENCE

1. Holzner,Steven: 'Visual Basic 6 Black Book' 08/01/1998 [Online] Available &lt**http://portal.aauj.edu/portal_resources/downloads/programming/microsoft_visual_basic_black_book.pdf** > (April 9, 2016)

2. Smiley,John: 'Multiple Form Projects in Visual Basic 6' 28/03/2004 [Online] Available &lt**http://www.johnsmiley.com/cis18/smiley013.pdf**> (April 10, 2016)