Web Programlama Dersi 3.Hafta

Dr. Öğretim Üyesi Sinan TOKLU

JPA KURULUM

DATA (D:) > Sinan > jpa_kurulum > jpa_mysql_dosyalar

Ad	Değiştirme tarihi
jpa_libs	2.01.2021 20:58
EntityUtil.java	23.01.2011 10:48
log4j.properties	23.01.2011 10:51
persistence.xml	23.01.2011 10:34

JPA KURULUM

DATA (D:) > Sinan > jpa_kurulum > jpa_mysql_dosyalar > jpa_libs ✓ ↻   🔎 Ara: jpa_libs

Ad	Değiştirme tarihi	Tür	Boyut
ant-antlr.jar	30.01.2010 13:31	Executable Jar File	6 KB
antlr.jar	30.01.2010 13:31	Executable Jar File	434 KB
antlr-runtime.jar	30.01.2010 13:31	Executable Jar File	114 KB
dom4j.jar	30.01.2010 13:38	Executable Jar File	303 KB
hibernate-annotations.jar	30.01.2010 13:31	Executable Jar File	274 KB
hibernate-commons-annotations.jar	30.01.2010 13:31	Executable Jar File	66 KB
hibernate-core.jar	30.01.2010 13:31	Executable Jar File	2.223 KB
hibernate-entitymanager.jar	30.01.2010 13:31	Executable Jar File	117 KB
hibernate-search.jar	30.01.2010 13:31	Executable Jar File	307 KB
hibernate-validator.jar	30.01.2010 13:31	Executable Jar File	62 KB
javassist.jar	31.01.2010 13:02	Executable Jar File	581 KB
jta.jar	31.01.2010 13:07	Executable Jar File	13 KB
log4j.jar	30.01.2010 13:39	Executable Jar File	359 KB
lucene-core.jar	31.01.2010 13:27	Executable Jar File	804 KB
mysql-connector-java-5.1.7-bin.jar	31.01.2010 13:26	Executable Jar File	694 KB
persistence-api.jar	31.01.2010 13:09	Executable Jar File	51 KB
slf4j-api.jar	30.01.2010 13:38	Executable Jar File	15 KB
slf4j-log4j12.jar	30.01.2010 13:38	Executable Jar File	9 KB

JPA KURULUM

JPA KURULUM

```
∨ 🗁 WebContent
   › 🗁 META-INF
   ∨ 🗁 WEB-INF
      ∨ 🗁 lib
           📄 ant-antlr.jar
           📄 antlr-runtime.jar
           📄 antlr.jar
           📄 common-annotations.jar
           📄 commons-beanutils.jar
           📄 commons-collections.jar
           📄 commons-digester.jar
           📄 commons-logging.jar
           📄 dom4j.jar
           📄 hibernate-annotations.jar
           📄 hibernate-commons-annotations.jar
           📄 hibernate-core.jar
           📄 hibernate-entitymanager.jar
           📄 hibernate-search.jar
           📄 hibernate-validator.jar
           📄 javassist.jar
           📄 jstl.jar
           📄 jta.jar
           📄 log4j.jar
           📄 lucene-core.jar
           📄 mysql-connector-java-5.1.7-bin.jar
           📄 persistence-api.jar
           📄 primefaces-5.0.jar
           📄 slf4j-api.jar
           📄 slf4j-log4j12.jar
           📄 standard.jar
      📄 faces-config.xml
      📄 web.xml
```

JPA KURULUM

faces-config.xml   EntityUtil.java ⊠

```java
1  package com.mergeCons.egitim.util;
2
3⊕ import javax.persistence.EntityManager;
6
7  public class EntityUtil {
8      private static EntityManagerFactory entityManagerFactory;
9      public static final ThreadLocal<EntityManager> threadLocal = new ThreadLocal<EntityManager>();
10
11⊝     public static EntityManagerFactory getEntityManagerFactory() {
12         if (entityManagerFactory == null) {
13             entityManagerFactory = Persistence
14                     .createEntityManagerFactory("baglantiBir");
15         }
16         return entityManagerFactory;
17     }
18
19⊝     public static EntityManager getEntityManager() {
20         EntityManager entityManager = threadLocal.get();
21         if (entityManager == null) {
22             entityManager = getEntityManagerFactory().createEntityManager();
23             threadLocal.set(entityManager);
24         }
25         return entityManager;
26     }
27 }
28
```

JPA KURULUM

```xml
faces-config.xml        EntityUtil.java        *persistence.xml ⊠

 1 <?xml version="1.0" encoding="UTF-8"?>
 2 <persistence version="1.0"
 3     xmlns="http://java.sun.com/xml/ns/persistence" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
 4     xsi:schemaLocation="http://java.sun.com/xml/ns/persistence
 5 http://java.sun.com/xml/ns/persistence/persistence_1_0.xsd">
 6
 7     <persistence-unit name="baglantiBir" transaction-type="RESOURCE_LOCAL">
 8         <provider>org.hibernate.ejb.HibernatePersistence</provider>
 9         <properties>
10             <property name="hibernate.dialect" value="org.hibernate.dialect.MySQLDialect" />
11             <property name="hibernate.connection.driver_class" value="com.mysql.jdbc.Driver" />
12             <property name="hibernate.connection.password" value="root" />
13             <property name="hibernate.connection.username" value="root" />
14             <property name="hibernate.connection.url" value="jdbc:mysql://localhost:3306/ankara_gazi" />
15             <property name="hibernate.cache.provider_class" value="org.hibernate.cache.NoCacheProvider" />
16             <property name="hibernate.hbm2ddl.auto" value="update" />
17             <property name="hibernate.show_sql" value="true" />
18             <property name="hibernate.format_sql" value="true" />
19             <property name="hibernate.connection.autocommit" value="true" />
20         </properties>
21     </persistence-unit>
22
23
24 </persistence>
```

JPA KURULUM

JPA KURULUM
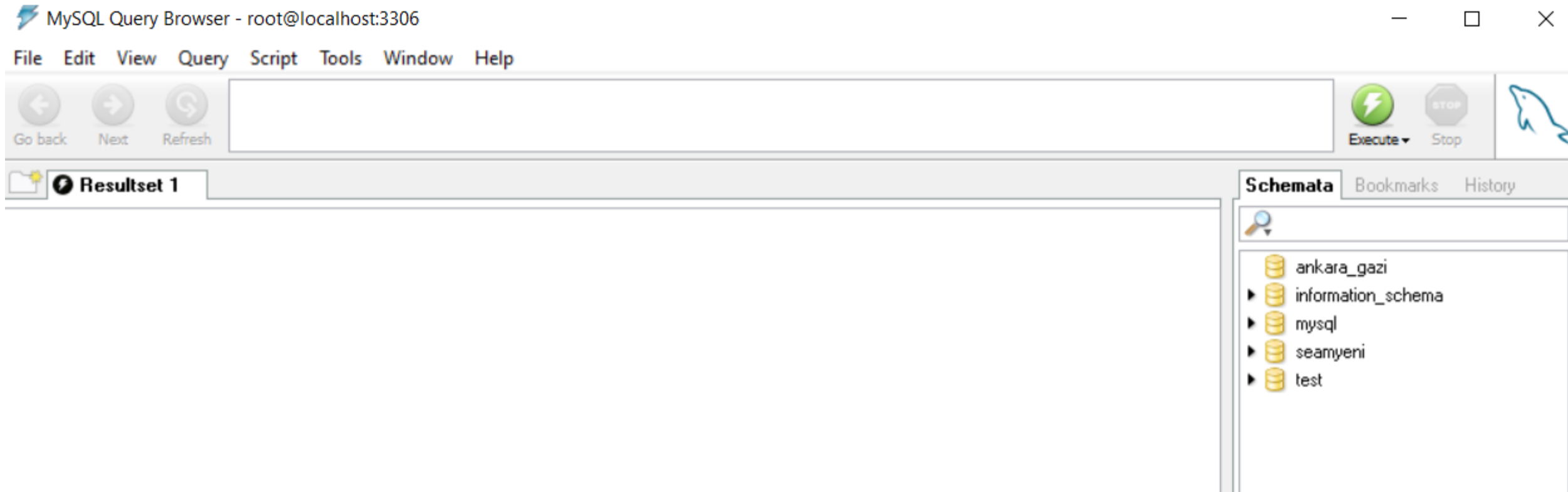
JSF-JPA-MODEL


```java
  1  import javax.persistence.Column;

  6
  7  @Entity
  8  @Table(name = "GaziUni")
  9  public class Demo {
 10      @Id
 11      @GeneratedValue
 12      private Long id;
 13      @Column(name = "ISIM_ALAN_ADI")
 14      private String ad;
 15      private String soyad;
 16      private Integer yas;
 17
 18      public String getAd() {
 19          return ad;
 20      }
 21
 22      public void setAd(String ad) {
 23          this.ad = ad;
 24      }
 25
```

JSF-JPA-MODEL

```java
7
8  public class DemoView {
9      private Demo demo = new Demo();
10     private List<Demo> listele = new ArrayList<Demo>();
11     private String kullaniciAdi;
12     private String sifre;
13
14     public String giris() {
15         if (kullaniciAdi.equals("Sinan") && sifre.equals("12345"))
16             return "dogru";
17         else
18             return "yanlis";
19     }
20
21     public void kaydet() {
22         EntityManager en = EntityUtil.getEntityManager();
23         en.getTransaction().begin();
24         en.persist(demo);
25         en.getTransaction().commit();
26         demo = new Demo();
27     }
28
29     public void sil() {
30         EntityManager en = EntityUtil.getEntityManager();
31         en.getTransaction().begin();
32         en.remove(demo);
33         en.getTransaction().commit();
34         demo = new Demo();
35     }
```

```
37⊖      public void duzenle() {
38           EntityManager en = EntityUtil.getEntityManager();
39           en.getTransaction().begin();
40           en.merge(demo);
41           en.getTransaction().commit();
42           demo = new Demo();
43       }
44
45⊖      public List<Demo> getKayitListesi() {
46           EntityManager en = EntityUtil.getEntityManager();
47           return en.createQuery("from Demo").getResultList();
48
49       }
50
51⊖      public Demo getDemo() {
52           return demo;
53       }
54
55⊖      public void setDemo(Demo demo) {
56           this.demo = demo;
57       }
```

```
8  <h:head></h:head>
9  <body>
10     <f:view>
11         <h:form>
12             <h:panelGrid columns="2">
13                 Ad:<h:inputText value="#{demoView.demo.ad}" />
14                 Soyad:<h:inputText value="#{demoView.demo.soyad}" />
15                 Yas:<h:inputText value="#{demoView.demo.yas}" />
16                 <h:commandButton action="#{demoView.kaydet()}" value="KAYDET"
17                     rendered="#{demoView.demo.ad==null}" />
18                 <h:commandButton action="#{demoView.duzenle()}" value="GUNCELLE"
19                     rendered="#{demoView.demo.ad!=null}" />
20                 <h:commandButton action="geri" value="Geri" />
21             </h:panelGrid>
22             <p:dataTable value="#{demoView.kayitListesi}" var="sn">
23                 <f:facet name="header"> Kayit Listesi</f:facet>
24                 <p:column>
25                     <f:facet name="header"> Kayit Sec</f:facet>
26                     <h:commandLink value="Sec">
27                         <f:setPropertyActionListener value="#{sn}"
28                             target="#{demoView.demo}" />
29                     </h:commandLink>
30                 </p:column>
31                 <p:column>
32                     <f:facet name="header"> Kayit Sil</f:facet>
33                     <h:commandLink action="#{demoView.sil()}" value="Sil">
34                         <f:setPropertyActionListener value="#{sn}"
35                             target="#{demoView.demo}"></f:setPropertyActionListener>
36                     </h:commandLink>
37                 </p:column>
```

```
38⊖                        <p:column>
39                             <f:facet name="header"> Ad </f:facet>
40                             <h:outputText value="#{sn.ad}" />
41                        </p:column>
42⊖                        <p:column>
43                             <f:facet name="header"> Soyad </f:facet>
44                             <h:outputText value="#{sn.soyad}" />
45                        </p:column>
46⊖                        <p:column>
47                             <f:facet name="header"> Yas </f:facet>
48                             <h:outputText value="#{sn.yas}" />
49                        </p:column>
50                   </p:dataTable>
51             </h:form>
52        </f:view>
```

JSF-JPA-MODEL
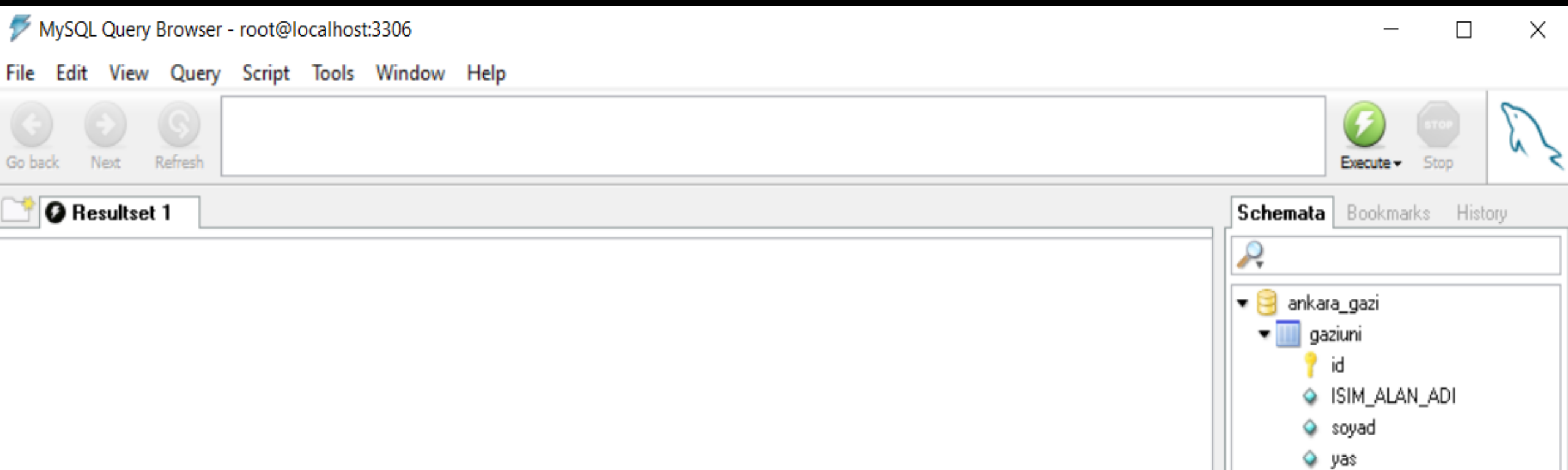
JSF-JPA-MODEL

Ad: [ ]

Soyad: [ ]

Yas: [ ]

[KAYDET] [Geri]

Kayit Listesi				
Kayit Sec	Kayit Sil	Ad	Soyad	Yas
Sec	Sil	Sinan	Toklu	107

JSF-JPA-MODEL

Ogrenci.java ⊠ | DemoView.java | OgrenciId.java

```java
  1⊕ import java.io.Serializable;□
 16
 17 @Entity
 18 @Table(name = "Sinan")
 19 public class Ogrenci implements Serializable {
 20⊝     /*
 21       * @TableGenerator(name = "id_al", table = "toklu", pkColumnName = "entity_Adi",
 22       * valueColumnName = "deger", allocationSize = 10, pkColumnValue = "Ogrenci")
 23       *
 24       * @Id
 25       *
 26       * @GeneratedValue(strategy = GenerationType.TABLE, generator = "id_al") private
 27       * Long id;
 28       */
 29⊝     @EmbeddedId
 30      private OgrenciId id2;
 31      private String ad;
 32      private String soyad;
 33      // @Range(min = 3, max = 7, message = "Yas 3 ile 7 arasinda olmali")
 34      private Integer yas;
 35      // @Future
 36      private Date tarih;
 37      // @Future
 38      private Date cikisTarihi;
 39      // @Email
 40      private String email;
 41⊝     @Version
 42      private Integer versiyonNum;
 43
 44⊝     public String getAd() {
 45          return ad;
 46      }
 47
```

JSF-JPA-MODEL

```java
 1 import java.util.List;
 2
 3 import javax.persistence.EntityManager;
 4
 5 import com.mergeCons.egitim.util.EntityUtil;
 6
 7 public class DemoView {
 8     private Ogrenci ogrenci = new Ogrenci();
 9
10     public void kaydet() {
11         EntityManager en = EntityUtil.getEntityManager();
12         en.getTransaction().begin();
13         en.persist(ogrenci);
14         en.getTransaction().commit();
15         ogrenci = new Ogrenci();
16     }
17
18     public void sil() {
19         EntityManager en = EntityUtil.getEntityManager();
20         en.getTransaction().begin();
21         en.remove(ogrenci);
22         en.getTransaction().commit();
23         ogrenci = new Ogrenci();
24     }
```

JSF-JPA-MODEL

```java
26    public void guncelle() {
27        EntityManager en = EntityUtil.getEntityManager();
28        en.getTransaction().begin();
29        en.merge(ogrenci);
30        en.getTransaction().commit();
31        ogrenci = new Ogrenci();
32    }
33
34    public List<Ogrenci> getListe() {
35        EntityManager en = EntityUtil.getEntityManager();
36        return en.createQuery("from Ogrenci").getResultList();
37
38    }
```

JSF-JPA-MODEL

```java
Ogrenci.java    DemoView.java    OgrenciId.java ⌧

1⊕ import java.io.Serializable;⬚

4
5  @Embeddable
6  public class OgrenciId implements Serializable {
7       private Long kimlikNo;
8       private String ulkeKodu;
9
10⊖      public Long getKimlikNo() {
11           return kimlikNo;
12      }
13
14⊖      public void setKimlikNo(Long kimlikNo) {
15           this.kimlikNo = kimlikNo;
16      }
17
18⊖      public String getUlkeKodu() {
19           return ulkeKodu;
20      }
21
22⊖      public void setUlkeKodu(String ulkeKodu) {
23           this.ulkeKodu = ulkeKodu;
24      }
25  }
26
```

JSF-JPA-MODEL

Ogrenci.java　　DemoView.java　　OgrenciId.java　　Ogrenci.xhtml ✕

```
 1 <!DOCTYPE html PUBLIC "-//W3C//DTD XHTML 1.0 Transitional//EN" "http://www.w3.org/TR/xhtml1/DTD/x
 2 <html xmlns="http://www.w3.org/1999/xhtml"
 3     xmlns:ui="http://java.sun.com/jsf/facelets"
 4     xmlns:f="http://java.sun.com/jsf/core"
 5     xmlns:p="http://primefaces.org/ui"
 6     xmlns:h="http://java.sun.com/jsf/html">
 7
 8 <h:head></h:head>
 9 <body>
10     <f:view>
11         <h:form>
12             <h:panelGrid columns="2">
13                 Ad:<h:inputText value="#{demoView.ogrenci.ad}" />
14                 Soyad:<h:inputText value="#{demoView.ogrenci.soyad}" />
15                 Yas:<h:inputText value="#{demoView.ogrenci.yas}" />
16                 Giris Tarih:<p:calendar value="#{demoView.ogrenci.tarih}" />
17                 Cikis Tarih:<p:calendar value="#{demoView.ogrenci.cikisTarihi}" />
18                 E_mail:<h:inputText value="#{demoView.ogrenci.email}" />
19                 <h:commandButton action="#{demoView.kaydet()}" value="Kaydet" />
20                 <h:commandButton action="#{demoView.guncelle()}" value="Guncelle" />
21             </h:panelGrid>
22             <p:dataTable value="#{demoView.liste}" var="cls">
23                 <f:facet name="header">Ogrenci Listesi</f:facet>
24                 <p:column>
25                     <f:facet name="header">Kayit Sec</f:facet>
26                     <h:commandLink value="Sec">
27                         <f:setPropertyActionListener value="#{cls}"
28                             target="#{demoView.ogrenci}" />
29                     </h:commandLink>
30                 </p:column>
```