GRADING CARD AS DOCUMENT

ABSTRACT

This project is a Web based grading and tracking system. This system design benefits teachers, principals, administrators and students when compared to the current manual system at the school. Teachers can maintain grades, create lesson plans, provide information on assignments and tutorials and monitor the performance of each student. The principal can monitor students and teacher's lesson plans and tasks accomplished. Administrators can export grades of the students from the database to their system without manual entry. Parents can monitor the progress of their students online. Finally, students can receive online progress reports and assignments/tutorial information.

This system helps in making the documentation of grading card much diligent for the documentation purpose and helps in indulging the client server mode. Whereas the information will be provided in the excel sheets and other sheets. The information will be retrieved and then the program of client and server will convert into the documentations.

List of Tables

List of Figures

TABLE OF CONTENTS

I. INTRODUCTION

The current system forces teachers to manually enter the grades on a excel sheet. Teachers are responsible for daily grades, weekly grades and the academic cycle grades. A semester has three academic cycles, and each academic cycle has six weeks. It is very tedious and time consuming to keep track of these grades manually. There is no easy way to backup this information except to look back into the daily grade books and submit the grades periodically to administrators.

Currently, parents do not have an easy method to keep track of the grades of their children. They must depend on their children in order to see the progress reports or they must schedule an appointment with the teachers. The Online Grading and Tracking System are designed to transfer information in an immediately usable form into the Regional Service Center Computer Cooperative system. The paper copy of the grades must be manually entered into the RSCCC System which is time consuming and tedious. The online grading system is a way to serve the needs of parents/students, faculty and staff and saves lots of time and effort. Staff need not have to wait several days for grade materials to be gathered, as grades can be turned in much faster.

Teachers can eliminate the use of grade sheets, thus eliminating the tedious job of tracking those sheets and also saving storage space. Below are some of the important functions benefiting the teachers.

- Academic semester grades can be entered online, providing an easy access to data for tracking students.
- Lesson plans can be created online providing the convenience of working from any location.
- Reduced burden at the end of academic cycle to submit the student grades to the administrator’s office.

II. DESCRIPTION – SYSTEM ANALYSIS

Many a time, a software application is required to generate reference documents in Microsoft Word file format. Sometimes, an application is even expected to receive Word files as input data.

Any Java programmer who wants to produce MS-Office files as output must use a predefined and read-only API to do so.

What is Apache POI?

Apache POI is a popular API that allows programmers to create, modify, and display MS-Office files using Java programs. It is an open source library developed and distributed by Apache Software Foundation to design or modify MS-Office files using Java program. It contains classes and methods to decode the user input data or a file into MS-Office documents.

Components of Apache POI

Apache POI contains classes and methods to work on all OLE2 Compound documents of MS-Office. The list of components of this API is given below −

POIFS (Poor Obfuscation Implementation File System) − This component is the basic factor of all other POI elements. It is used to read different files explicitly.

HSSF (Horrible SpreadSheet Format) − It is used to read and write .xls format of MS-Excel files.

XSSF (XML SpreadSheet Format) − It is used for .xlsx file format of MS-Excel.

HPSF (Horrible Property Set Format) − It is used to extract property sets of the MS-Office files.

HWPF (Horrible Word Processor Format) − It is used to read and write .doc extension files of MS-Word.

XWPF (XML Word Processor Format) − It is used to read and write .docx extension files of MS-Word.

HSLF (Horrible Slide Layout Format) − It is used to read, create, and edit PowerPoint presentations.

HDGF (Horrible DiaGram Format) − It contains classes and methods for MS-Visio binary files.

HPBF (Horrible PuBlisher Format) − It is used to read and write MS-Publisher files.

III. SYSTEM REQUIREMENTS

JDK	Java SE 2 JDK 1.5 or above
Memory	1 GB RAM
Operating System Version	Windows XP or above, Linux

Table 1: Working Environment

STEPS FOR RUNNING THE PROGRAM

Step 1: Open Ide
Step 2: Make sure the execution compiler mode is in java mode
Step 3: In package explorer right click and create a new java project
Step 4: Click on next
Step 5: Import all the library files from apache poi software
Step 6: Now type the code and save it.
Step 7: Execute the codes
Step 8: a word file will be created in the specific location
Step 9: open the file and see all the details have been entered.
Step 10: stop

SEQUENCE DIAGRAM

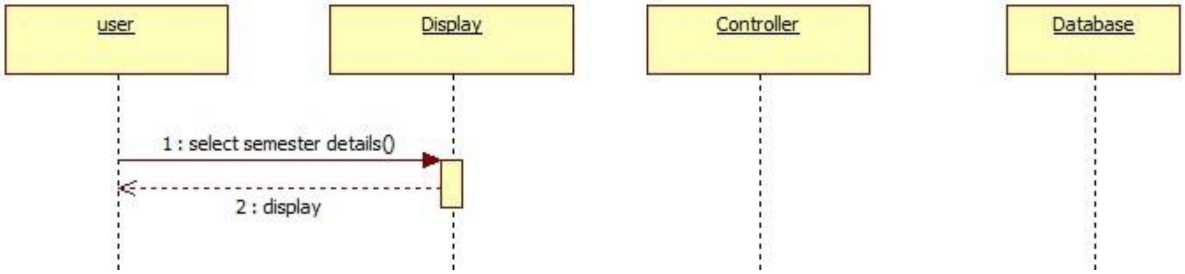


Fig 1: Sequence Diagram

CODE: CLIENT

```
package dc;
import java.io.*;
import java.net.*;
public class client
{
	public static void main(String [] args)throws IOException
	{
		String str;
		int n;
		Socket  cs=new Socket("localhost",56);
		DataInputStream in=new DataInputStream(cs.getInputStream());
		DataOutputStream out=new DataOutputStream(cs.getOutputStream());
		BufferedReader br = new BufferedReader(new InputStreamReader(System.in));
		System.out.println("Press Enter without text to quit");

		//this is for student name
		String st=in.readLine();
		System.out.println(st);
		str=br.readLine();
		out.writeBytes(str+"\n");

		//this is for student roll no
		st=in.readLine();
		System.out.println(st);
		str=br.readLine();
		out.writeBytes(str+"\n");

		//this is for subject count
		st=in.readLine();
		System.out.println(st);
		str=br.readLine();
		out.writeBytes(str+"\n");
		n=Integer.parseInt(str);

		//subject detail generation
		for(int i=0;i<n;i++)
		{
			// below 4 line are to send subjectcode
			st=in.readLine();
			System.out.println(st);
			str=br.readLine();
			out.writeBytes(str+"\n");

			// below 4 line are to send the name of the subject
```

```
                        st=in.readLine();
                        System.out.println(st);
                        str=br.readLine();
                        out.writeBytes(str+"\n");

                        // below 4 lines are to send no of credits of the subject
                        st=in.readLine();
                        System.out.println(st);
                        str=br.readLine();
                        out.writeBytes(str+"\n");

                        // below 4 lines are to send mks of the subject
                        st=in.readLine();
                        System.out.println(st);
                        str=br.readLine();
                        out.writeBytes(str+"\n");

                }
                cs.close();

        }
}
```

CODE: SERVER

```
package dc;
import java.io.*;
import java.io.File;
import java.io.FileOutputStream;
import org.apache.poi.xwpf.usermodel.Borders;
import org.apache.poi.xwpf.usermodel.ParagraphAlignment;
import org.apache.poi.xwpf.usermodel.XWPFDocument;
import org.apache.poi.xwpf.usermodel.XWPFParagraph;
import org.apache.poi.xwpf.usermodel.XWPFRun;
import org.apache.poi.xwpf.usermodel.XWPFTable;
import org.apache.poi.xwpf.usermodel.XWPFTableRow;

import java.net.*;
public class server
{
        public static void main(String[] args)throws IOException
        {
```

```
        //socket creation and acceptance
        ServerSocket ss= new ServerSocket(56);
        Socket s=ss.accept();

        //variables used in program(few may have been declared later in program)
String Text,str,name,grade,stuname,stdregno,code;
        int n,mks,credits,tc=0;
        float sum=0,avg;

        //input and output streams
        DataInputStream in=new DataInputStream(s.getInputStream());
        DataOutputStream out=new DataOutputStream(s.getOutputStream());
        System.out.println("Server Ready");

        //to get student name
        str="enter the name os student";
        out.writeBytes(str+"\n");
        stuname=in.readLine();
        System.out.println(stuname);

        //to get student register no
        str="enter the regno ";
        out.writeBytes(str+"\n");
        stdregno=in.readLine();

        //document creation requisites
        XWPFDocument document = new XWPFDocument();
FileOutputStream ou = new FileOutputStream(new File("d:gradecard.docx"));
XWPFParagraph paragraph = document.createParagraph();
XWPFRun run = paragraph.createRun();

paragraph.setAlignment(ParagraphAlignment.CENTER);
run = paragraph.createRun();
run.setFontSize(34);
run.setText("PRESIDENCY UNIVERSITY"+"\n");

paragraph = document.createParagraph();
paragraph.setBorderBottom(Borders.BASIC_BLACK_DASHES);
paragraph.setAlignment(ParagraphAlignment.CENTER);
run = paragraph.createRun();
run.setFontSize(20);
run.setText("BANGALORE, KARNATAKA-560064");

paragraph = document.createParagraph();
paragraph.setAlignment(ParagraphAlignment.CENTER);
run = paragraph.createRun();
```

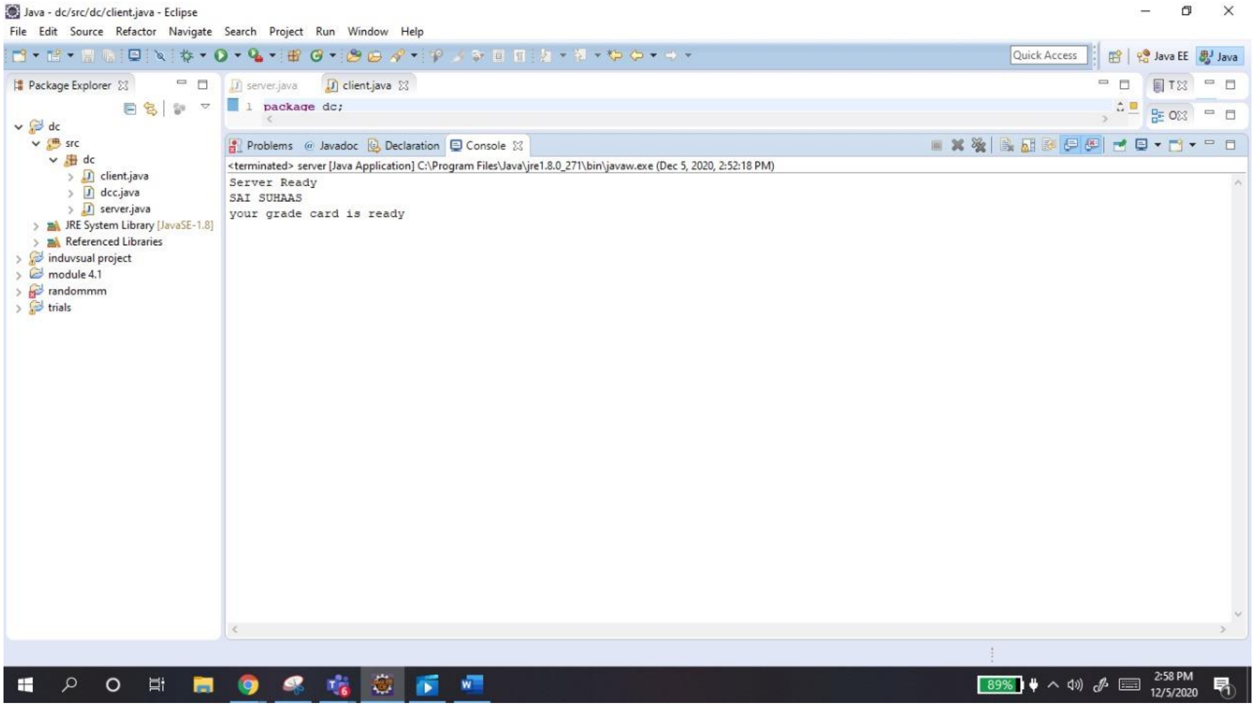
```
run.setBold(true);
run.setFontSize(20);
run.setText("GRADE CARD");


        paragraph = document.createParagraph();
paragraph.setAlignment(ParagraphAlignment.LEFT);
run = paragraph.createRun();
run.setBold(true);
run.setFontSize(12);
run.setText("Student Name: "+stuname);



        paragraph = document.createParagraph();
paragraph.setAlignment(ParagraphAlignment.LEFT);
run = paragraph.createRun();
run.setBold(true);
run.setFontSize(12);
run.setText("Roll Number: "+stdregno);

        //the below 4 line is for subject count
        str="enter the no of subjects";
        out.writeBytes(str+"\n");
        Text=in.readLine();
        n=Integer.parseInt(Text);

        //creates a table
        XWPFTable tab = document.createTable();

//create first row
XWPFTableRow row = tab.getRow(0);
row.getCell(0).setText("Course Code");
row.addNewTableCell().setText("Course Name");
row.addNewTableCell().setText("Credits");
row.addNewTableCell().setText("Grade");

        for(int i=0;i<n;i++)
        {
                // below 3 line are to store subject code
                str="enter  the subject code";
                out.writeBytes(str+"\n");
                code=in.readLine();

                // below 3 line are to store the name of the subject
                str="enter  the subject name";
```

```
out.writeBytes(str+"\n");
name=in.readLine();

// below 4 lines are to store no of credits of the subject
str="enter the credits of the subject";
out.writeBytes(str+"\n");
Text=in.readLine();
credits=Integer.parseInt(Text);


// below 4 lines are to store mks of the subject
str="enter the marks of the subject for 100";
out.writeBytes(str+"\n");
Text=in.readLine();
mks=Integer.parseInt(Text);


//the below if else statements is to generate grade
//grade decision
if(mks<40)
{
        grade="F";
        sum+=0;
        credits=0;
}
else if(mks<50)
{
        grade="D";
        sum+=4;
        tc+=credits;
}
else if(mks<60)
{
        grade="C";
        sum+=5;
        tc+=credits;
}
else if(mks<70)
{
        grade="B";
        sum+=4;
        tc+=credits;
}
else if(mks<80)
{
        grade="B+";
```

```
                                sum+=4;
                                tc+=credits;
                        }
                        else if(mks<90)
                        {
                                grade="A";
                                sum+=8;
                                tc+=credits;
                        }
                        else if(mks<95)
                        {
                                grade="A+";
                                sum+=9;
                                tc+=credits;
                        }
                        else
                        {
                                grade="O";
                                sum+=10;
                                tc+=credits;
                        }
                        String cr=Integer.toString(credits);
                        // Second Row
                        row = tab.createRow();
              row.getCell(0).setText(code);
              row.getCell(1).setText(name);
              row.getCell(2).setText(cr);
              row.getCell(3).setText(grade);

                }
                //calculates average which is nothing but SGPA
                avg=sum/n;


                str=Integer.toString(tc);

                row = tab.createRow();
      row.getCell(0).setText(" ");
      row.getCell(1).setText("total credits");
      row.getCell(2).setText(str);
      row.getCell(3).setText("");


                paragraph = document.createParagraph();
           paragraph.setBorderBottom(Borders.BASIC_BLACK_DASHES);
           paragraph.setAlignment(ParagraphAlignment.CENTER);
```

```
        run = paragraph.createRun();
        run.setText("            ");


        paragraph = document.createParagraph();
        paragraph.setBorderBottom(Borders.BASIC_BLACK_DASHES);
        paragraph.setAlignment(ParagraphAlignment.CENTER);
        run = paragraph.createRun();
        run.setBold(true);
        run.setText("SGPA: "+avg);




            System.out.println("your grade card is ready");

            //THIS LINE WRITES ALL DATA INTO THE WORD FILE
            document.write(ou);

            //closing socket,output stream and document
            ou.close();
        document.close();
            ss.close();
      }
}
```

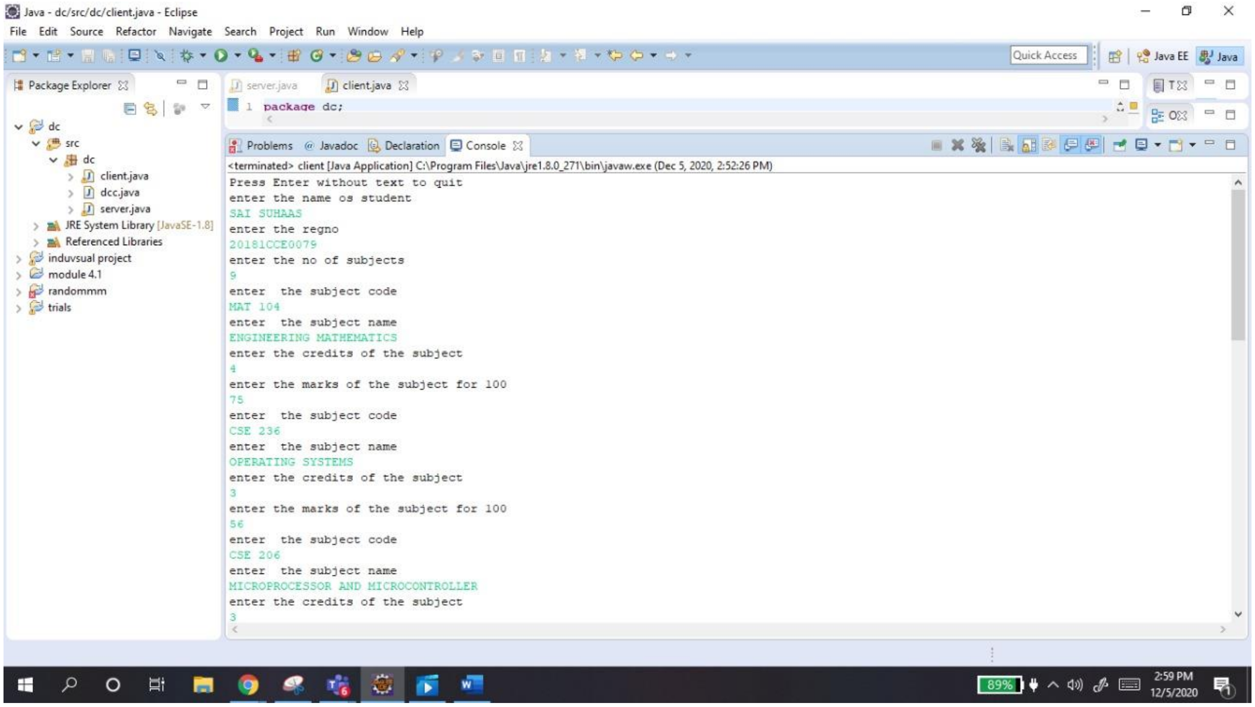
IV. SCREENSHOTS



```
1 package dc;
```

```
<terminated> server [Java Application] C:\Program Files\Java\jre1.8.0_271\bin\javaw.exe (Dec 5, 2020, 2:52:18 PM)
Server Ready
SAI SUHAAS
your grade card is ready
```

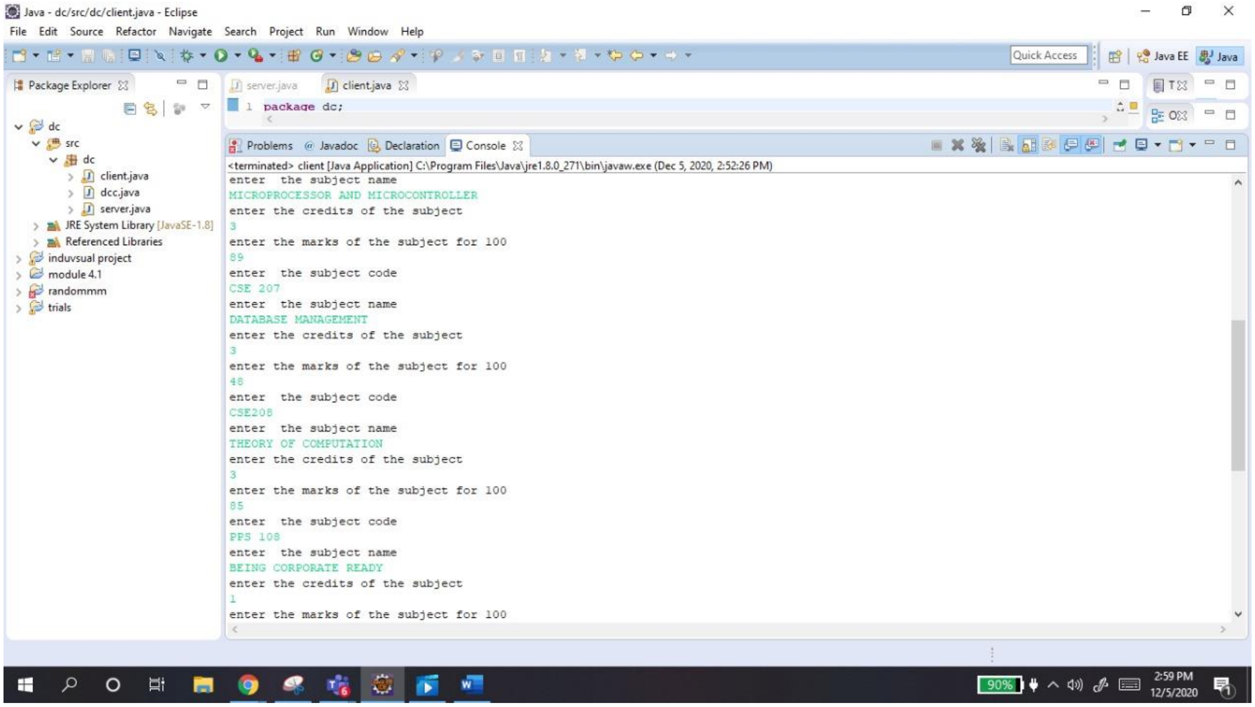
Fig 1: SERVER DEMONSTRATION



```
1 package dc;
```

```
<terminated> client [Java Application] C:\Program Files\Java\jre1.8.0_271\bin\javaw.exe (Dec 5, 2020, 2:52:26 PM)
Press Enter without text to quit
enter the name os student
SAI SUHAAS
enter the regno
20181CCE0079
enter the no of subjects
9
enter  the subject code
MAT 104
enter  the subject name
ENGINEERING MATHEMATICS
enter the credits of the subject
4
enter the marks of the subject for 100
75
enter  the subject code
CSE 236
enter  the subject name
OPERATING SYSTEMS
enter the credits of the subject
3
enter the marks of the subject for 100
56
enter  the subject code
CSE 206
enter  the subject name
MICROPROCESSOR AND MICROCONTROLLER
enter the credits of the subject
3
```

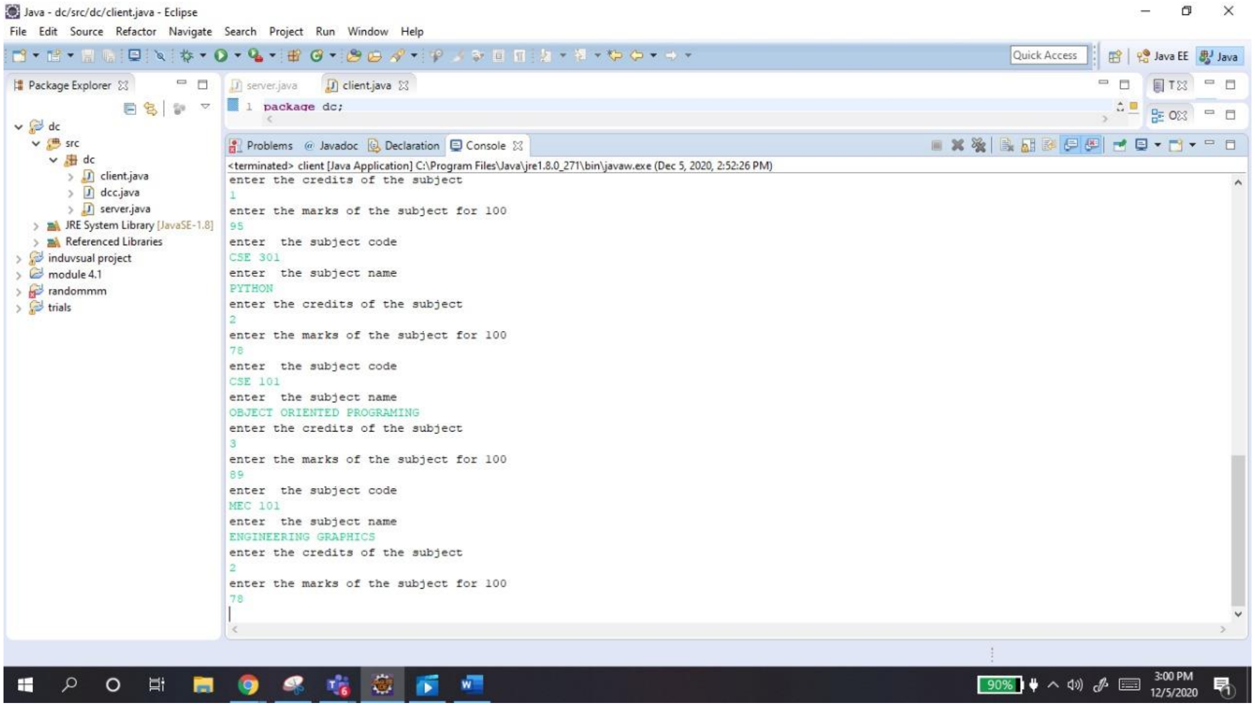
Fig 2: CLIENT -1 DEMONSTRATION



```
1 package dc;
```

```
<terminated> client [Java Application] C:\Program Files\Java\jre1.8.0_271\bin\javaw.exe (Dec 5, 2020, 2:52:26 PM)
enter  the subject name
MICROPROCESSOR AND MICROCONTROLLER
enter the credits of the subject
3
enter the marks of the subject for 100
89
enter  the subject code
CSE 207
enter  the subject name
DATABASE MANAGEMENT
enter the credits of the subject
3
enter the marks of the subject for 100
48
enter  the subject code
CSE208
enter  the subject name
THEORY OF COMPUTATION
enter the credits of the subject
3
enter the marks of the subject for 100
85
enter  the subject code
PPS 108
enter  the subject name
BEING CORPORATE READY
enter the credits of the subject
1
enter the marks of the subject for 100
```

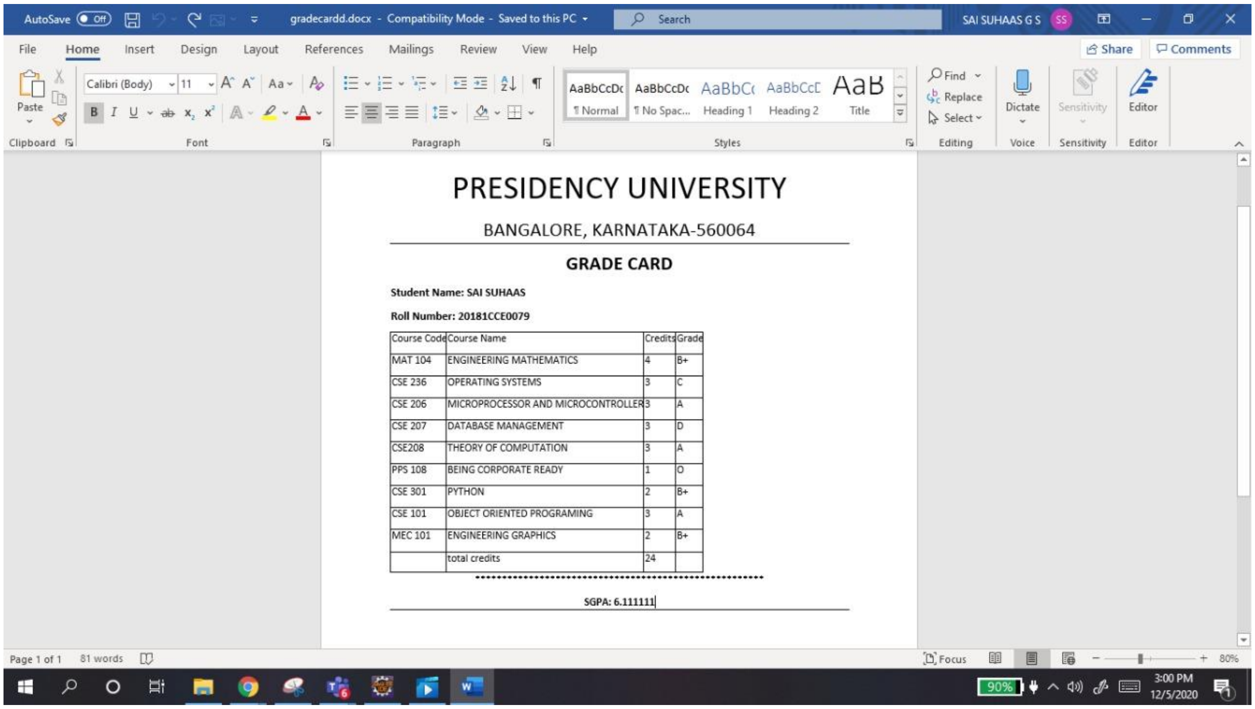
Fig 3: CLIENT -2 DEMONSTRATION



```
1 package dc;
```

```
<terminated> client [Java Application] C:\Program Files\Java\jre1.8.0_271\bin\javaw.exe (Dec 5, 2020, 2:52:26 PM)
enter the credits of the subject
1
enter the marks of the subject for 100
95
enter  the subject code
CSE 301
enter  the subject name
PYTHON
enter the credits of the subject
2
enter the marks of the subject for 100
78
enter  the subject code
CSE 101
enter  the subject name
OBJECT ORIENTED PROGRAMING
enter the credits of the subject
3
enter the marks of the subject for 100
89
enter  the subject code
MEC 101
enter  the subject name
ENGINEERING GRAPHICS
enter the credits of the subject
2
enter the marks of the subject for 100
78
```

Fig 4: CLIENT -3 DEMONSTRATION



PRESIDENCY UNIVERSITY

BANGALORE, KARNATAKA-560064

GRADE CARD

Student Name: SAI SUHAAS

Roll Number: 20181CCE0079

Course Code	Course Name	Credits	Grade
MAT 104	ENGINEERING MATHEMATICS	4	B+
CSE 236	OPERATING SYSTEMS	3	C
CSE 206	MICROPROCESSOR AND MICROCONTROLLER	3	A
CSE 207	DATABASE MANAGEMENT	3	D
CSE208	THEORY OF COMPUTATION	3	A
PPS 108	BEING CORPORATE READY	1	O
CSE 301	PYTHON	2	B+
CSE 101	OBJECT ORIENTED PROGRAMING	3	A
MEC 101	ENGINEERING GRAPHICS	2	B+
	total credits	24	

****

SGPA: 6.111111

Fig 5: OUTPUT DEMONSTRATION

V. CONCLUSION

The Grading and Tracking and documentation System is aimed at helping teachers, principals, and officials in charge of testing to save time and effort in grading and tracking the students. The project helps teachers create lesson plans, create online assignments and allows teachers to monitor the performance of each student. The Principal and assistant principal can monitor all the teachers and view their lesson plans and track their progress. The OGTS allows the principal and assistant principal to monitor each student performance.

The officials in charge of testing in the administrative office have privileges to export data into useable form. This project also plays an important role in helping parents to track their children by allowing them to track their academic progress saving them time and effort. Students can take advantage of online assignments to makeup the work they missed.

VI. REFERNCES

- https://www.tutorialspoint.com/apache_poi_word/apache_poi_word_quick_guide.htm
- [IIC NET 2004] Web Hosting Company. Home Page. Available from http://www.iicinternet.com (Visited June 6, 2005)
- [MYSQL 2004] MySQL: About MySQL (April 2004). Home Page. Available from http://www.mysql.com (Visited April 7, 2004)
- [Nielson 1992] Nielson. J. Usability Engineering: New York: Academic Press.
- [PHP-1 2004] PHP: A simple tutorial – Manual (April 2004). Home Page. Available from http://www.php.net/manual/en/tutorial.php (Visited April 7, 2004)
- http://www.client_server.com
- http://www.tcp_protocol.com
- http://www.iEEE.com