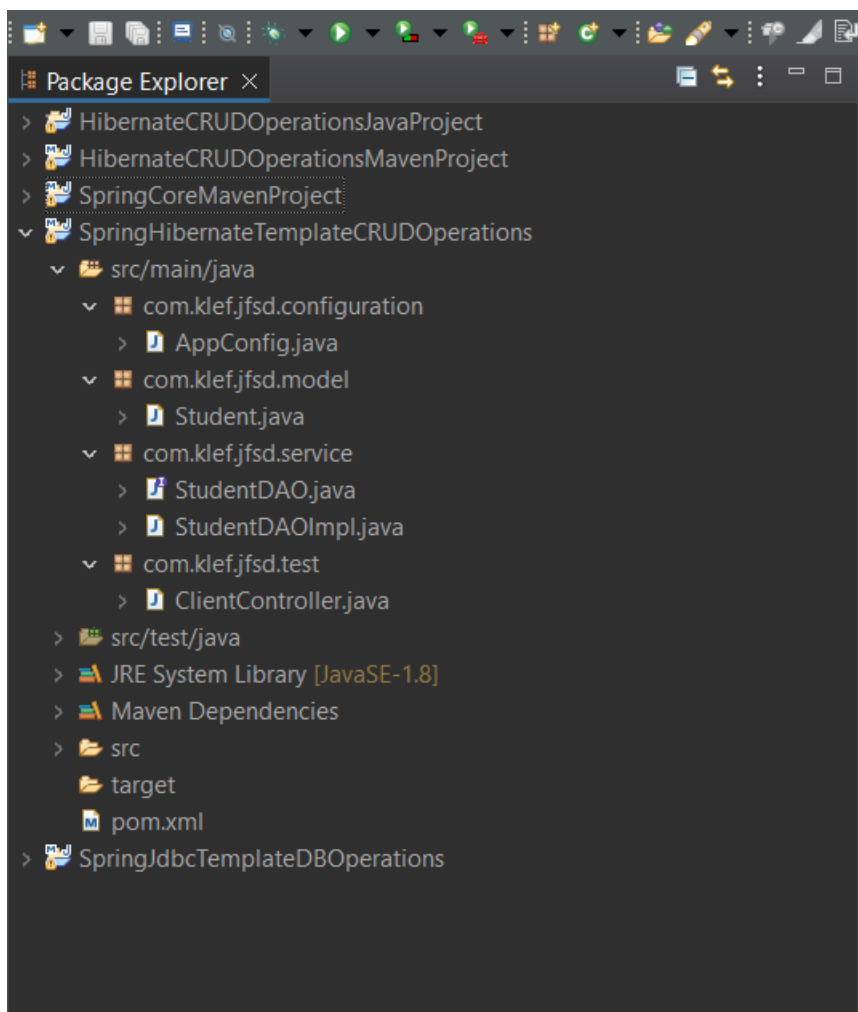


Question:

1.The Navodaya Johar school is wanting to direct a get-together of their 2021-2022 batch students. To design this occasion and oversee, principal appointed a student from a similar batch. To do this the student needed to make hibernate application with spring application. He initially made a table in database to store the subtleties of his companions who are going to the gathering. He made the table with the name Reunion with properties ID No, Name, Contact Number, Amount paid, and Status. ID.NO being the primary key has the most extreme size of 4 digits and Status speaks to how much sum has been paid i.e., completely paid, or partially paid, or not paid. Note that the sum should be paid to go to the gathering is 2000 rupees. Now he needs to make a java project with springs and hibernate integration. Help him in Creating three unique classes for inserting subtleties in database. First make a class for inserting the details of the students who are going to the get-together gathering. Presently make another class for retrieving the amount paid by the students.

2. Now to the extension to the last question create a class file in the same java project for updating the database If the student wants to pay the amount, then update the amount in data base and print the total amount he paid till then and if he had paid the total amount the change the status to fully paid. If not, then show the amount that need to be paid by him. Also create a class file for deleting the details of students who cancelled their plan of going go get-together because of some issues.

### Architecture of Project:



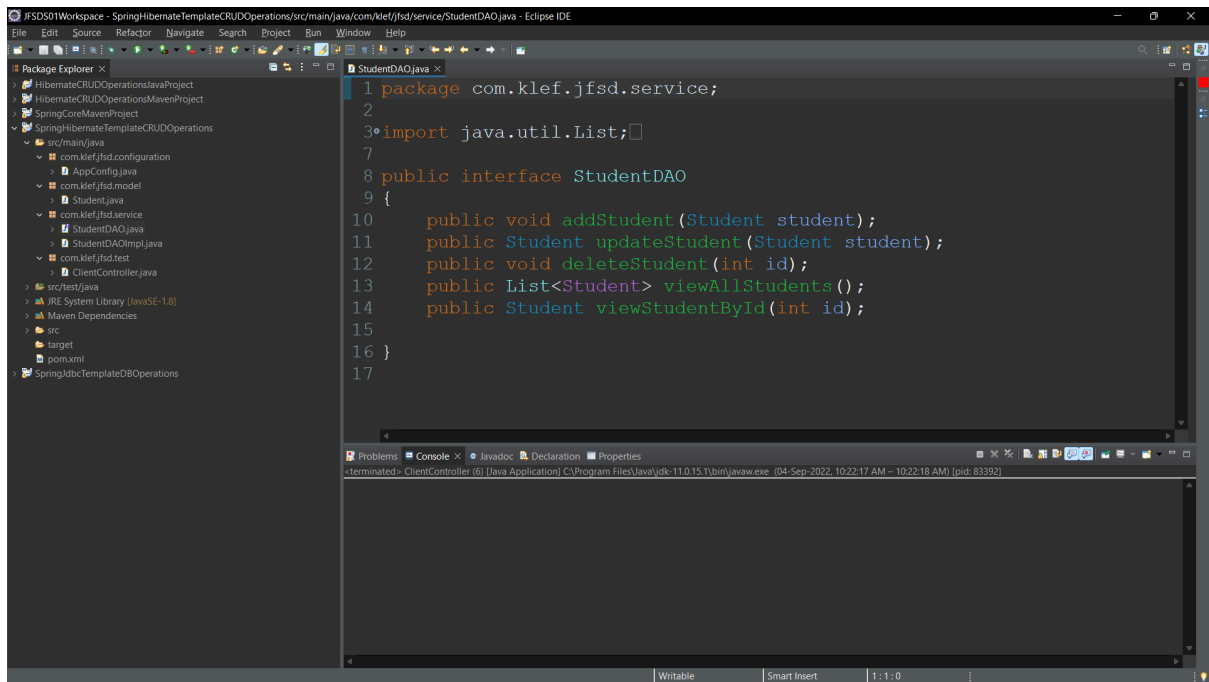
### Student.java

```
JFSDS01Workspace - SpringHibernateTemplateCRUDOperations/src/main/java/com/klef/jfsd/model/Student.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help
AppConfig.java Employee.java EmployeeService.java ClientController.java AppConfig.java Student.java x
1 package com.klef.jfsd.model;
2
3 import javax.persistence.*;
4
5 @Entity
6 @Table(name="student_table")
7 public class Student
8 {
9     @Id
10    @GeneratedValue //auto generator class
11    @Column(name="student_id")
12    private int id;
13    @Column(name="student_name", nullable = false, length = 200)
14    private String name;
15    @Column(name="student_gender", nullable = false)
16    private String gender;
17    @Column(name="student_dob", nullable = false)
18    private String dob; //date of birth
19    @Column(name="student_department", nullable = false)
20    private String department; //CSE or ECE or CSIT
21    @Column(name="student_program", nullable = false)
22    private String program; //B.Tech or M.Tech
23    @Column(name="student_cgpa", nullable = false)
24    private double cgpa;
25    @Column(name="student_backlogs", nullable = false)
26    private int backlogs;
27
28    private String emailid;
29    @Column(name="student_contactno", nullable = false, length = 100, unique = true)
30    private String contactno;
31    @Column(name="student_location", nullable = false, length = 200)
32    private String location;
33    public int getId() {
34        return id;
35    }
36    public void setId(int id) {
37        this.id = id;
38    }
39    public String getName() {
40        return name;
41    }
42    public void setName(String name) {
43        this.name = name;
44    }
45    public String getGender() {
46        return gender;
47    }
48    public void setGender(String gender) {
49        this.gender = gender;
50    }
51    public String getDob() {
52        return dob;
53    }
54}
```

```
JFSDS01Workspace - SpringHibernateTemplateCRUDOperations/src/main/java/com/kief/jfsd/model/Student.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help
AppConfig.java Employee.java EmployeeService.java ClientController.java AppConfig.java Student.java x
71 }
72* public void setCgpa(double cgpa) {
73     this.cgpa = cgpa;
74 }
75* public int getBacklogs() {
76     return backlogs;
77 }
78* public void setBacklogs(int backlogs) {
79     this.backlogs = backlogs;
80 }
81* public String getEmailid() {
82     return emailid;
83 }
84* public void setEmailid(String emailid) {
85     this.emailid = emailid;
86 }
87* public String getContactno() {
88     return contactno;
89 }
90* public void setContactno(String contactno) {
91     this.contactno = contactno;
92 }
93* public String getLocation() {
94     return location;
95 }
96* public void setLocation(String location) {
97     this.location = location;
98 }
99 }
```

```
JFSDS01Workspace - SpringHibernateTemplateCRUDOperations/src/main/java/com/kief/jfsd/model/Student.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help
AppConfig.java Employee.java EmployeeService.java ClientController.java AppConfig.java Student.java x
83 }
84* public void setEmailid(String emailid) {
85     this.emailid = emailid;
86 }
87* public String getContactno() {
88     return contactno;
89 }
90* public void setContactno(String contactno) {
91     this.contactno = contactno;
92 }
93* public String getLocation() {
94     return location;
95 }
96* public void setLocation(String location) {
97     this.location = location;
98 }
99* @Override
100* public String toString() {
101     return "Student [id=" + id + ", name=" + name + ", gender=" + gender + ", dob=" + dob + ",
102         + department + ", program=" + program + ", cgpa=" + cgpa + ", backlogs=" + backlog
103         + emailid + ", contactno=" + contactno + ", location=" + location + "]\n";
104 }
105 }
106 }
107 }
108 }
```

## StudentDAO.java interface



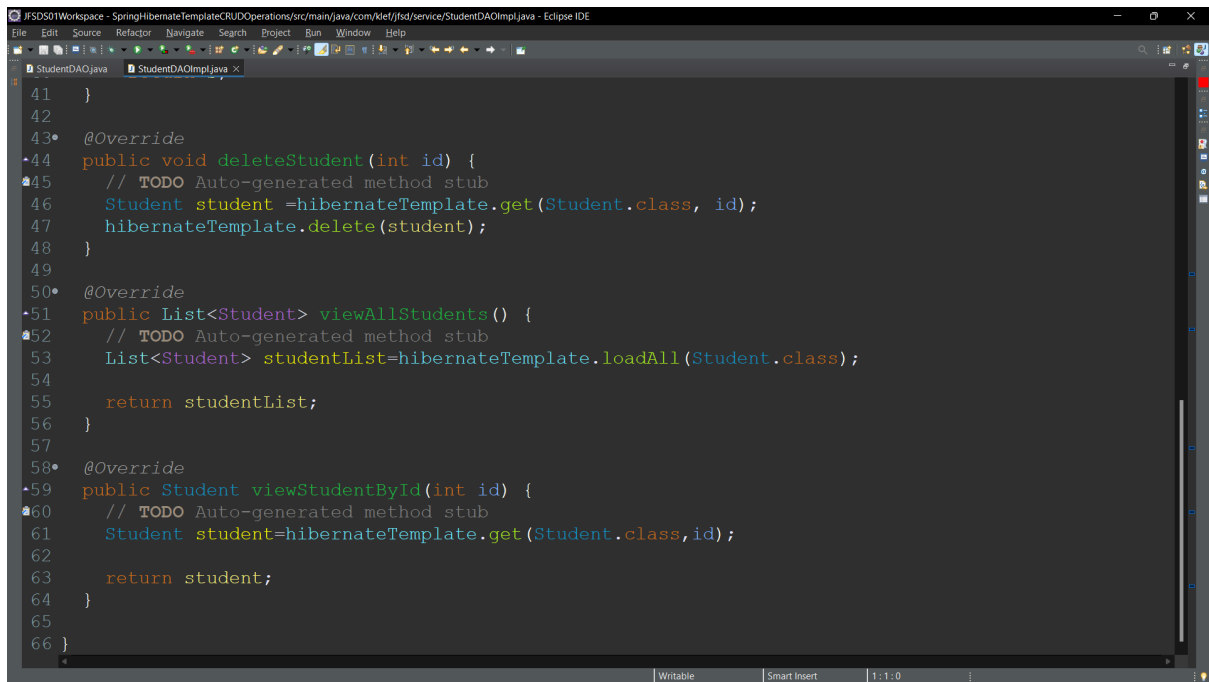
The screenshot shows the Eclipse IDE interface. The Package Explorer on the left displays the project structure, including the package `com.klef.jfsd.service` where `StudentDAO.java` is located. The main editor window shows the following Java code for the `StudentDAO` interface:

```
1 package com.klef.jfsd.service;
2
3 import java.util.List;
4
5 public interface StudentDAO
6 {
7     public void addStudent(Student student);
8     public Student updateStudent(Student student);
9     public void deleteStudent(int id);
10    public List<Student> viewAllStudents();
11    public Student viewStudentById(int id);
12 }
13
14
```

The bottom of the IDE shows the Console window with the message: `<terminated> ClientController (6) [Java Application] C:\Program Files\Java\jdk-11.0.15\bin\javaw.exe (04-Sep-2022, 10:22:17 AM - 10:22:18 AM) [pid: 83392]`.

## StudentDAOImpl.java class

```
JFSDS01Workspace - SpringHibernateTemplateCRUDOperations/src/main/java/com/klef/jfsd/service/StudentDAOImpl.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help
StudentDAOImpl.java x
1 package com.klef.jfsd.service;
2
3 import java.util.List;
10
11 @Transactional
12 public class StudentDAOImpl implements StudentDAO {
13     public HibernateTemplate hibernateTem
14
15
16     public HibernateTemplate getHibernateTemplate() {
17         return hibernateTemplate;
18     }
19
20     public void setHibernateTemplate(HibernateTemplate hibernateTemplate) {
21         this.hibernateTemplate = hibernateTemplate;
22     }
23
24     @Override
25     public void addStudent(Student student) {
26         // TODO Auto-generated method stub
27         hibernateTemplate.save(student);
28     }
29
30     @Override
31     public Student updateStudent(Student student) {
32         // TODO Auto-generated method stub
33         Student s = hibernateTemplate.get(Student.class, student.getId());
34
35         s.setContactno(student.getContactno());
36         s.setCgpa(student.getCgpa());
37         s.setBacklogs(student.getBacklogs());
38         s.setLocation(student.getLocation());
39
40         return s;
41     }
42
43     @Override
44     public void deleteStudent(int id) {
45         // TODO Auto-generated method stub
46         Student student = hibernateTemplate.get(Student.class, id);
47         hibernateTemplate.delete(student);
48     }
49
50     @Override
51     public List<Student> viewAllStudents() {
52         // TODO Auto-generated method stub
53         List<Student> studentList = hibernateTemplate.loadAll(Student.class);
54     }
55 }
```



```
41 }
42
43 @Override
44 public void deleteStudent(int id) {
45 // TODO Auto-generated method stub
46 Student student =hibernateTemplate.get(Student.class, id);
47 hibernateTemplate.delete(student);
48 }
49
50 @Override
51 public List<Student> viewAllStudents() {
52 // TODO Auto-generated method stub
53 List<Student> studentList=hibernateTemplate.loadAll(Student.class);
54
55 return studentList;
56 }
57
58 @Override
59 public Student viewStudentById(int id) {
60 // TODO Auto-generated method stub
61 Student student=hibernateTemplate.get(Student.class,id);
62
63 return student;
64 }
65
66 }
```

ClientController.java

```
JFSDS01Workspace - SpringHibernateTemplateCRUDOperations/src/main/java/com/klef/jfsd/test/ClientController.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help
StudentDAO.java StudentDAOImpl.java ClientController.java X
1 package com.klef.jfsd.test;
2
3 import java.util.List;
10
11 public class ClientController {
12
13     AnnotationConfigApplicationContext applicationContext=new AnnotationConfigApplicationContext(AppC
14     StudentDAO dao=applicationContext.getBean(StudentDAO.class);
15
16     public static void main(String[] args) {
17         ClientController clientController=new ClientController();
18         //clientController.AddStudentRecord();
19         //clientController.UpdateStudentRecord();
20         //clientController.DeleteStudentRecord();
21         // clientController.ViewStudentRecordByID();
22         clientController.ViewAllStudents();
23     }
24     public void AddStudentRecord() {
25
26         Student student=new Student();
27         student.setName("Srinivas");
28         student.setGender("MALE");
29         student.setDob("09/10/2002");
30         student.setDepartment("ECE");
31         student.setProgram("M.Tech");
32         student.setCgpa(7.6);
33     }
```

```
JFSDS01Workspace - SpringHibernateTemplateCRUDOperations/src/main/java/com/klef/jfsd/test/ClientController.java - Eclipse IDE
File Edit Source Refactor Navigate Search Project Run Window Help
StudentDAO.java StudentDAOImpl.java ClientController.java X
34     student.setEmailid("srinivas@gmail.com");
35     student.setContactno("7756788402");
36     student.setLocation("Kadapa");
37
38     dao.addStudent(student);
39     System.out.println("Student Record added successfully");
40 }
41
42     public void UpdateStudentRecord() {
43
44         Student student=new Student();
45         student.setId(5);
46         student.setContactno("8977295499");
47         student.setCgpa(9.45);
48         student.setBacklogs(1);
49         student.setLocation("Guntur");
50
51         dao.updateStudent(student);
52         System.out.println("Student Record updated successfully");
53     }
54
55     public void DeleteStudentRecord() {
56
57         dao.deleteStudent(6);
58         System.out.println("Student Record deleted successfully");
59     }
```