Appendice B:

Hibernate

Per la persistenza dei dati è stato utilizzato "Hibernate", un tool full ORM (Object-relational mapping) open source, collegandolo tramite jdbc a un database remoto, Amazon RDS con engine MySql.

```xml
1  <!DOCTYPE hibernate-configuration PUBLIC
2          "-//Hibernate/Hibernate Configuration DTD 3.0//EN"
3          "http://www.hibernate.org/dtd/hibernate-configuration-3.0.dtd">
4
5  <hibernate-configuration>
6
7      <session-factory>
8
9          <!-- JDBC Database connection settings -->
10         <property name="connection.driver_class">com.mysql.jdbc.Driver</property>
11         <property name="connection.url">jdbc:mysql://gash-db.cre8x1bx4cxq.eu-west-1.rds.amazonaws.com:3306/gash_db</property>
12         <property name="connection.username">admin</property>
13         <property name="connection.password">*****</property>
14
15         <!-- JDBC connection pool settings ... using built-in test pool -->
16         <property name="connection.pool_size">1</property>
17
18         <!-- Select our SQL dialect -->
19         <property name="dialect">org.hibernate.dialect.MySQLDialect</property>
20
21         <!-- Echo the SQL to stdout -->
22         <property name="show_sql">true</property>
23
24         <property name="hibernate.current_session_context_class">thread</property>
25
26
27     </session-factory>
28
29  </hibernate-configuration>
```

Figure 1 File configurazione hibernate.cfg.xml

Java Hibernate annotations

```java
1  package classes;
2
3  import javax.persistence.Column;
7
8  @Entity
9  @Table(name="Cliente")
10 public class Cliente {
11     @Id //Primary key
12     @Column(name="codiceFiscale")
13     private String codiceFiscale;
14
15     @Column(name="nomecognome_o_ragionesociale")
16     private String nomecognome_o_ragionesociale;
17
18     @Column(name="partitaIVA")
19     private int partitaIVA;
20
21     @Column(name="domicilioFiscale")
22     private String domicilioFiscale;
23
24     @Column(name="email")
25     private String email;
26
27     @Column(name="numVendite")
28     private int numVendite=0;
29
```

Figure 2 Classe Cliente persistente

```java
1  package classes;
2  import org.hibernate.Session;
5
6
7  public class HibernateUtil {
8
9      private static SessionFactory factory;
10
11     static {
12         try{
13
14             factory = new Configuration()
15                     .configure("hibernate.cfg.xml")
16                     .addAnnotatedClass(Cliente.class)
17                     .buildSessionFactory();
18         } catch (Exception e){
19             e.printStackTrace();
20
21 }
22 }
23
24     public static SessionFactory getFactory() {
25         return factory;
26     }
27     public static void kill(){
28         factory.close();
29     }
30 }
31
```

Figure 3 HibernateUtil