

MAHARASHTRA STATE BOARD OF TECHNICAL EDUCATION, MUMBAI

A MICRPROJECT REPORT OF

STUDENT RECORD SYSTEM

UNDER THE SUBJECT

JAVA PROGRAMMING (22412)

SEMESTER- 4 OF DIPLOMA IN COMPUTER ENGINEERING ACADEMIC YEAR- 2022-2023

SUBMITTED BY-

Roll No	Name	Enrollment No
1251	Shejwal Pratik Pramod	2100100053
1252	Deshmukh Yash Prashant	2100100054
1261	Kharade Riya Sunil	2100100063

UNDER THE GUIDANCE OF

SMT. JADHAV S V

GOVERNMENT POLYTECHNIC, KARAD.

DEPARTMENT OF COMPUTER ENGINEERING

ACKNOWLEDGEMENT

We take it is an opportunity to thank all those who have directly and indirectly inspired, directed and assisted us towards successful completion of this project report.

We express our sincere thanks to Principal Dr. R. K. Patil and the Head of Department Prof. S. B. Patil for having us allowed to submit this report as part of our academic learning.

We express our sincere thanks to Smt. Jadhav. S. V., Lecturer in Computer Engineering, Govt. Polytechnic Karad, for encouragement throughout the project report and guideline in designing and working out this project.

Place: Government Polytechnic, Karad.

Date:

Your sincerely,

1251- Shejwal Pratik Pramod

1252-Deshmukh Yash Prashant

1261-Kharade Riya Sunil



Maharashtra State Board of Technical Education

Certificate of Completion

Of Micro-Project Assessment at the end of the Diploma Programme (By respective Head of the Department & Head of the Institute)

This is to certify that,

Roll No	Name	Enrollment No
1251	Shejwal Pratik Pramod	2100100053
1252	Deshmukh Yash Prashant	2100100054
1261	Kharade Riya Sunil	2100100063

have successfully completed "Student Record System" Micro-Project as in the enclosed 'Portfolio' for the course Java Programming (22412) during their tenure of completing the Diploma programme in Computer Engineering from Government Polytechnic Karad with institute code 6016.

Smt. Jadhav S.V Subject Teacher Prof. S. B. Patil Head of the department Dr. R. K. Patil Principal

STUDENT RECORD SYSTEM

1. RATIONALE:

- Student Record System is application which is helpful for students as well as college
 authorities. In the current system all the activities are done manually. It is very time
 consuming and costly. Our Student Record System deals with the various activities
 related to the students.
- In our project, we created application for storing all students information. In which student name, student roll number, total fees and contact number are included.
- There is no limit for adding student records. We can also search for particular student report. We can also delete particular student's record. We can get report of all the registered students.

2. AIM/BENEFITS OF MICRO-PROJECT:

- a) It helps us to keep and maintain multiple records effortlessly.
- b) To help an organization keep the necessary documentation accessible about students.
- c) The Main objective of this project is to build a student file that will store records of students.
- d) The benefit is educational institutes can keep proper track of student data.

3. COURSE OUTCOMES ACHIEVED:

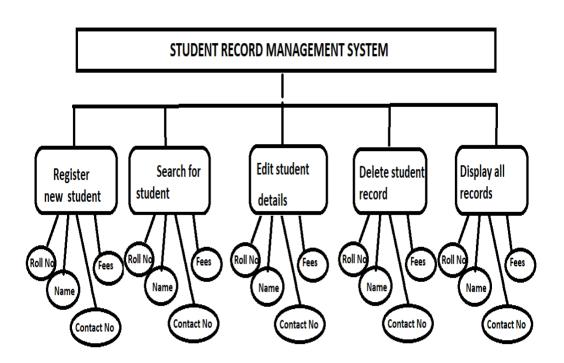
- A) Develop Program Using Object Oriented Methodology In Java.
- B) Apply concept of inheritance for code reusability.
- D) Implement Exception Handling.
- F) Develop A Program For Handling I/O And File Streams.

4. LITERATURE REVIEW:

Java programming or simply Java is a widely used and robust technology for software development and creation of applications. Therefore, Java is both a programming language and a platform. On the other hand, a platform is any hardware or software environmental setting where software developers run their programs. Therefore, since Java has its own environment (JRE) and API on which it runs, it is referred to as a platform. Desktop applications like the acrobat reader, media player, and antivirus among others

- 1. Several web applications such as javapoint.com
- 2. Mobile phone devices applications
- 3. Robotics
- 4. Embedded system

5. ACTUAL METHODOLOGY FOLLOWED:



1) Register New Student

Here we adding a new record of a new admission student with details such as name, email id, mobile No etc.

2) Search for student

We can also search for any student. If specified student will found it will displays all details of student.

3) Edit student details

We can also edit student details like email, mobile no etc,

4) Delete student record

We delete a specified record from stored data. student record will specified by user.

5) Display all registered student.

Here we retrieve record from file and display students.

7.ACTUAL RESOURCES USED:

Sr.	Name of Resource	Specification	Quantity
No			
1	Computer system	HP Pavilion Ryzen 5 4600h Windows 11	1
2	Software	JDK 8.0,Notepad++.	1
3	Lab manual	Subject:Java Programming(22412)	1
4	Book	TechKnowledge: Java Programming (22412)	1

6. OUTPUT OF THE MICRO-PROJECT:

```
Microsoft Windows [Version 10.0.22000.675]
(c) Microsoft Corporation. All rights reserved.

C:\Users\sanik\Desktop\Java programs>javac Student_Registration.java
Note: Student_Registration.java uses unchecked or unsafe operations.
Note: Recompile with -Xlint:unchecked for details.

C:\Users\sanik\Desktop\Java programs>java Student_Registration

**********Welcome to the Student Registration*********

1) Register new student
2) Search for Student
3) Edit Student details
4) Delete Student record
5) Display all registered Students
6) Exit

Enter your choice:
```

```
Enter your choice:
Enter how many students you want to Register:
Enter the following details to register:
Enter Roll No.:
108
Enter Name of Student:
Payal
Enter Fees:
2000
Enter Contact No.:
4567890123
Enter the following details to register:
Enter Roll No.:
109
Enter Name of Student:
Revati
Enter Fees:
2000
Enter Contact No.:
5678901234
```

```
Enter your choice:
Enter student roll no. to search:
103
Student Details :
Roll No.103
Name: Rutika
Fee: 2000.0
Contact No: 3456789012
*********Welcome to the Student Registration*******

    Register new student

2) Search for Student
Edit Student details
4) Delete Student record
Display all registered Students
6) Exit
Enter your choice:
```

```
Enter your choice:
Enter the student Roll No. to EDIT the details
101
Edit student Details:
1)Student Roll no.
2)Student Name
3)Contact No.
4)GO BACK
Enter your choice:
Enter new Student Contact No.:
6789012345
Student Details :
Roll_No.101
Name: sanika
Fee: 1000.0
Contact No: 6789012345
Edit student Details:
1)Student Roll no.
2)Student Name
3)Contact No.
4)GO BACK
Enter your choice:
```

```
Enter your choice:
Enter Student Roll No.to DELETE the record:
109
  ------Student List------
Roll No. Name
                       Fee
                                Contact-no
101 sanika
                       1000.0
                               6789012345
102 Akshata
                       2000.0
                                2345678901
103 Rutika
                       2000.0
                                3456789012
104 Sakshi
                       2000.0 4567890123
                      2000.0 6789012345
2000.0 6976532890
105 arati
106 vaishnavi
107 sayali
                       2000.0
                                3456789012
                       2000.0 4567890123
108 Payal
Total Count of registered Students:8
java.util.ConcurrentModificationException
```

```
Enter your choice:
java.io.EOFException
 -----Student List-----
Roll No. Name
                               Contact-no
                      Fee
101 sanika
                      1000.0
                               6789012345
102 Akshata
                      2000.0
                               2345678901
103 Rutika
                      2000.0
                               3456789012
104 Sakshi
                      2000.0
                               4567890123
105 arati
                      2000.0
                               6789012345
                      2000.0 6976532890
106 vaishnavi
107 sayali
                      2000.0
                               3456789012
                      2000.0
108 Payal
                               4567890123
Total Count of registered Students:8
```

```
**********************************

1) Register new student
2) Search for Student
3) Edit Student details
4) Delete Student record
5) Display all registered Students
6) Exit

Enter your choice:
6

You have chosen Exit!! saving the Files and closing tool.
Thank You!!

C:\Users\sanik\Desktop\Java programs>
```

7. SKILLS DEVELOPED / LEARNING OUTCOME OF THIS MICRO-PROJECT:

Now we are able to-

- 1. Develop Java program by using file handling.
- 2. Develop Java program by using object oriented methodologies and concepts(e.g. If-Else Statements, Switch cases, Looping statements).
- 3. Develop Java program by using exception handling.

8. APPLICATIONS OF MICROPROJECT:

- The Student Record System is console based development in Java. It can be used by educational institutes or colleges to maintain the records of students easily.
- It also provides a less time consuming process for viewing, adding, editing, deleting and searching student details.
- Student Record System software is helpful for both Students as well as authorities.