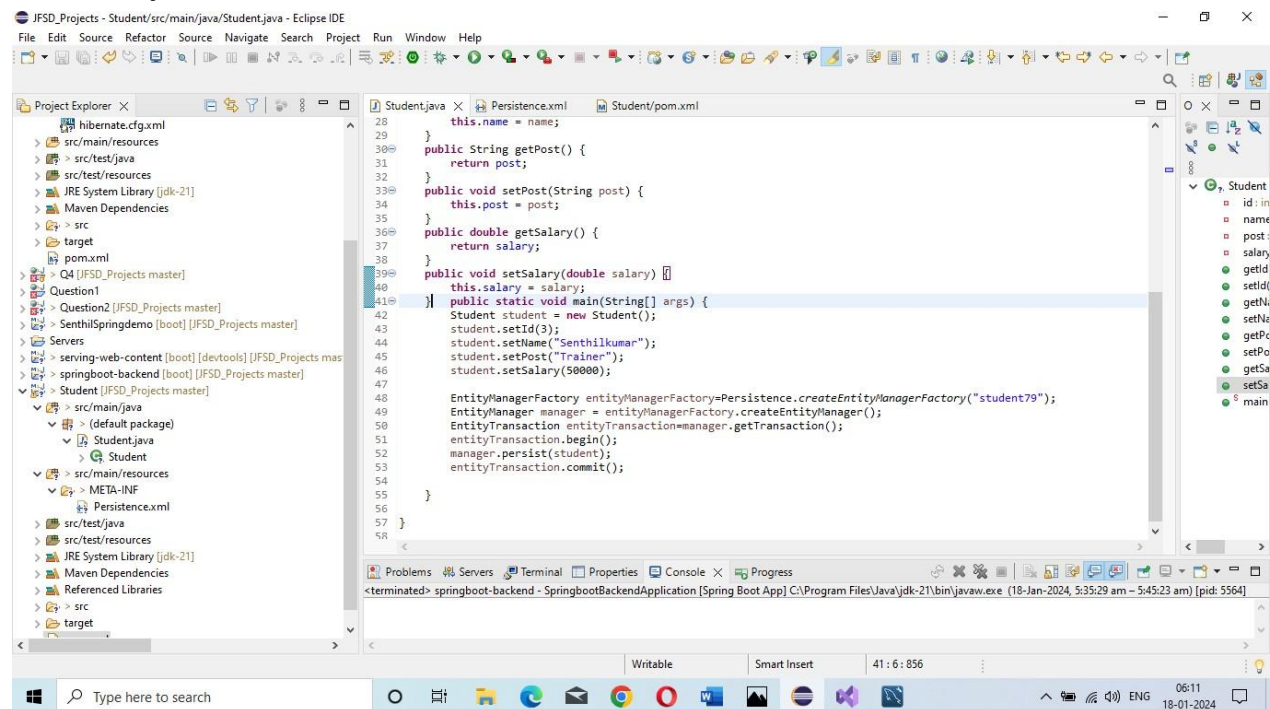


Java Full Stack application with Hibernate CRUD operations

Dr.B.Hanumanthu_ISTE60

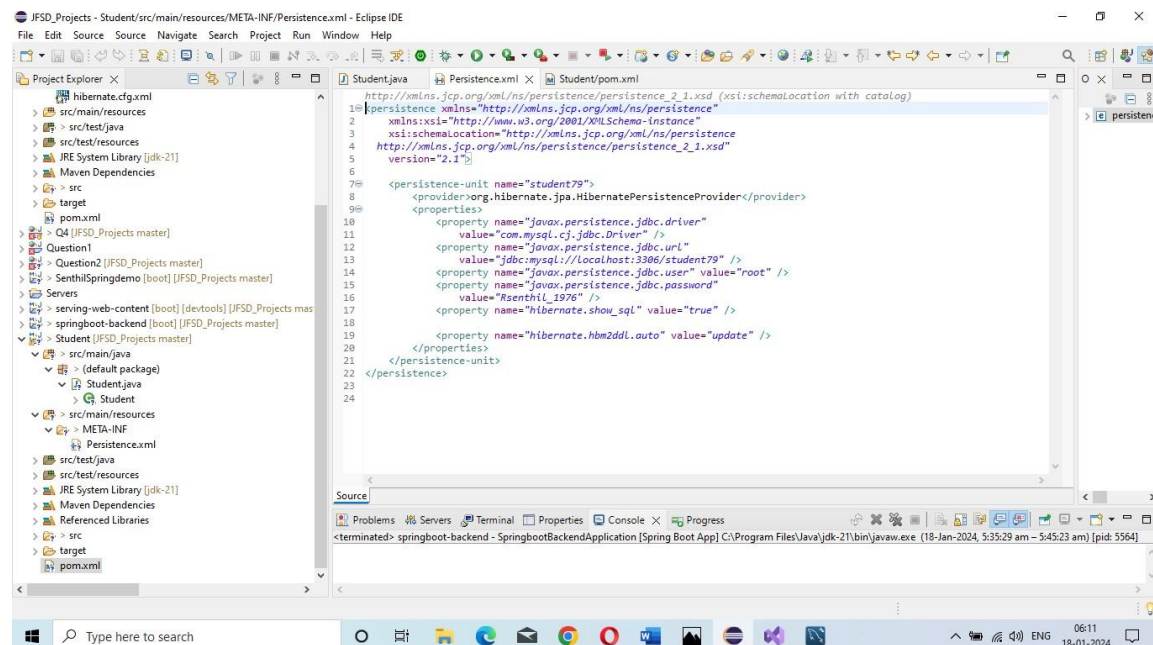
Student.java



The screenshot shows the Eclipse IDE with the `Student.java` file open. The code defines a `Student` class with attributes `id`, `name`, `post`, and `salary`. It includes methods for `getPost()`, `setPost(String post)`, `getSalary()`, and `setSalary(double salary)`. A `main` method is also present, which creates a `Student` object, sets its attributes, and uses `EntityManagerFactory` and `EntityManager` to persist the object. The `Project Explorer` on the left shows the project structure, including `hibernate.cfg.xml`, `src/main/resources`, `src/test/resources`, `JRE System Library [jdk-21]`, `Maven Dependencies`, `target`, `pom.xml`, and `Q4 [JFSD_Projects master]`.

```
28     this.name = name;
29 }
30 public String getPost() {
31     return post;
32 }
33 public void setPost(String post) {
34     this.post = post;
35 }
36 public double getSalary() {
37     return salary;
38 }
39 public void setSalary(double salary) {
40     this.salary = salary;
41 }
42 public static void main(String[] args) {
43     Student student = new Student();
44     student.setId(3);
45     student.setName("Senthilkumar");
46     student.setPost("Trainer");
47     student.setSalary(50000);
48
49     EntityManagerFactory entityManagerFactory = Persistence.createEntityManagerFactory("student79");
50     EntityManager manager = entityManagerFactory.createEntityManager();
51     EntityTransaction entityTransaction = manager.getTransaction();
52     entityTransaction.begin();
53     manager.persist(student);
54     entityTransaction.commit();
55 }
56 }
57 }
58 }
```

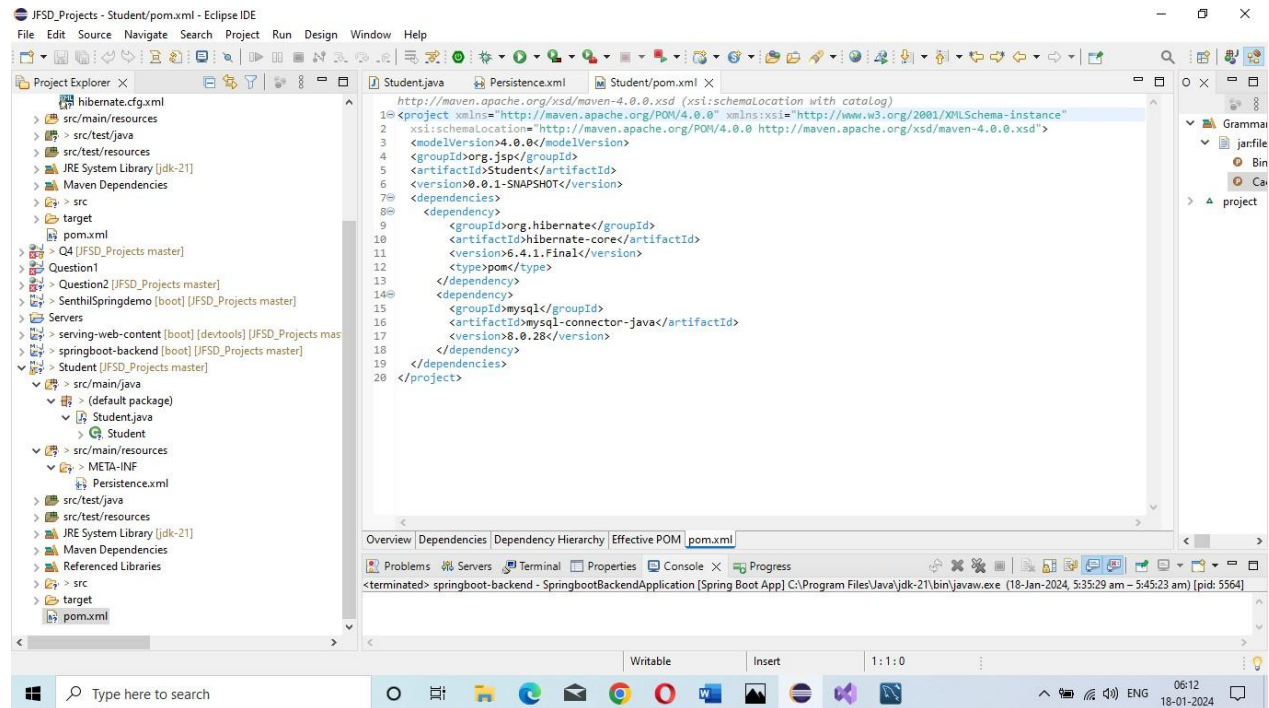
Persistence.xml



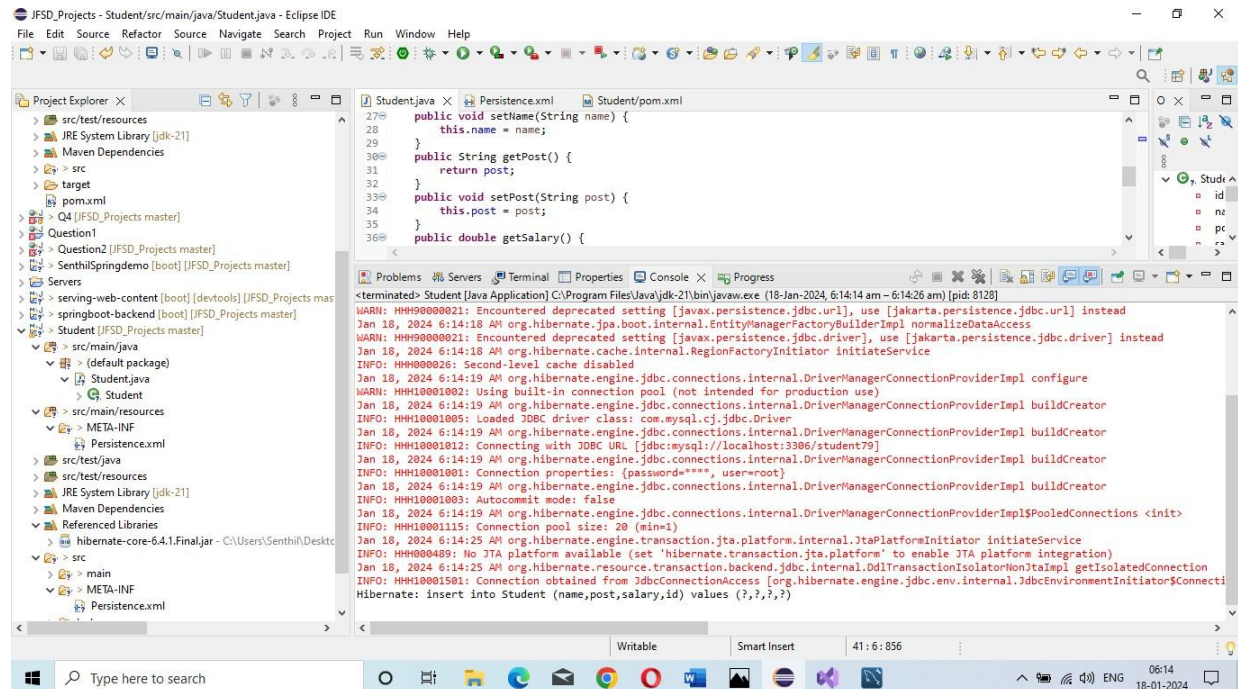
The screenshot shows the Eclipse IDE with the `Persistence.xml` file open. The code defines the persistence configuration for the application, including the `xmlns` namespace, the `xs:schemaLocation`, and the `entity-name` and `provider` elements. The `properties` element is used to configure the `javax.persistence.jdbc.driver`, `javax.persistence.jdbc.url`, `javax.persistence.jdbc.user`, `javax.persistence.jdbc.password`, and `hibernate.hbm2ddl.auto` properties. The `Project Explorer` on the left shows the project structure, including `hibernate.cfg.xml`, `src/main/resources`, `src/test/resources`, `JRE System Library [jdk-21]`, `Maven Dependencies`, `target`, `pom.xml`, and `Q4 [JFSD_Projects master]`.

```
10 <http://xmlns.jcp.org/xml/ns/persistence/persistence_2_1.xsd (xsi:schemaLocation with catalog)
11 <persistence xmlns="http://xmlns.jcp.org/xml/ns/persistence"
12     xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
13     xsi:schemaLocation="http://xmlns.jcp.org/xml/ns/persistence
14     http://xmlns.jcp.org/xml/ns/persistence/persistence_2_1.xsd"
15     version="2.1">
16
17     <persistence-unit name="student79">
18         <provider>org.hibernate.jpa.HibernatePersistenceProvider</provider>
19         <properties>
20             <property name="javax.persistence.jdbc.driver"
21                 value="com.mysql.cj.jdbc.Driver" />
22             <property name="javax.persistence.jdbc.url"
23                 value="jdbc:mysql://localhost:3306/student79" />
24             <property name="javax.persistence.jdbc.user" value="root" />
25             <property name="javax.persistence.jdbc.password"
26                 value="Rsenhili_1976" />
27             <property name="hibernate.show_sql" value="true" />
28             <property name="hibernate.hbm2ddl.auto" value="update" />
29         </properties>
30     </persistence-unit>
31 </persistence>
```

Pom.xml



Output



MySQL Workbench: DB- student60

The screenshot shows the MySQL Workbench interface. On the left, the 'SCHEMAS' pane displays a tree view of databases, including 'student79' and 'student'. The 'student' table is selected. The 'Columns' pane shows the table's structure: 'id' (int PK), 'name' (varchar(255)), 'post' (varchar(255)), and 'salary' (double). The 'Query' pane contains the SQL statement: `SELECT * FROM student79.student;`. The 'Result Grid' displays the following data:

	id	name	post	salary
1	1	Senthikumar	Developer	10000
2	2	Aikonsolutions	Trainer	10000
3	3	Senthikumar	Trainer	50000

The 'Output' pane shows the execution details: `student 1 x`, `SELECT * FROM student79.student LIMIT 0, 1000`, and a message: `3 row(s) returned`. The 'Duration / Fetch' is `0.016 sec / 0.000 sec`.

Student60-Database

id	name	post	salary
----	------	------	--------