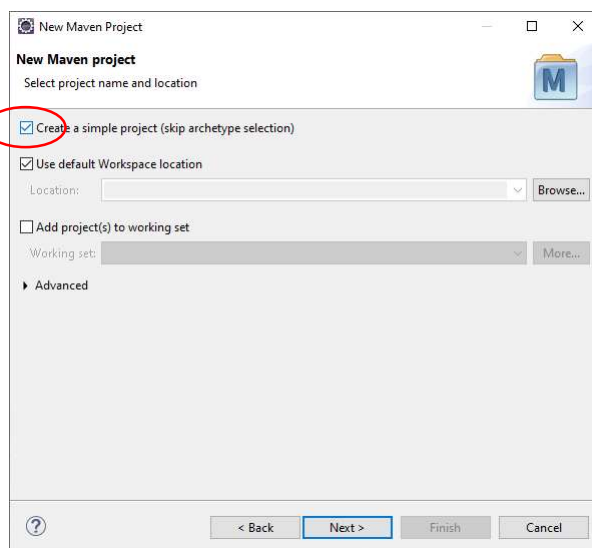


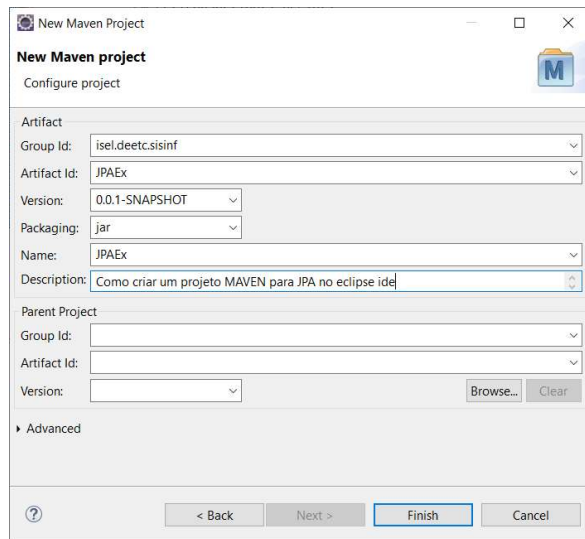
No Eclipse IDE

1



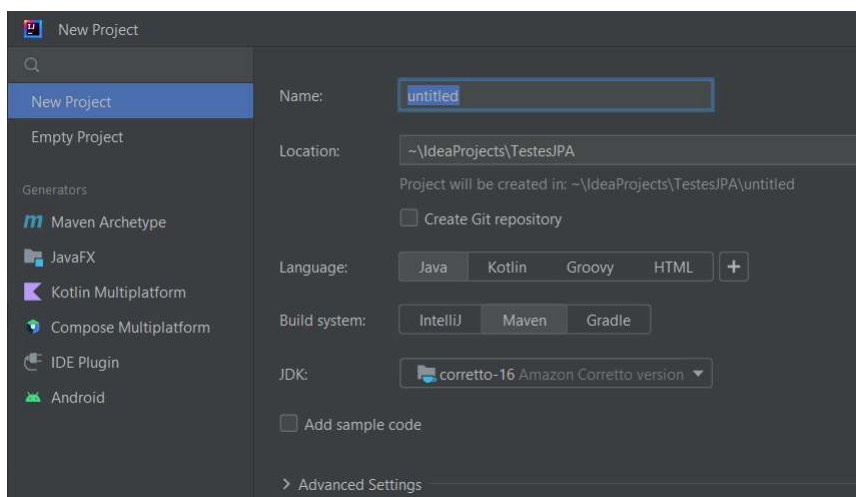
No Eclipse IDE

2



No Eclipse IDE

3



No IntelliJ

4

```

1 <project xmlns="http://maven.apache.org/POM/4.0.0" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="http://maven.apache.org/POM/4.0.0 http://maven.apache.org/xsd/maven-4.0.0.xsd">
2   <modelVersion>4.0.0</modelVersion>
3   <groupId>isel.deetc.sisinf</groupId>
4   <artifactId>JPAEx</artifactId>
5   <version>0.0.1-SNAPSHOT</version>
6   <name>JPAEx</name>
7   <description>Como criar um projeto MAVEN para JPS no eclipse IDE</description>
8 </project>

```

5

The screenshot shows the Maven Repository website. The top navigation bar includes the 'MVN REPOSITORY' logo and a search bar with 'eclipseLink' entered. Below the search bar, there's a section for 'Indexed Artifacts (33.6M)' and 'What's New in Maven'. The main content area displays 'Found 228 results' for the search query. A table on the left lists various repositories with their artifact counts. The search results list shows '1. EclipseLink' as the top result, with details about its usage and release date.

Repository	Count
Central	176
Sonatype	43
Spring Lib M	42
Spring Plugins	39
Payara	18
IBiblio	7
Geomajas	5

Search Results	Usage
1. EclipseLink org.eclipse.persistence » eclipseLink Comprehensive open-source Java persistence solution addressing relational, XML, and database web services. Last Release on Feb 24, 2023	423 usages [GPL] [ECL]

6

Indexed Artifacts (26.5M) Home » org.eclipse » persistence

Maven Repository org.eclipse-p x +

https://mavenrepository.com/artifact/org.eclipse.persistence

Search for groups, artifacts, categories

Home » org.eclipse » persistence

Group: Eclipse Persistence

Sort: popular | newest

1. Javax Persistence
org.eclipse.persistence » javax.persistence
javax.persistence build based upon git transaction 82dd749
619 usages

2. EclipseLink
org.eclipse.persistence » eclipselink
Comprehensive open-source Java persistence solution addressing relational, XML, and database web services.
Last Release on Feb 24, 2023
423 usages

Popular Categories

- Testing Frameworks & Tools
- Android Packages
- Logging Frameworks
- Java Specifications
- JSON Libraries
- JVM Languages
- Core Utilities
- Mocking
- Language Runtime
- Web Assets

7

Maven Repository: org.eclipse-p x +

https://mavenrepository.com/artifact/org.eclipse.persistence/eclipselink

Search for groups, artifacts, categories

Home » org.eclipse.persistence » eclipselink

EclipseLink
Comprehensive open-source Java persistence solution addressing relational, XML, and database web services.

License: [EDL 1.0](#) [EPL 2.0](#)

Categories: [JPA Implementations](#)

Tags: [eclipse](#) [persistence](#) [eclipselink](#) [jpa](#)

Ranking: #1057 in MavenRepository (See Top Artifacts)
#3 in JPA Implementations

Used By: 423 artifacts

Central (99) | Hortonworks (1) | Spring Plugins (2) | Geomajas (129) | Payara (8) | ICM (1)

Version	Vulnerabilities	Repository	Usages	Date
4.0.1		Central	3	Feb 24, 2023
4.0.1-RC2		Central	1	Feb 22, 2023
4.0.1-RC1		Central	1	Feb 07, 2023
4.0.0		Central	8	Oct 19, 2022

8

Maven Repository: org.eclipse.persistence:org.eclipse.persistence:artifact:org.eclipse.persistence:eclipselink/4.0.1

MVN REPOSITORY Search for groups, artifacts, categories

Home » org.eclipse.persistence » eclipselink » 4.0.1

EclipseLink » 4.0.1
Comprehensive open-source Java persistence solution addressing relational, XML, and database web services.

License: [ECL 1.0](#) [GPL 2.0](#)

Categories: [JPA Implementation](#)

Tags: [eclipse](#) [persistence](#) [eclipselink](#) [jpa](#)

Date: Feb 24, 2023

Files: [pom \(29 KB\)](#) [jar \(8.8 MB\)](#) [View All](#)

Repositories: [Central](#)

Ranking: #1057 in MavenRepository (See Top Artifacts)
#3 in JPA Implementations

Used By: 423 artifacts

Maven [Gradle](#) [Gradle \(Short\)](#) [Gradle \(Kotlin\)](#) [SBT](#) [Ivy](#) [Grape](#) [Leiningen](#) [Buildr](#)

```
<!-- https://mavenrepository.com/artifact/org.eclipse.persistence/eclipselink -->
<dependency>
  <groupId>org.eclipse.persistence</groupId>
  <artifactId>eclipselink</artifactId>
  <version>4.0.1</version>
</dependency>
```

☒ Include comment with link to declaration

```
*JPAEx/pom.xml x
1 <?xml version="1.0" encoding="UTF-8" ?>
2 <project xmlns="http://maven.apache.org/POM/4.0.0" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="http://maven.apache.org/POM/4.0.0 http://maven.apache.org/xsd/maven-4.0.0.xsd">
3   <modelVersion>4.0.0</modelVersion>
4   <groupId>isel.deetc.sisinf</groupId>
5   <artifactId>JPAEx</artifactId>
6   <version>0.0.1-SNAPSHOT</version>
7   <name>JPAEx</name>
8   <description>Como criar projeto MAVEN no eclipse IDE</description>
9   <dependencies>
10    <!-- https://mavenrepository.com/artifact/org.eclipse.persistence/eclipselink -->
11    <dependency>
12      <groupId>org.eclipse.persistence</groupId>
13      <artifactId>eclipselink</artifactId>
14      <version>4.0.1</version>
15    </dependency>
16  </dependencies>
17
18 </project>
```

Maven Repository: postgresql jdbc

https://mvnrepository.com/search?q=postgresql+jdbc

MVN REPOSITORY

Repository

- Central 3.9k
- Sonatype 866
- Spring Plugins 497
- Spring Lib M 461
- Clojars 183
- JCenter 153
- ICM 105

Found 4991 results

Sort: **relevance** | popular | newest

1. **PostgreSQL JDBC Driver**
org.postgresql = postgresql
PostgreSQL JDBC Driver Postgresql
Last Release on Mar 18, 2023

11

Maven Repository: org.postgresql

https://mvnrepository.com/artifact/org.postgresql/postgresql

MVN REPOSITORY

Search for groups, artifacts, categories

Indexed Artifacts (33.6M)

Popular Categories

- Testing Frameworks & Tools
- Android Packages
- Logging Frameworks
- Java Specifications
- JSON Libraries
- JVM Languages
- Core Utilities

Home » org.postgresql » postgresql

PostgreSQL JDBC Driver
PostgreSQL JDBC Driver Postgresql

License: **BSD 2-clause**

Categories: **JDBC Drivers**

Tags: **database sql jdbc postgresql driver**

Ranking: **#114 in MvnRepository (See Top Artifacts)**
#2 in JDBC Drivers

Used By: 3,900 artifacts

Central (177) | Atlassian (1) | Redhat GA (11) | Redhat EA (2) | HuaweiCloudSDK (1) | Brekka (1) | Orbis

Version	Vulnerabilities	Repository	Usage
42.6.x	42.6.0	Central	121

12

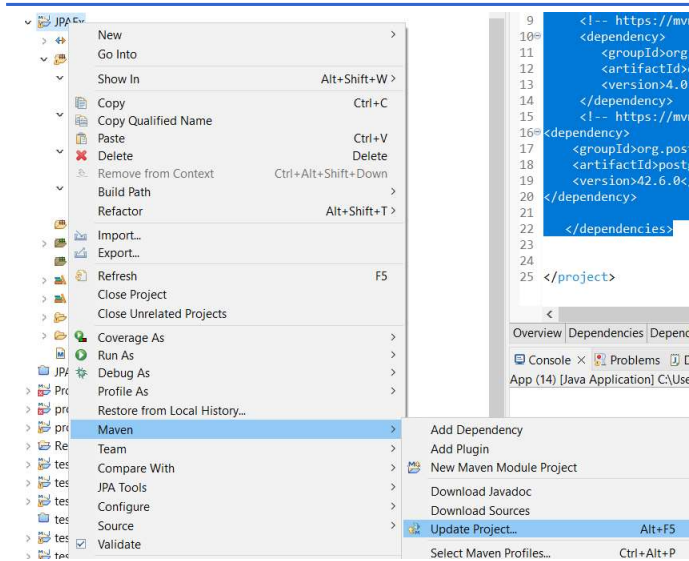
The screenshot shows the Maven Repository website for the PostgreSQL JDBC Driver 42.6.0. The page layout includes a search bar at the top, a sidebar with popular categories like Testing Frameworks & Tools, Android Packages, Logging Frameworks, Java Specifications, JSON Libraries, JVM Languages, Core Utilities, Mocking, Language Runtime, Web Assets, Annotation Libraries, Logging Bridges, HTTP Clients, and Dependency Injection. The main content area displays the driver's details, including its license (BSD 2-clause), categories (JDBC Drivers), tags (database, sql, jdbc, postgresql, driver), organization (PostgreSQL Global Development Group), homepage (https://jdbc.postgresql.org), date (Mar 18, 2023), files (pom (2 KB), jar (1.0 MB)), repositories (Central), ranking (#114 in MavenRepository, #2 in JDBC Drivers), and usage (3,900 artifacts). A code snippet for the Maven dependency is also shown:

```
<!-- https://mvnrepository.com/artifact/org.postgresql/postgresql -->
<dependency>
<groupId>org.postgresql</groupId>
<artifactId>postgresql</artifactId>
<version>42.6.0</version>
</dependency>
```

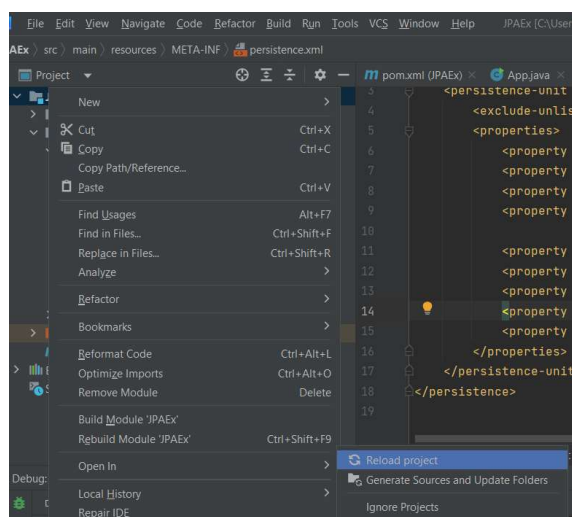
```
1<?xml version="1.0" encoding="UTF-8"?>
2<project xmlns="http://maven.apache.org/POM/4.0.0" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance" xsi:schemaLocation="http://maven.apache.org/POM/4.0.0 http://maven.apache.org/xsd/maven-4.0.0.xsd">
3  <groupId>isel.deetc</groupId>
4  <artifactId>JPAEx</artifactId>
5  <version>0.0.1-SNAPSHOT</version>
6  <name>JPAEx</name>
7  <description>Como criar projeto MAVEN no eclipse IDE</description>
8  <dependencies>
9    <!-- https://mvnrepository.com/artifact/org.eclipse.persistence/eclipselink -->
10    <dependency>
11      <groupId>org.eclipse.persistence</groupId>
12      <artifactId>eclipselink</artifactId>
13      <version>4.0.1</version>
14    </dependency>
15    <!-- https://mvnrepository.com/artifact/org.postgresql/postgresql -->
16    <dependency>
17      <groupId>org.postgresql</groupId>
18      <artifactId>postgresql</artifactId>
19      <version>42.6.0</version>
20    </dependency>
21  </dependencies>
22
23</project>
```

salvar


Se se pretender usar sempre estas versões das dependências, basta incluí-las no ficheiro pom.xml, sem necessidade de pesquisa no repositório Maven



15



16

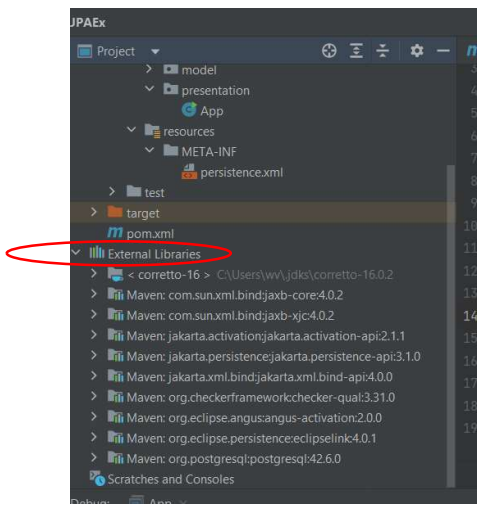


No Eclipse IDE

Sistemas de Informação (ISEL-DEETC - LEIC Walter Vieira)

17

17



No IntelliJ

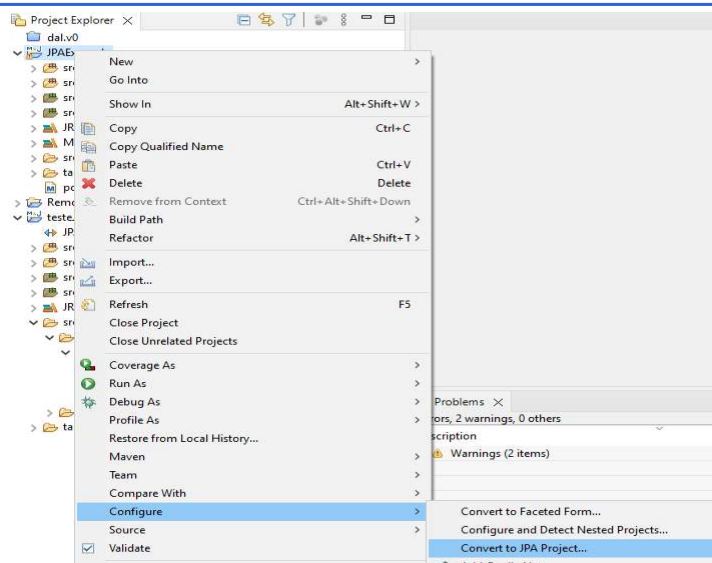
Sistemas de Informação (ISEL-DEETC - LEIC Walter Vieira)

18

18

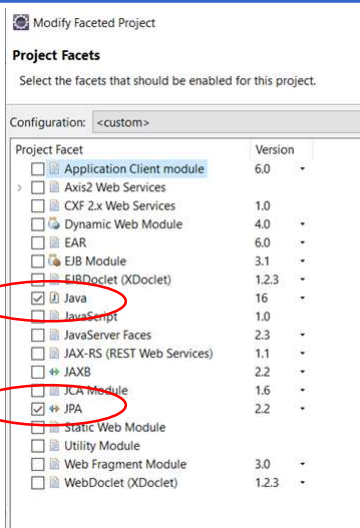
Para quem tem
o plugin Dali
Tools instalado

No Eclipse IDE



19

No Eclipse IDE



20

File Edit Navigate Search Project Run Design Window Help

Project Explorer

JPAAulas_ex7

JPAAulas_ex8_BusinessLogic

JPAAulas_ex8_DALJDBC

JPAAulas_ex8_modelJDBC

JPAAulas_ex8_Presentation

JPAAulas_ex8DALJPA

JPAAulas_ex8modelJPA

JPAEx

JPA Content

persistence.xml

src/main/java

BusinessLogic

BLService.java

model

Aluno.java

Presentation

App.java

META-INF

persistence.xml

src/main/resources

src/test/java

src/test/resources

JRE System Library [J2SE-1.5]

Maven Dependencies

src

target

pom.xml

persistence.xml

JPAEx/pom.xml

Connection

Persistence Unit Connection

Configure the data source or JDBC connection properties.

Transaction type: Resource Local

Database

JTA data source:

Non-JTA data source:

JDBC connection properties

Populate from connection...

Driver: org.postgresql.Driver

URL: jdbc:postgresql://localhost:5432/sisinf

User: postgres

Password:

General Connection Options Schema Generation Properties Schema Generation Source

Console Problems Debug Shell Search

App (14) [Java Application] C:\Users\wv\p2\pool\plugins\org.eclipse.justi.openjdk.hotspot.jre.full.w

No Eclipse IDE

Sistemas de Informação (ISEL-DEETC - LEIC Walter Vieira)

21

21

JPAEx/pom.xml

persistence.xml

```

1 <?xml version="1.0" encoding="UTF-8"?>
2 <persistence version="2.2" xmlns="http://xmlns.jcp.org/xml/ns/persistence" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
3   <persistence-unit name="JPAEx" transaction-type="RESOURCE_LOCAL">
4     <properties>
5       <property name="javax.persistence.jdbc.url" value="jdbc:postgresql://localhost:5432/sisinf"/>
6       <property name="javax.persistence.jdbc.user" value="postgres"/>
7       <property name="javax.persistence.jdbc.password" value="pa$$w0rd"/>
8       <property name="javax.persistence.jdbc.driver" value="org.postgresql.Driver"/>
9     </properties>
10  </persistence-unit>
11 </persistence>
12

```

JPAEx/pom.xml

persistence.xml

Aluno.java

```

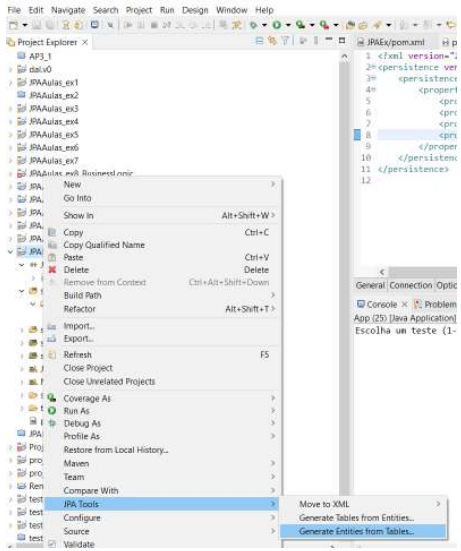
1 <?xml version="1.0" encoding="UTF-8"?>
2 <persistence version="2.2" xmlns="http://xmlns.jcp.org/xml/ns/persistence" xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
3   <persistence-unit name="JPAEx" transaction-type="RESOURCE_LOCAL">
4     <exclude-unlisted-classes>false</exclude-unlisted-classes>
5     <properties>
6       <property name="jakarta.persistence.jdbc.url" value="jdbc:postgresql://localhost:5432/sisinf"/>
7       <property name="jakarta.persistence.jdbc.user" value="postgres"/>
8       <property name="jakarta.persistence.jdbc.password" value="pa$$w0rd"/>
9       <property name="jakarta.persistence.jdbc.driver" value="org.postgresql.Driver"/>
10    </properties>
11  </persistence-unit>
12 </persistence>
13

```

Sistemas de Informação (ISEL-DEETC - LEIC Walter Vieira)

22

22

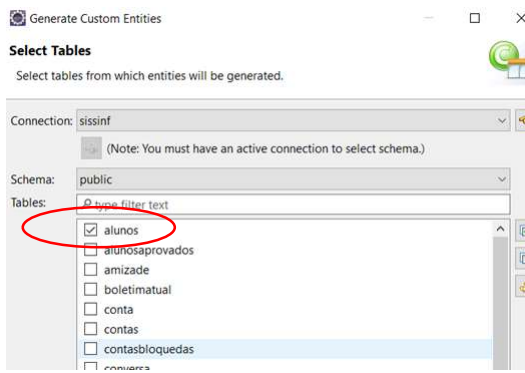


No Eclipse IDE

Sistemas de Informação (ISEL-DEETC - LEIC Walter Vieira)

23

23



No Eclipse IDE

Sistemas de Informação (ISEL-DEETC - LEIC Walter Vieira)

24

24

```

Aluno.java X
1 package model;
2
3 import java.io.Serializable;
4 import javax.persistence.*;
5
6
7 /**
8  * The persistent class for the alunos database table.
9  *
10 */
11 @Entity
12 @Table(name="alunos")
13 @NamedQuery(name="Aluno.findAll", query="SELECT a FROM Aluno a")
14 public class Aluno implements Serializable {
15     private static final long serialVersionUID = 1L;
16
17     @Id
18     private long numal;
19
20     private String nomeal;

```

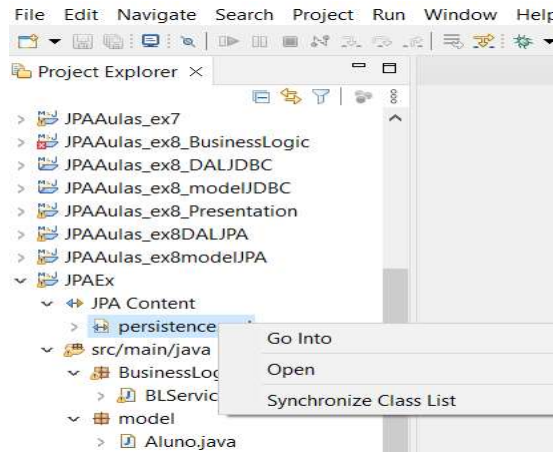
25

```

*Aluno.java X
1 package model;
2
3 import java.io.Serializable;
4 import jakarta.persistence.*;
5
6 /**
7  * The persistent class for the alunos database table.
8  *
9  */
10 @Entity
11 @Table(name="alunos")
12 @NamedQuery(name="Aluno.findAll", query="SELECT a FROM Aluno a")
13 public class Aluno implements Serializable {
14     private static final long serialVersionUID = 1L;
15
16     @Id
17     private long numal;

```

26



No Eclipse IDE

27

```
Aluno.java X
1 package model;
2
3 import java.io.Serializable;
4 import jakarta.persistence.*;
5
6 /**
7  * The persistent class for the alunos database table.
8  *
9  */
10 @Entity
11 @Table(name="alunos")
12 @NamedQuery(name="Aluno.findAll", query="SELECT a FROM Aluno a")
13 public class Aluno implements Serializable {
14     private static final long serialVersionUID = 1L;
15
16     @Id
17     private long numal;
18
19     private String nomeal;
20
21     public Aluno() {
22     }
23
24     public long getNumal() {
25         return this.numal;
26     }
27 }
```

28

Para quem não tem o plugin **Dali Tools** instalado no eclipse IDE, ou para quem usa o IntelliJ (community edition) fazer tudo como até ao slide 19 e colocar o ficheiro persistence.xml numa pasta de nome META-INF em src/main/resources.

Colocar neste ficheiro o conteúdo seguinte, com as alterações nos locais assinalados:

```
<?xml version="1.0" encoding="UTF-8"?>
<persistence version="2.2" xmlns="http://xmlns.jcp.org/xml/ns/persistence"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://xmlns.jcp.org/xml/ns/persistence
http://xmlns.jcp.org/xml/ns/persistence/persistence_2_2.xsd">
  <persistence-unit name="projetoBase" transaction-type="RESOURCE_LOCAL">
    <exclude-unlisted-classes>false</exclude-unlisted-classes>
    <properties>
      <property name="jakarta.persistence.jdbc.url"
value="jdbc:postgresql://localhost:5432/sisinf"/>
      <property name="jakarta.persistence.jdbc.user" value="postgres"/>
      <property name="jakarta.persistence.jdbc.password" value="pa$$w0rd"/>
      <property name="jakarta.persistence.jdbc.driver"
value="org.postgresql.Driver"/>
    </properties>
  </persistence-unit>
</persistence>
```

Ter em conta que sem plugins específicos para JPA se perde alguma facilidade de desenvolvimento.

Existem plugins disponíveis, quer para eclipse, quer para intellij community.