

CHUYÊN ĐỀ JAVA

HIBERNATE MAPPING

ONE-TO-ONE

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Nội dung trình bày

- One to one
- Lazy
- Fetch
- Cascade

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Quan hệ một-một (one-to-one)



A	
PK	IDA
	...

B	
PK	IDB
FK1 + UNIQUE	IDA
	...

Quan hệ một-một (one-to-one)

- Trong ứng dụng quản lý sinh viên
 - Mỗi sinh viên có một giấy chứng minh nhân dân
 - Mỗi chứng minh nhân dân thuộc về một sinh viên
- Mỗi quan hệ giữa sinh viên và chứng minh nhân dân là mối quan hệ một-một (one-to-one)

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Quan hệ một-một (one-to-one)

Sinhvien

1

1

ChungMinhNhanDan

SinhVien		
	MaSinhVien	SoCMND
▶	0712111	111222333
	0712222	222333444
	0712333	333444555

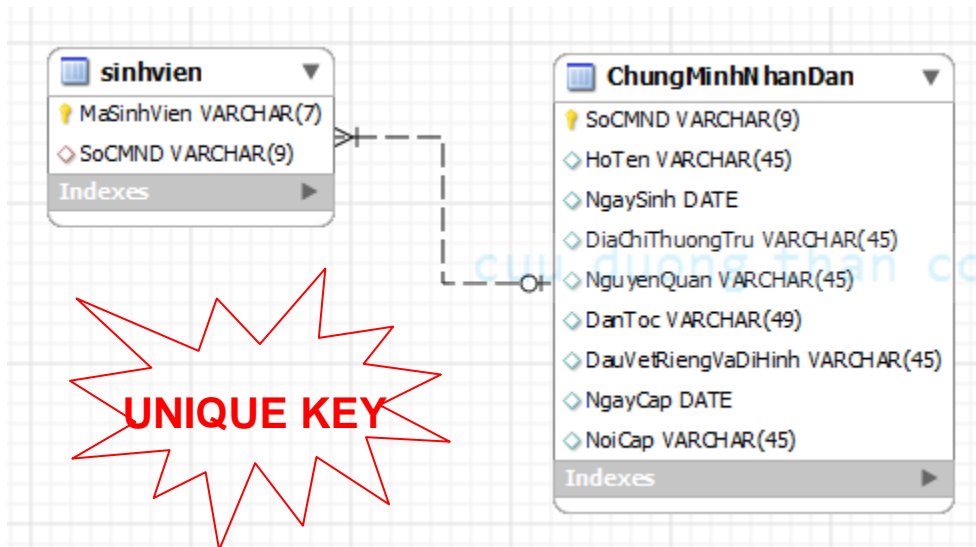
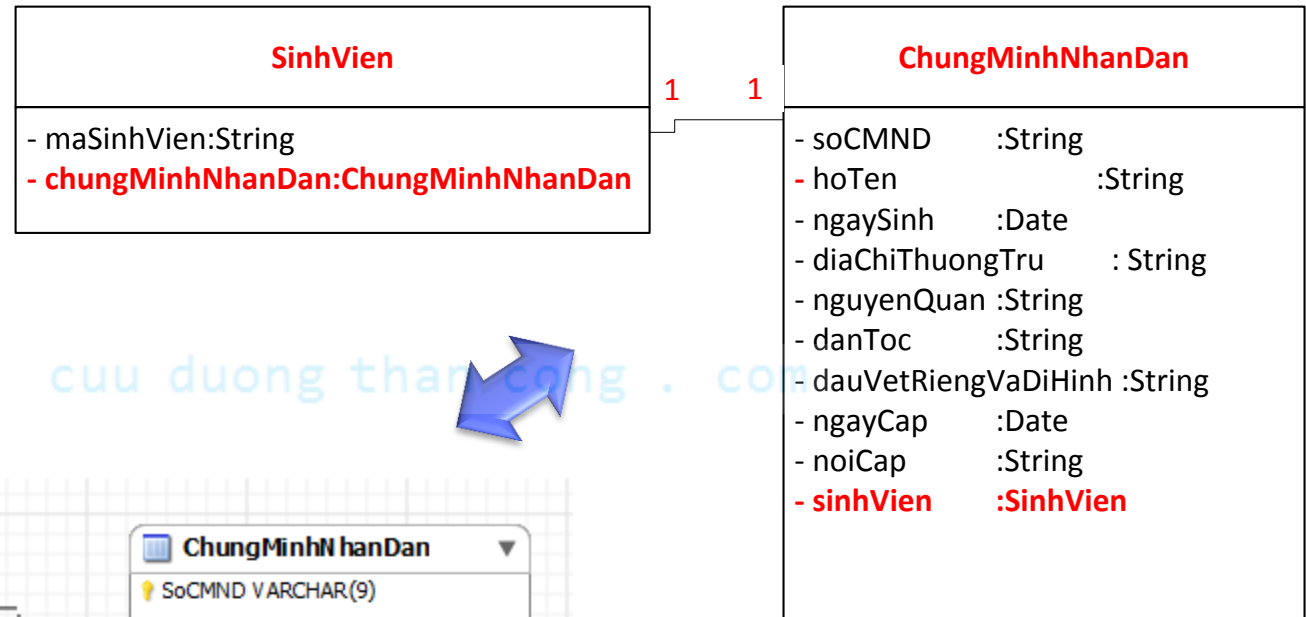


sinhvien	
MaSinhVien	VARCHAR(7)
SoCMND	VARCHAR(9)
Indexes	

ChungMinhNhanDan	
SoCMND	VARCHAR(9)
HoTen	VARCHAR(45)
NgaySinh	DATE
DiaChiThuongTru	VARCHAR(45)
NguyenQuan	VARCHAR(45)
DanToc	VARCHAR(49)
DauVetRiengVaDiHinh	VARCHAR(45)
NgayCap	DATE
NoiCap	VARCHAR(45)
Indexes	

ChungMinhNhanDan									
	SoCMND	HoTen	NgaySinh	DiaChiThuongTru	NguyenQuan	DanToc	DauVetRiengVaDiHinh	NgayCap	NoiCap
▶	111222333	Nguyễn Văn Lý	1985-01-01	220 Nguyễn Văn Cừ Q1 TPHCM	Nam Định	Kinh	Sẹo thẳng 2cm trên sau mép trái	2005-03-20	TPHCM
	222333444	Trần Bảo Chung	1984-02-19	230 Lê Đại Hành Q11 TPHCM	Long An	Khơ me	Sẹo cong 5cm trên mũi	2004-01-15	TPHCM
	333444555	Lê Văn Sáng	1983-03-24	Ấp Hòa Hiệp Xã Trung Thành H...	Hà Nội	Tày	Sẹo thẳng 3cm bên má phải	0000-00-00	Vĩnh Long

Quan hệ một-một (one-to-one)



SinhVien POJO

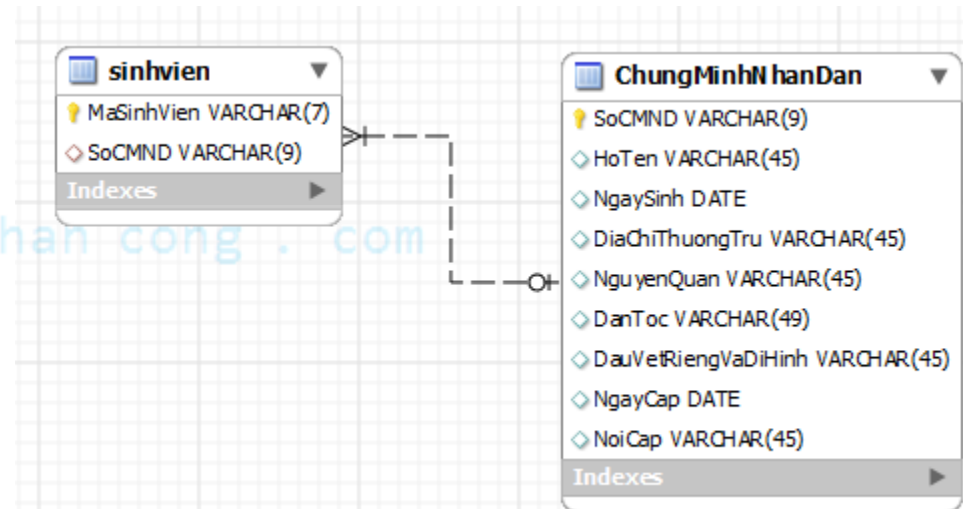


CMND POJO

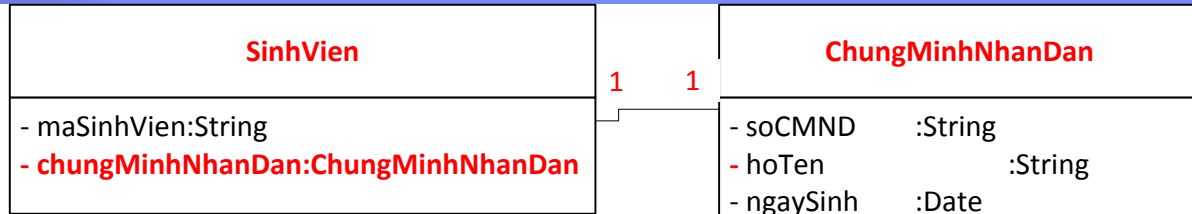


Quan hệ một-một (one-to-one)

- Mapping mỗi quan hệ một-một giống như mapping trong mỗi quan hệ nhiều-một
 - Nhưng thêm thuộc tính **unique="true"**
- Có thể khai báo sử dụng thuộc tính
 - **Lazy**
 - **Fetch**
 - **cascade**



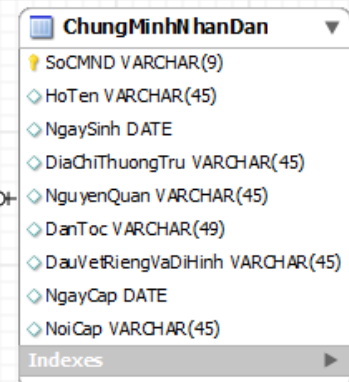
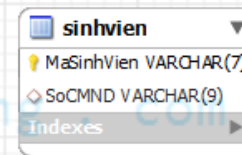
SinhVien.hbm.xml



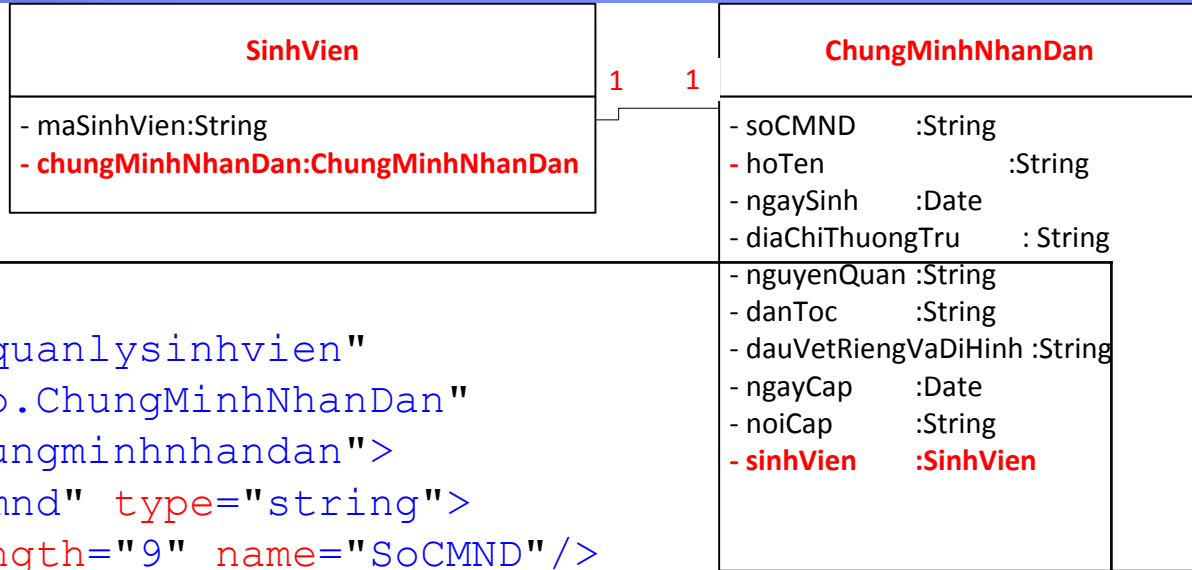
```

1 <hibernate-mapping>
2   <class catalog="quanlysinhvien" name="pojo.SinhVien"
3     table="sinhvien">
4     <id name="maSinhVien" type="string">
5       <column length="7" name="MaSinhVien"/>
6       <generator class="assigned"/>
7     </id>
8     <many-to-one class="pojo.ChungMinhNhanDan"
9       name="chungMinhNhanDan" fetch="join" lazy="false"
10      cascade="save-update,delete">
11       <column length="9" name="SoCMND" unique="true"/>
12     </many-to-one>
13   </class>
14 </hibernate-mapping>
15

```



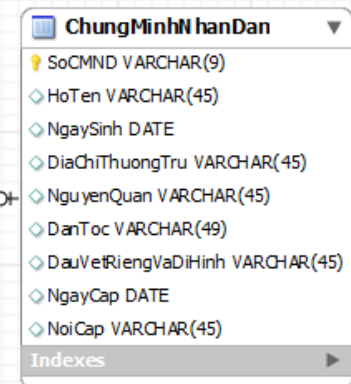
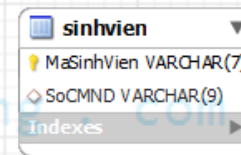
CMND.hbm.xml



```

1 <hibernate-mapping>
2   <class catalog="quanlysinhvien"
3     name="pojo.ChungMinhNhanDan"
4     table="chungminhnhandan">
5     <id name="soCmnd" type="string">
6       <column length="9" name="SoCMND"/>
7       <generator class="assigned"/>
8     </id>
9     . . .
10    <one-to-one name="sinhVien" class="pojo.SinhVien"
11      property-ref="chungMinhNhanDan"
12      cascade="save-update,delete"/>
13    </class>
14 </hibernate-mapping>
15

```

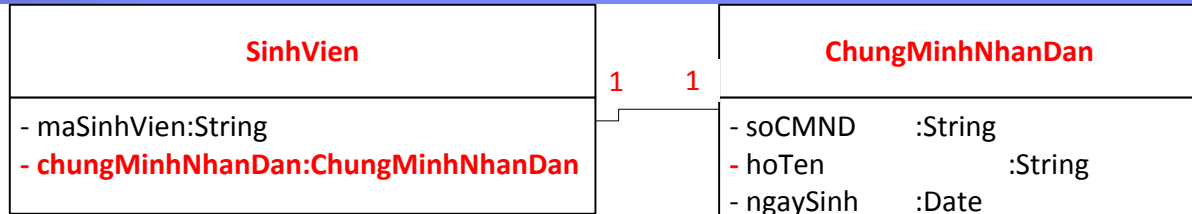


UNIQUE KEY

SinhVienDAO

```
1  public class SinhVienDAO {
2      public static List<SinhVien> layDanhSachSinhVien() {
3          List<SinhVien> ds = null;
4          Session session = HibernateUtil.getSessionFactory()
5                                  .openSession();
6          try {
7              String hql = "select sv from SinhVien sv";
8              Query query = session.createQuery(hql);
9              ds = query.list();
10         } catch (HibernateException ex) {
11             System.err.println(ex);
12         } finally {
13             session.close();
14         }
15         return ds;
16     }
17     . . .
18 }
```

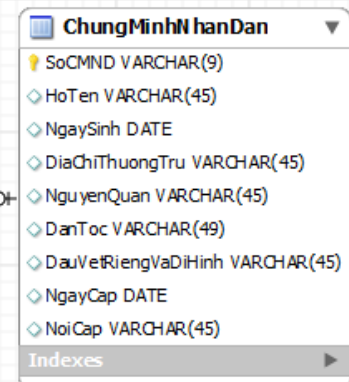
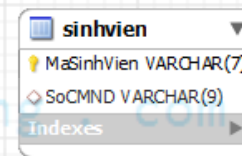
SinhVien.hbm.xml



```

1 <hibernate-mapping>
2   <class catalog="quanlysinhvien" name="pojo.SinhVien"
3     table="sinhvien">
4     <id name="maSinhVien" type="string">
5       <column length="7" name="MaSinhVien"/>
6       <generator class="assigned"/>
7     </id>
8     <many-to-one class="pojo.ChungMinhNhanDan"
9       name="chungMinhNhanDan" fetch="join" lazy="false"
10      cascade="save-update,delete">
11       <column length="9" name="SoCMND" unique="true"/>
12     </many-to-one>
13   </class>
14 </hibernate-mapping>
15

```



Main – lấy danh sách sinh viên

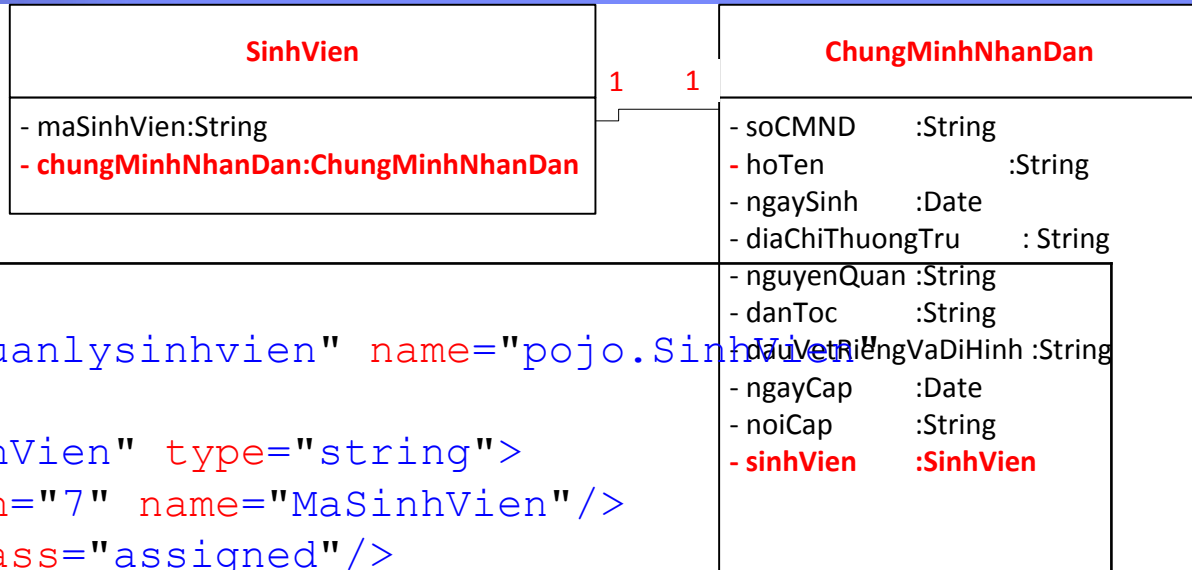
```
1 public class Main {
2
3     public static void main(String[] args) {
4
5         List<SinhVien> ds=SinhVienDAO.layDanhSachSinhVien();
6         for(int i=0; i<ds.size(); i++){
7             SinhVien sv=ds.get(i);
8             . . .
9         }
10    }
11 }
```

Name	Type	Value
ds	ArrayList	"size = 3"
[0]	SinhVien	#1517
maSinhVien	String	"0712111"
chungMinhNhanDan	ChungMinhNhanDan	#1518
soCmnd	String	"111222333"
hoTen	String	"Nguyễn Văn Lý"
ngaySinh	Date	#1535
diaChiThuongTru	String	"220 Nguyễn Văn Cừ Q1 TPHCM"
nguyenQuan	String	"Nam Định"
danToc	String	"Kinh"
dauVetRiengVaDiHinl	String	"Sẹo thẳng 2cm trên sau mép trái"
ngayCap	Date	#1540
noiCap	String	"TPHCM"
sinhVien	SinhVien	#1517
[1]	SinhVien	#1530
[2]	SinhVien	#1531

SinhVienDAO

```
1  public class SinhVienDAO {
2      . . .
3      public static SinhVien layThongTinSinhVien(
4          String maSinhVien) {
5          SinhVien sv = null;
6          Session session = HibernateUtil.getSessionFactory().
7              cuu duong than cong . com openSession();
8          try {
9              sv =(SinhVien)session.get(SinhVien.class, maSinhVien);
10         } catch (HibernateException ex) {
11             System.err.println(ex);
12         } finally {
13             session.close();
14         } cuu duong than cong . com
15         return sv;
16     }
17     . . .
18 }
```

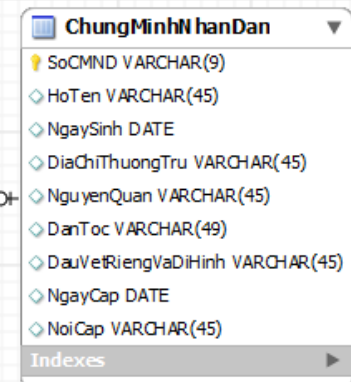
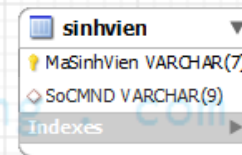
SinhVien.hbm.xml



```

1 <hibernate-mapping>
2   <class catalog="quanlysinhvien" name="pojo.SinhVien"
3     table="sinhvien">
4     <id name="maSinhVien" type="string">
5       <column length="7" name="MaSinhVien"/>
6       <generator class="assigned"/>
7     </id>
8     <many-to-one class="pojo.ChungMinhNhanDan"
9       name="chungMinhNhanDan" fetch="join" lazy="false"
10      cascade="save-update,delete">
11       <column length="9" name="SoCMND" unique="true"/>
12     </many-to-one>
13   </class>
14 </hibernate-mapping>
15

```



Main – lấy thông tin sinh viên

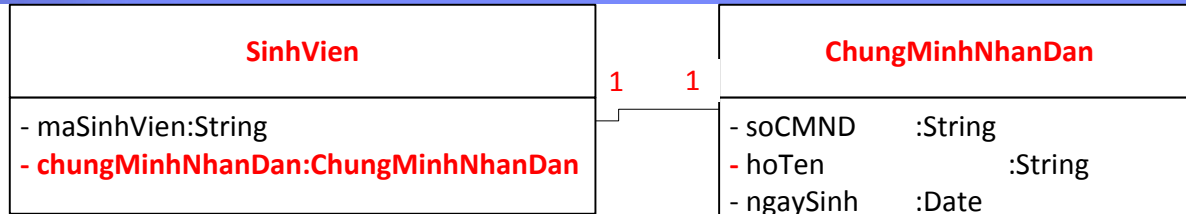
```
1 public class Main {  
2  
3     public static void main(String[] args) {  
4  
5         SinhVien v=null;  
6         sv=SinhVienDAO.layThongTinSinhVien("0712222");  
7         . . .  
8     }  
9 }
```

Name	Type	Value
sv	SinhVien	#1380
maSinhVien	String	"0712222"
chungMinhNhanDan	ChungMinhNhanDan	#1387
soCmnd	String	"222333444"
hoTen	String	"Trần Bảo Chung"
ngaySinh	Date	#1390
diaChiThuongTru	String	"230 Lê Đại Hành Q11 TPHCM"
nguyenQuan	String	"Long An"
danToc	String	"Khơ me"
dauVetRiengVaDiHinh	String	"Sẹo cong 5cm trên mũi"
ngayCap	Date	#1396
noiCap	String	"TPHCM"
sinhVien	SinhVien	#1380

SinhVienDAO

```
1  public static boolean themSinhVien(SinhVien sv) {
2      Session session = HibernateUtil.getSessionFactory().openSession();
3      if (SinhVienDAO.layThongTinSinhVien(sv.getMaSinhVien()) != null) {
4          return false;
5      }
6      boolean kq = true;
7      Transaction transaction = null;
8      try {
9          transaction = session.beginTransaction();
10         session.save(sv);
11         transaction.commit();
12     } catch (HibernateException ex) {
13         transaction.rollback();
14         System.err.println(ex);
15         kq = false;
16     } finally {
17         session.close();
18     }
19     return kq;
20 }
```

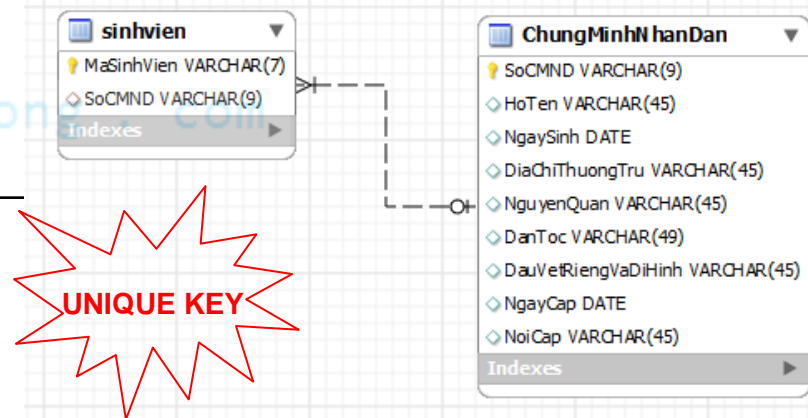
SinhVien.hbm.xml



```

1 <hibernate-mapping>
2   <class catalog="quanlysinhvien" name="pojo.SinhVien"
3     table="sinhvien">
4     <id name="maSinhVien" type="string">
5       <column length="7" name="MaSinhVien"/>
6       <generator class="assigned"/>
7     </id>
8     <many-to-one class="pojo.ChungMinhNhanDan"
9       name="chungMinhNhanDan" fetch="join" lazy="false"
10      cascade="save-update,delete">
11       <column length="9" name="SoCMND" unique="true"/>
12     </many-to-one>
13   </class>
14 </hibernate-mapping>

```



Main – thêm sinh viên cùng cmd

```
1 public class Main {
2     public static void main(String[] args) {
3         SinhVien sv=new SinhVien(); sv.setMaSinhVien("0312555");
4         ChungMinhNhanDan cmd=new ChungMinhNhanDan();
5         cmd.setSoCmd("444555666");
6         cmd.setHoTen("T? T?n Thêm");
7         cmd.setDiaChiThuongTru("140 Quốc Lộ 53 Càng Long-Trà Vinh");
8         cmd.setNguyenQuan("V?nh Long");
9         Calendar c=Calendar.getInstance();
10        c.set(1984, 6, 22);
11        cmd.setNgaySinh(c.getTime());
12        c.set(2001, 4, 18);
13        cmd.setNgayCap(c.getTime());
14        cmd.setDanToc("Kinh");
15        cmd.setDauVetRiengVaDiHinh("Sẹo 3cm trên mắt trái");
16        cmd.setNoiCap("Trà Vinh");
16        sv.setChungMinhNhanDan(cmd);
18        boolean kq=SinhVienDAO.themSinhVien(sv);
19    }
```

Main – thêm sinh viên cùng cmd

SinhVien		
	MaSinhVien	SoCMND
▶	0712111	111222333
	0712222	222333444
	0712333	333444555
	0312555	444555666



ChungMinhNhanDan

Tài liệu tham khảo

- Nguyễn Hoàng Anh, Tập bài giảng và video môn chuyên đề Java, 2010
- Gary Mak, Tập hướng dẫn từng bước Hibernate, 2006

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HỎI VÀ ĐÁP

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