



**openSAP *Developing JAVA Based Apps with SAP HANA Cloud Platform***  
week2\_unit2 - Exercice

**Snippet 1**

File – web.xml, Path– src/main/webapp/WEB-INF/web.xml, Project - espm-cloud-web

```
<resource-ref>
    <res-ref-name>jdbc/DefaultDB</res-ref-name>
    <res-type>javax.sql.DataSource</res-type>
</resource-ref>
```

---

**Snippet 2**

File - JpaEntityManagerFactory.java, Path - src/main/java/&gt;com.sap.espm.model.web&gt;

JpaEntityManagerFactory.java, Project - espm-cloud-web

```
    public static synchronized EntityManagerFactory getEntityManagerFactory()
        throws NamingException, SQLException {
        if (entityManagerFactory == null) {
            InitialContext ctx = new InitialContext();
            DataSource ds = (DataSource) ctx.lookup(DATA_SOURCE_NAME);
            Map<String, Object> properties = new HashMap<String,
Object>();
            properties.put(PersistenceUnitProperties.NON_JTA_DATASOURCE,
ds);

            entityManagerFactory = Persistence.createEntityManagerFactory(
                PERSISTENCE_UNIT_NAME, properties);
            Utility.setEntityManagerFactory(entityManagerFactory);
        }
        return entityManagerFactory;
    }
}
```

---

**Snippet 3**

File: SalesOrderHeader.java, path- Java

src/main/java&gt;com.sap.espm.model&gt;SalesOrderHeader.java , Project - espm-cloud-jpa

@Entity

@Table(name = "ESPM\_SALES\_ORDER\_HEADER")

---

**Snippet 4:**

File: SalesOrderHeader.java, path -

src/main/java&gt;com.sap.espm.model&gt;SalesOrderHeader.java , Project - espm-cloud-jpa

```
@PrePersist
private void persist() {
    Calendar cal = Calendar.getInstance();
    Date date = new Date();
    cal.setTime(date);
    this.lifeCycleStatus = "N";
    this.lifeCycleStatusName = "New";
    int itemNumber = 10;
    this.netAmount = new BigDecimal("0.00");
    this.taxAmount = new BigDecimal("0.00");
    this.grossAmount = new BigDecimal("0.00");
    this.createdAt = cal;
    for (SalesOrderItem item : salesOrderItems) {
        item.setSalesOrderId(this.getSalesOrderId());
        item.setItemNumber(itemNumber);
        itemNumber += 10;
        item.persist();
        this.netAmount = this.netAmount.add(item.getNetAmount())
            .setScale(3);
        this.taxAmount = this.taxAmount.add(item.getTaxAmount())
            .setScale(3);
        this.grossAmount = this.grossAmount.add(item.getGrossAmount())
            .setScale(3);
    }
}
```

---

**Snippet 5:**

File: persistence.xml path- src/main/resources/META-INF/persistence.xml, Project - espm-cloud-jpa

```
<!-- To do add the SalesOrderHeader class -->
<class>com.sap.espm.model.SalesOrderHeader</class>
```

### **Coding Samples**

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