

# CORE JAVA PROJECT

**PROJECT TITLE:** STUDENT MANAGEMENT SYSTEM

**AIM:**

- o To manage the student's information without any interruption.

**LANGUAGE:**

- o JAVA

**SOFTWARE REQUIREMENTS:**

- o Eclipse for java

**SYNOPSIS:**

In student management system they are 5 operations are there.

The 5 operations are:

- Add student
- View the student
- Update the student
- Delete the student
- View all student detail

**OPERATION EXPLAINS:**

The first one is Add Student Operation it will make new student record add to collection. Second one is view student operation by this we can view particular student details. Third one is update student operation

it will make changes in existing record and update the record. Fourth one is delete student operation it will remove unwanted record of student collections. Fifth one is view all student detail operation it show all the student information at one site present in collections.

## **INITIAL SETUP:(IN JAVA)**

**Package name:** edu.projectnew

**Classes name:** 1. MainOperation  
2. Studentservice  
3. Student

## **PROGRAM:**

### **MAIN OPERATION CLASS:**

```
/******COREJAVAPROJECT*****  
*  
* CSR CAPGEMINI TRAINING PROGRAM  
*  
* EDUBRIDGE INDIA PRIVATE LIMITED  
*  
* PROJECT TITLE: STUDENT MANAGEMENT SYSTEM  
*  
* UNDER THE GUIDENCE OF TRAINER MRS.INDRAKKA  
BASAPPA MALI  
*
```

@DONE BY RAGINI M

In student management system,

\*The 5 operations are:

- 1.Add student
- 2.View the student
- 3.Update the student
- 4.Delete the student
- 5.View all student detail
- 6.Exit

MainOperation :

```
package edu.projectnew;
import java.util.Scanner;
public class MainOperation {
    static Studentservice service = new
    Studentservice();
    static boolean ordering = true;
    public static void menu() {
        System.out.println("*****WELCOME TO
        STUDENT MANAGEMENT
        SYSTEM*****"
        +"\n1.Add Student"
        +"\n2.View Student"
        +"\n3.Update Student"
        +"\n4.Delete Student"
        +"\n5.view All Student Detail"
        +"\n6.Exit");
    }
    public static void main(String[] args) {
        Scanner sc = new Scanner(System.in);
        do {
            menu();
```

```
System.out.println("Enter the choice:");
int choice = sc.nextInt();
switch(choice) {
case 1:
System.out.println("Add Student");
service.addstudent();
break;
case 2:
System.out.println("View Student");
service.viewstudent();
break;
case 3:
System.out.println("Update Student");
service.updatestudent();
break;
case 4:
System.out.println("Delete Student");
service.deletestudent();
break;
case 5:
System.out.println("View All Students Detail");
service.viewallstudent();
break;
case 6:
System.out.println("Thank you for using
application!!");
System.exit(0);
default:
System.out.println("Please enter valid choice");
}
}while(ordering);
}
}
```

## STUDENT SERVICE CLASS:

```
package edu.projectnew;
import java.util.HashMap;
import java.util.HashSet;
import java.util.Scanner;
import java.util.TreeSet;
public class Studentservice {
    HashSet<Student> stuset = new HashSet<Student>();
    Student st1 = new
    Student(1001,"Arun", 34, "CS", "arunak@gmail.com", "6037896534");
    Student st2 = new
    Student(1002,"Ragini", 35, "CS", "ragiak@gmail.com", "6837896534");
    Student st3 = new
    Student(1003,"Shiva", 34, "Com", "sivask@gmail.com",
    "6737896534");
    Student st4 = new
    Student(1004,"Pragatheesh", 35, "IT", "eesu@gmail.com",
    "6637896534");
    Student st5 = new
    Student(1005,"Malar", 34, "Com", "malar@gmail.com", "6537896534");
    Scanner sc=new Scanner(System.in);
    boolean found=false;
    int id;
    String name;
    int deptcode;
    String department;
    String gmail;
    String phno;
    public Studentservice() {
        stuset.add(st1);
        stuset.add(st2);
        stuset.add(st3);
        stuset.add(st4);
        stuset.add(st5);
    }
}
```

```

//add student
public void addstudent() {
System.out.println("Enter id:");
id=sc.nextInt();
System.out.println("Enter name:");
name=sc.next();
System.out.println("Enter deptcode:");
deptcode=sc.nextInt();
System.out.println("Enter department:");
department=sc.next();
System.out.println("Enter gmail:");
gmail=sc.next();
System.out.println("Enter phno:");
phno=sc.next();
Student st=new Student(id, name, deptcode,
department, gmail, phno);
stuset.add(st);
System.out.println(st);
System.out.println("Student added successfully");
}

//view student based on their id
public void viewstudent(){
System.out.println("Enter id: ");
id=sc.nextInt();
for(Student st:stuset) {
if(st.getId()==id) {
System.out.println(st);
found=true;
}
}
if(!found) {
System.out.println("Student with this id is not present");
}
}

//update the student

```

```

public void updatestudent() {
System.out.println("Enter id: ");
id=sc.nextInt();
boolean found=false;
for(Student st:stuset) {
if(st.getId()==id) {
System.out.println("Enter new name: ");
name=sc.next();
System.out.println("Enter the deptcode:");
deptcode=sc.nextInt();
System.out.println("Enter the department:");
department=sc.next();
System.out.println("Enter the gmail:");
gmail=sc.next();
System.out.println("Enter new phno");
phno=sc.next();
st.setName(name);
st.setdeptcode(deptcode);
st.setDepartment(department);
st.setgmail(gmail);
st.setphno(phno);
System.out.println("Updated Details of student are:");
System.out.println(st);
found=true;
}
}
if(!found) {
System.out.println("Student is not present");
}
else {
System.out.println("Student details updated successfully !!");
}
}
//delete student
public void deletestudent() {

```

```

System.out.println("Enter id");
id=sc.nextInt();
boolean found=false;
Student stdelete=null;
for(Student st:stuset) {
    if(st.getId()==id) {
        stdelete=st;
        found=true;
    }
}
if(!found) {
    System.out.println("Student is not present");
}
else {
    stuset.remove(stdelete);
    System.out.println("Student deleted successfully!!");
}
//view all students
public void viewallstudent() {
    for(Student st:stuset) {
        System.out.println(st);
    }
}
System.out.println("Student displayed successfully!!");
}
}
}

```

## STUDENT CLASS:

```

package edu.projectnew;
import java.io.Serializable;
import java.time.LocalDate;
public class Student {
    private int id;

```



```
private String name;
private int deptcode;
private String department;
private String gmail;
private String phno;
public int getId() {
return id;
}
public void setId(int id) {
this.id = id;
}
public String getName() {
return name;
}
public void setName(String name) {
this.name = name;
}
public int getdeptcode() {
return deptcode;
}
public void setdeptcode(int deptcode) {
this.deptcode = deptcode;
}
public String getDepartment() {
return department;
}
public void setDepartment(String department) {
this.department = department;
}
public String getgmail() {
return gmail;
}
public void setgmail(String gmail) {
this.gmail = gmail;
}
```

```
public String getphno() {  
    return phno;  
}  
public void setphno(String phno) {  
    this.phno = phno;  
}  
@Override  
public String toString() {  
    return "Student [id=" + id + ", name:" + name + ", deptcode:" +  
    deptcode + ", departName:" + department + ", gmail:" + gmail + ", phno:"  
    + phno + "]";  
}  
public Student(int id, String name, int deptcode,  
String department, String gmail, String phno) {  
    super();  
    this.id = id;  
    this.name = name;  
    this.deptcode = deptcode;  
    this.department = department;  
    this.gmail = gmail;  
    this.phno = phno;  
}  
}
```

## OUTPUT:

### Add student

```
MainOperation [Java Application] D:\eclipse\plugins\org.eclipse.justi.openjdk.hotspot.jre.full.win32.x86_64_17.0.1.v20211116-1657\jre\bin\javaw.exe (28 Nov 2022, 11:25:40)
*****WELCOME TO STUDENT MANAGEMENT SYSTEM*****
1.Add Student
2.View Student
3.Update Student
4.Delete Student
5.view All Student Detail
6.Exit
Enter the choice:
1
Add Student
Enter id:
1010
Enter name:
Dharshini
Enter deptcode:
36
Enter department:
Com
Enter gmail:
dharsh@gmail.com
Enter phno:
9876543219
Student [id=1010, name:Dharshini, deptcode:36, departName:Com, gmail:dharsh@gmail.com, phno:9876543219]
Student added successfully
```

### View student

```
MainOperation [Java Application] D:\eclipse\plugins\org.eclipse.justi.openjdk.hotspot.jre.full.win32.x86_64_17.0.1.v20211116-1657\jre\bin\javaw.exe (28 Nov 2022, 11:36:39)
*****WELCOME TO STUDENT MANAGEMENT SYSTEM*****
1.Add Student
2.View Student
3.Update Student
4.Delete Student
5.view All Student Detail
6.Exit
Enter the choice:
2
View Student
Enter id:
1002
Student [id=1002, name:Ragini, deptcode:35, departName:CS, gmail:ragiak@gmail.com, phno:6837896534]
*****WELCOME TO STUDENT MANAGEMENT SYSTEM*****
1.Add Student
2.View Student
3.Update Student
4.Delete Student
5.view All Student Detail
6.Exit
Enter the choice:
```

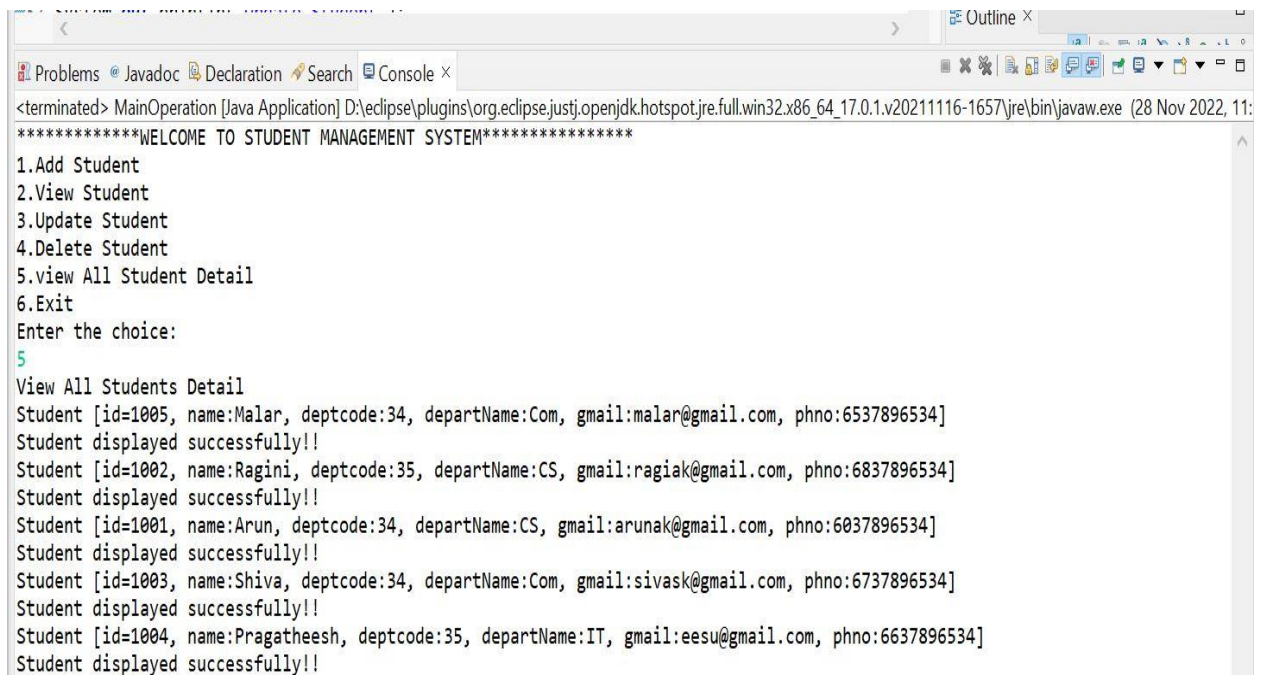
## Update Student

```
*****WELCOME TO STUDENT MANAGEMENT SYSTEM*****
1.Add Student
2.View Student
3.Update Student
4.Delete Student
5.view All Student Detail
6.Exit
Enter the choice:
3
Update Student
Enter id:
1004
Enter new name:
Pragadheeshwaran
Enter the deptcode:
34
Enter the department:
Com
Enter the gmail:
eesuraagi@gmail.com
Enter new phno
9867542310
Updated Details of student are:
Student [id=1004, name:Pragadheeshwaran, deptcode:34, departName:Com, gmail:eesuraagi@gmail.com, phno:9867542310]
Student details updated successfully !!
```

## Delete student

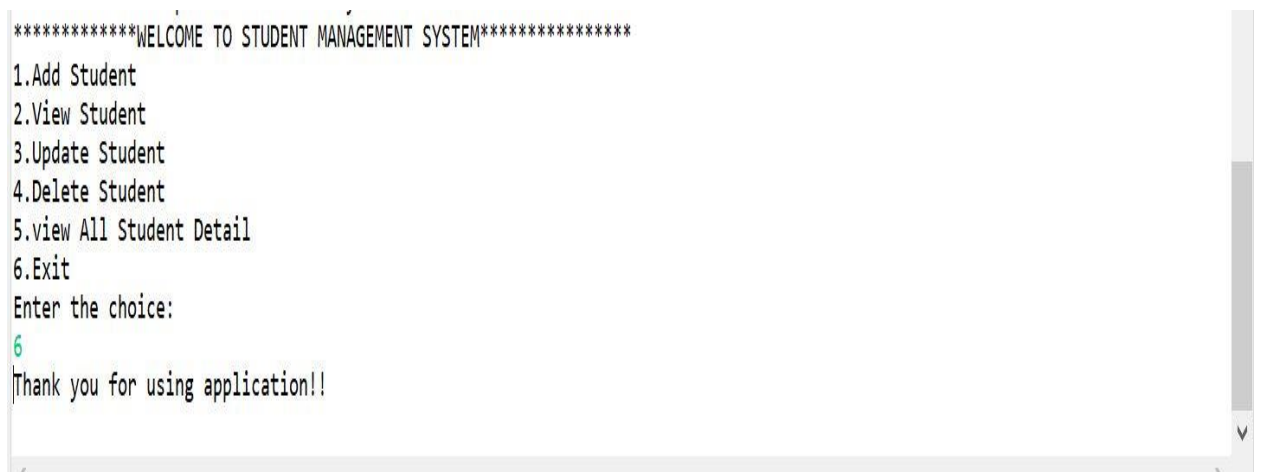
```
*****WELCOME TO STUDENT MANAGEMENT SYSTEM*****
1.Add Student
2.View Student
3.Update Student
4.Delete Student
5.view All Student Detail
6.Exit
Enter the choice:
4
Delete Student
Enter id
1010
Student deleted successfully!!
```

## View all student



```
<terminated> MainOperation [Java Application] D:\eclipse\plugins\org.eclipse.justi.openjdk.hotspot.jre.full.win32.x86_64_17.0.1.v20211116-1657\jre\bin\javaw.exe (28 Nov 2022, 11:
*****WELCOME TO STUDENT MANAGEMENT SYSTEM*****
1.Add Student
2.View Student
3.Update Student
4.Delete Student
5.view All Student Detail
6.Exit
Enter the choice:
5
View All Students Detail
Student [id=1005, name:Malar, deptcode:34, departName:Com, gmail:malar@gmail.com, phno:6537896534]
Student displayed successfully!!
Student [id=1002, name:Ragini, deptcode:35, departName:CS, gmail:ragiak@gmail.com, phno:6837896534]
Student displayed successfully!!
Student [id=1001, name:Arun, deptcode:34, departName:CS, gmail:arunak@gmail.com, phno:6037896534]
Student displayed successfully!!
Student [id=1003, name:Shiva, deptcode:34, departName:Com, gmail:sivask@gmail.com, phno:6737896534]
Student displayed successfully!!
Student [id=1004, name:Pragatheesh, deptcode:35, departName:IT, gmail:eesu@gmail.com, phno:6637896534]
Student displayed successfully!!
```

## Exit



```
*****WELCOME TO STUDENT MANAGEMENT SYSTEM*****
1.Add Student
2.View Student
3.Update Student
4.Delete Student
5.view All Student Detail
6.Exit
Enter the choice:
6
Thank you for using application!!
```