

# Java EE

Olivier Gutierrez

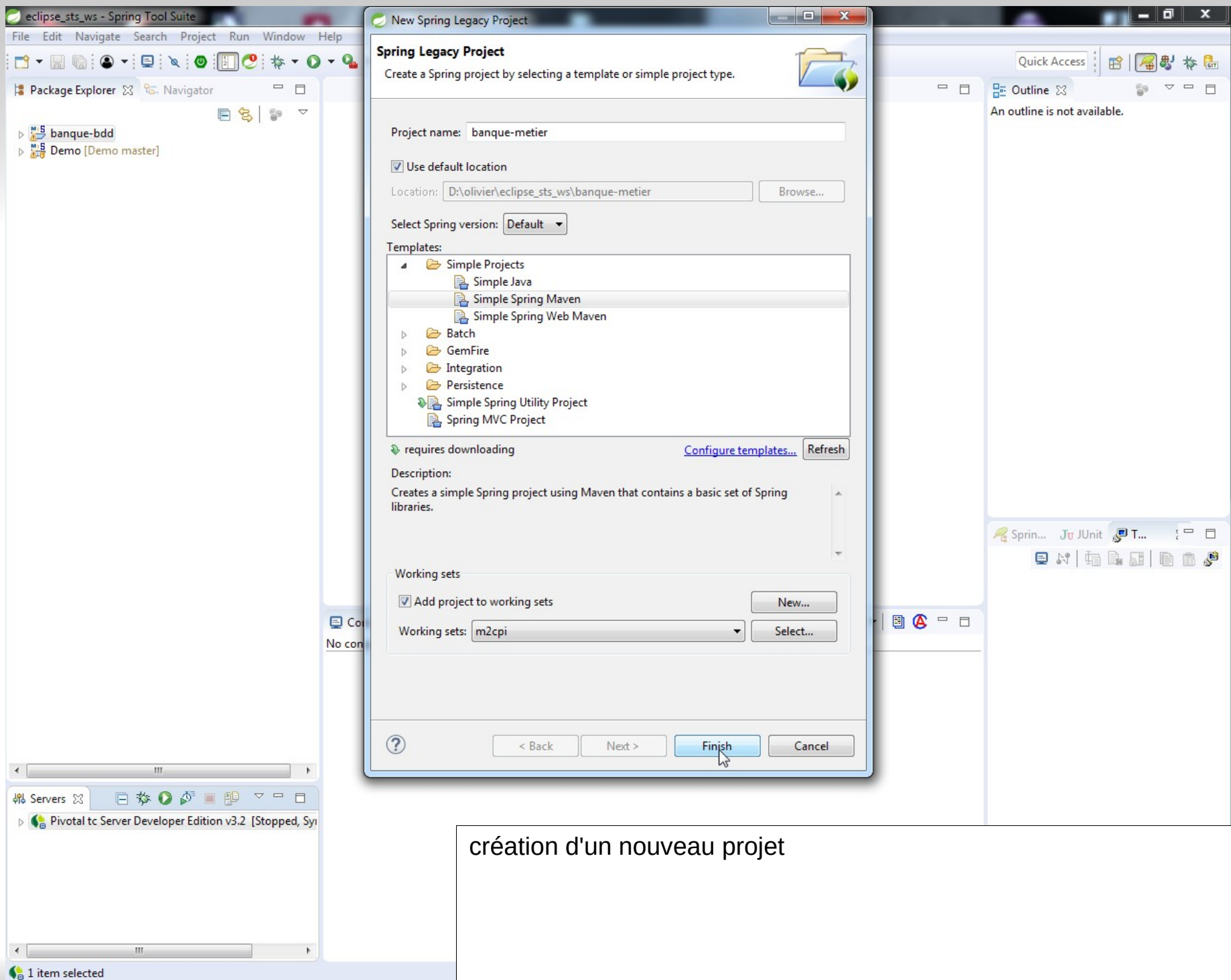
Le framework Spring

Le code métier



# Sommaire

Codage de la partie métier



création d'un nouveau projet

eclipse\_sts\_ws - banque-metier/pom.xml - Spring Tool Suite

File Edit Navigate Search Project Run Design Window Help

Package Explorer Navigator

banque-bdd [banque-bdd master]

- src/main/java
  - fr.formation.m2.spring.banque.bdd.exec
    - Start.java
  - fr.formation.m2.spring.banque.bdd.dao
  - fr.formation.m2.spring.banque.bdd.entities
  - fr.formation.m2.spring.banque.bdd.util
    - BanqueException.java
- src/main/resources
  - bdd-context.xml
- src/test/java
- JRE System Library [J2SE-1.5]
- Maven Dependencies
- src
  - main
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banque-metier

- src/main/java
- src/main/resources
- src/test/java
- JRE System Library [J2SE-1.5]
- Maven Dependencies
- src
  - main
  - test
  - target
- pom.xml

Demo [Demo master]

banque-metier/pom.xml

### Dependencies

Filter:

Dependencies

- spring-context : \${spring-framework.version}
- spring-tx : \${spring-framework.version}
- slf4j-api : \${slf4j.version} [compile]
- logback-classic : \${logback.version} [runtime]
- hibernate-entitymanager : \${hibernate.version}
- spring-test : \${spring-framework.version}
- junit : \${junit.version} [test]

Add... Remove Properties... Manage...

### Dependency Management

Add... Remove Properties...

To manage your transitive dependency exclusions, please use the [Dependency Hierarchy](#) page.

Overview Dependencies **Dependency Hierarchy** Effective POM pom.xml

Console Progress Problems Search Properties

No consoles to display at this time.

Servers

- Pivotal tc Server Developer Edition v3.2 [Stopped, Sy...

supprimer les dépendances non nécessaires

The screenshot shows the Eclipse IDE interface with the following components:

- Package Explorer:** Displays the project structure. The 'banque-bdd' project is expanded, showing source files like 'Start.java', 'dao', 'entities', 'util', and 'BanqueException.java'. The 'banque-metier' project is also visible, showing its source files and dependencies.
- Dependencies View:** Shows the dependencies for the selected project. It lists 'spring-context', 'spring-test', and 'junit' with their respective versions and scopes.
- Select Dependency Dialog:** A modal dialog box is open, allowing the user to search for and select a dependency. The search criteria are: Group Id: 'org.springframework.samples', Artifact Id: 'banque-bdd', Version: '0.0.1-SNAPSHOT', and Scope: 'compile'. The search results show a single entry: 'org.springframework.samples:banque-bdd:0.0.1-SNAPSHOT [jar]'. The user is currently selecting this entry.
- Status Bar:** At the bottom, it indicates the project is named 'project'.

rajouter la dépendance au projet banque-bdd

eclipse\_sts\_ws - banque-metier/pom.xml - Spring Tool Suite

File Edit Navigate Search Project Run Design Window Help

Package Explorer Navigator

banque-bdd [banque-bdd master]

- src/main/java
  - fr.formation.m2.spring.banque.bdd.exec
    - Start.java
  - fr.formation.m2.spring.banque.bdd.dao
  - fr.formation.m2.spring.banque.bdd.entities
  - fr.formation.m2.spring.banque.bdd.util
    - BanqueException.java
- src/main/resources
  - bdd-context.xml
- src/test/java

JRE System Library [J2SE-1.5]

Maven Dependencies

src

- main
- test
- target

bdd-context.xml

pom.xml

banque-metier

- src/main/java
- src/main/resources
- src/test/java

JRE System Library [J2SE-1.5]

Maven Dependencies

src

target

pom.xml

Demo [Demo master]

banque-metier/pom.xml

Overview

Artifact

Group Id: org.springframework.samples

Artifact Id: \* banque-metier

Version: 0.0.1-SNAPSHOT

Packaging: jar

Project

- Organization
- SCM
- Issue Management
- Continuous Integration

Parent

Properties

project.build.sourceEncoding : UTF-8

project.reporting.outputEncoding : UT...

spring-framework.version : 3.2.3.RELE...

hibernate.version : 4.2.1.Final

Modules

Edit property

Name: spring-framework.version

Value: 4.3.0.RELEASE

OK Cancel

Overview Dependencies Dependency Hierarchy Effective POM pom.xml

Console Progress Problems Search Properties

<terminated> C:\Program Files\Java\jdk1.8.0\_92\bin\javaw.exe (6 févr. 2018 à 15:57:35)

[INFO] Building banque-metier 0.0.1-SNAPSHOT

[INFO] -----

[WARNING] The POM for org.springframework.samples:banque-bdd:jar:0.0.1-SNAPSHOT is missing, no

[INFO] -----

[INFO] BUILD FAILURE

[INFO] -----

[INFO] Total time: 0.480 s

[INFO] Finished at: 2018-02-06T15:57:37+01:00

[INFO] Final Memory: 8M/245M

[INFO] -----

[ERROR] Failed to execute goal on project banque-metier: Could not resolve dependencies for pro

[ERROR]

[ERROR] To see the

[ERROR] Re-run Mave

[ERROR]

[ERROR] For more in

[ERROR] [Help 1] ht

...aligner la version de spring-framework avec le projet banque-bdd



eclipse\_sts\_ws - banque-metier/pom.xml - Spring Tool Suite

File Edit Source Refactor Navigate Search Project Run Design Window Help

Package Explorer Navigator

banque-bdd [banque-bdd master]

- src/main/java
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    - Start.java
  - fr.formation.m2.spring.banque.bdd.dao
  - fr.formation.m2.spring.banque.bdd.entities
  - fr.formation.m2.spring.banque.bdd.util
    - BanqueException.java
- src/main/resources
  - bdd-context.xml
- src/test/java

JRE System Library [J2SE-1.5]

Maven Dependencies

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bdd-context.xml

pom.xml

banque-metier

- src/main/java
- src/main/resources
- src/test/java

JRE System Library [J2SE-1.5]

Maven Dependencies

src

target

pom.xml

Demo [Demo master]

Create a new Spring Bean Definition file

New Spring Bean Definition file

Select the location and give a name for the Spring Bean Definition file

Enter or select the parent folder:

banque-metier/src/main/resources

banque-bdd [banque-bdd master]

banque-business

banque-metier

- .settings
- src
  - main
    - java
    - resources
  - test
- target

banque-persistence

banque-web

Demo [Demo master]

File name: metier-context.xml

Advanced >>

☒ Add Spring project nature if required

< Back Next > Finish Cancel

--- maven-surefire-plugin:2.12.4:test (default-test) @ banque-metier ---

--- maven-jar-plugin:2.4:jar (default-jar) @ banque-metier ---

Building jar: D:\olivier\eclipse\_sts\_ws\banque-metier\target\banque-metier-0.0.1-SNAPSHOT.jar

--- maven-install-plugin:2.4:install (default-install) @ banque-metier ---

Installing D:\olivier\eclipse\_sts\_ws\banque-metier\target\banque-metier-0.0.1-SNAPSHOT.jar to C:\Users\olivier\.m2\repository\fr\formation\m2\spring\banque-metier\0.0.1-SNAPSHOT.jar

BUILD SUCCESS

Total time: 0.154s

Finished at: 2019-07-15 14:15:15

Final Memory: 10M

banque-metier

new spring bean configuration file puis 'next'... (ATTENTION : 'metier-context.xml')



eclipse\_sts\_ws - banque-metier/pom.xml - Spring Tool Suite

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Package Explorer Navigator

banque-bdd [banque-bdd master]

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  - fr.formation.m2.spring.banque.bdd.util
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- src/main/resources
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- src/test/java

JRE System Library [J2SE-1.5]

Maven Dependencies

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banque-metier

- src/main/java
- src/main/resources
- src/test/java

JRE System Library [J2SE-1.5]

Maven Dependencies

src

- main
- test

target

- pom.xml

Demo [Demo master]

Create a new Spring Bean Definition file

New Spring Bean Definition file

Select XSD namespaces to use with the new Spring Bean Definition

Select desired XSD namespace declarations:

- ☐ aop - http://www.springframework.org/schema/aop
- ☒ beans - http://www.springframework.org/schema/beans
- ☐ c - http://www.springframework.org/schema/c
- ☐ cache - http://www.springframework.org/schema/cache
- ☐ context - http://www.springframework.org/schema/context
- ☐ jdbc - http://www.springframework.org/schema/jdbc
- ☐ jee - http://www.springframework.org/schema/jee
- ☐ lang - http://www.springframework.org/schema/lang
- ☐ p - http://www.springframework.org/schema/p

Select desired XSD (if none is selected the default will be used):

- ☒ http://www.springframework.org/schema/beans/spring-beans.xsd
- ☐ http://www.springframework.org/schema/beans/spring-beans-2.0.xsd
- ☐ http://www.springframework.org/schema/beans/spring-beans-2.5.xsd
- ☐ http://www.springframework.org/schema/beans/spring-beans-3.0.xsd
- ☐ http://www.springframework.org/schema/beans/spring-beans-3.1.xsd
- ☐ http://www.springframework.org/schema/beans/spring-beans-3.2.xsd
- ☐ http://www.springframework.org/schema/beans/spring-beans-4.0.xsd
- ☐ http://www.springframework.org/schema/beans/spring-beans-4.1.xsd
- ☐ http://www.springframework.org/schema/beans/spring-beans-4.2.xsd

< Back Next > Finish Cancel

--- maven-surefire-plugin:2.12.4:test (default-test) @ banque-metier ---

--- maven-jar-plugin:2.4:jar (default-jar) @ banque-metier ---

Building jar: D:\olivier\eclipse\_sts\_ws\banque-metier\target\banque-metier-0.0.1-SNAPSHOT.jar

--- maven-install-plugin:2.4:install (default-install) @ banque-metier ---

Installing D:\olivier\eclipse\_sts\_ws\banque-metier\target\banque-metier-0.0.1-SNAPSHOT.jar to C:\Users\olivier\.m2\repository\org\springframework\banque-metier\0.0.1-SNAPSHOT\banque-metier-0.0.1-SNAPSHOT.jar

BUILD SUCCESS

Total time: 0.158s

Finished at: 2019-07-11 14:14:14

Final Memory: 10M

banque-metier

...sélectionner 'beans' uniquement

eclipse\_sts\_ws - banque-metier/src/main/resources/metier-context.xml - Spring Tool Suite

File Edit Source Refactor Navigate Search Project Run Design Window Help

Package Explorer Navigator

- banque-bdd [banque-bdd master]
  - src/main/java
    - fr.formation.m2.spring.banque.bdd.exec
      - Start.java
    - fr.formation.m2.spring.banque.bdd.dao
    - fr.formation.m2.spring.banque.bdd.entities
    - fr.formation.m2.spring.banque.bdd.util
      - BanqueException.java
  - src/main/resources
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  - src/main/java
  - src/main/resources
    - metier-context.xml
  - src/test/java
  - JRE System Library [J2SE-1.5]
  - Maven Dependencies
  - src
  - target
  - pom.xml
- Demo [Demo master]

banque-metier/pom.xml

```
<?xml version="1.0" encoding="UTF-8"?>
<beans xmlns="http://www.springframework.org/schema/beans"
xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
xsi:schemaLocation="http://www.springframework.org/schema/beans http://www.springfra
</beans>
```

metier-context.xml

New Java Package

Java Package

Create a new Java package.

Creates folders corresponding to packages.

Source folder: banque-metier/src/main/java Browse...

Name: fr.formation.m2.spring.banque.metier

☐ Create package-info.java

Finish Cancel

Source

Con

metier ---

```
<termi
[INFO]
[INFO] Nothing to compile - all classes are up-to-date
[INFO]
--- maven-surefire-plugin:2.12.4:test (default-test) @ banque-metier ---
[INFO]
--- maven-jar-plugin:2.4:jar (default-jar) @ banque-metier ---
[INFO] Building jar: D:\olivier\eclipse_sts_ws\banque-metier\target\banque-metier-0.0.1-SNAPSHO
[INFO]
--- maven-install-plugin:2.4:install (default-install) @ banque-metier ---
[INFO] Installing D:\olivier\eclipse_sts_ws\banque-metier\target\banque-metier-0.0.1-SNAPSHOT.j
[INFO] Installing D
[INFO]
[INFO] BUILD SUCCESS
[INFO]
[INFO] Total time:
[INFO] Finished at:
[INFO] Final Memory
[INFO]
```

banque-metier

banque-metier

créer un nouveau package

eclipse\_sts\_ws - banque-metier/src/main/java/fr/formation/m2/spring/banque/metier/BanqueService.java - Spring Tool Suite

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer Navigator

banque-business  
 src/main/java  
 fr.formation.banque.business  
 BanqueService.java  
 BanqueServiceImpl.java  
 src/main/resources  
 src/test/java  
 JRE System Library [J2SE-1.5]  
 Maven Dependencies  
 src  
 target  
 pom.xml  
 banque-persistence  
 banque-persistence  
 banque-web  
 DemoSpring  
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 testmvc

banque-metier/pom.xml metier-context.xml BanqueService.java

```

1 package fr.formation.m2.spring.banque.metier;
2
3 import java.util.List;
4
5 import fr.formation.m2.spring.banque.bdd.entities.Client;
6 import fr.formation.m2.spring.banque.bdd.entities.Compte;
7 import fr.formation.m2.spring.banque.bdd.util.BanqueException;
8
9 public interface BanqueService {
10
11     public abstract Client authentifier(String identifiant, String motDePasse)
12         throws BanqueException;
13
14     public abstract List<Compte> mesComptes (long idClient) throws BanqueException;
15
16     public abstract void virement (
17         long numeroADebiter, long numeroACrediter, double montant)
18         throws BanqueException;
19
20 }
21
22

```

Outline

fr.formation.m2.spring.banque.metier  
 BanqueService  
 authentifier(String, String) : Client  
 mesComptes(long) : List<Compte>  
 virement(long, long, double) : void

Console

```

<terminated> C:\Program Files\Java\jdk1.8.0_92\bin\javaw.exe (6 févr. 2018 à 16:04:34)
[INFO] --- maven-compiler-plugin:3.1:testCompile (default-testCompile) @ banque-metier ---
[INFO] Nothing to compile - all classes are up to date
[INFO] --- maven-surefire-plugin:2.12.4:test (default-test) @ banque-metier ---
[INFO] --- maven-jar-plugin:2.4:jar (default-jar) @ banque-metier ---
[INFO] Building jar: D:\olivier\eclipse_sts_ws\banque-metier\target\banque-metier-0.0.1-SNAPSHOT.jar
[INFO] --- maven-install-plugin:2.4:install (default-install) @ banque-metier ---
[INFO] Installing D:\olivier\eclipse_sts_ws\banque-metier\target\banque-metier-0.0.1-SNAPSHOT.jar to C:\Users\olivier\.m2\repository\fr\formation\m2\spring\banque\metier\banque-metier-0.0.1-SNAPSHOT.jar
[INFO] BUILD SUCCESS
[INFO] Total time: 0.158s
[INFO] Finished at: 2018-02-06 16:04:34
[INFO] Final Memory: 10M
[INFO]

```

Servers

Pivotal tc Server Developer Edition v3.2 [Stopped, Sy...

créer une interface BanqueService et faire les imports depuis l'appli banque-bdd

The screenshot displays the Eclipse IDE environment for a Spring project named 'banque-metier'. The main editor shows the implementation of `BanqueServiceImpl.java`, which implements the `BanqueService` interface. The code includes imports for various classes from the `fr.formation.m2.spring.banque.bdd` package and the `java.util` package. The `BanqueServiceImpl` class contains three methods: `authentifier`, `mesComptes`, and `virement`. A tooltip is visible over the `CompteDAO` import, showing a list of available classes, with `CompteDAO` selected. The Package Explorer on the left shows the project structure, including the `banque-metier` package and its sub-packages. The Outline view on the right shows the class hierarchy. The Console at the bottom displays the output of the Maven build, indicating that the project was successfully compiled and packaged.

```

package fr.formation.m2.spring.banque.metier;

import java.util.List;

import fr.formation.m2.spring.banque.bdd.dao.ClientDAO;
import fr.formation.m2.spring.banque.bdd.entities.Client;
import fr.formation.m2.spring.banque.bdd.entities.Compte;
import fr.formation.m2.spring.banque.bdd.util.BanqueException;

public class BanqueServiceImpl implements BanqueService {

    private ClientDAO clientDAO;
    private CompteDAO compteDAO;

    @Override
    public Client authentifier(String login, String password) throws BanqueException {
        // TODO Auto-generated method stub
        return null;
    }

    @Override
    public List<Compte> mesComptes(long clientId) throws BanqueException {
        // TODO Auto-generated method stub
        return null;
    }

    @Override
    public void virement(long clientId, long destinationId, double montant) throws BanqueException {
        // TODO Auto-generated method stub
    }
}

```

Console Output:

```

<terminated> C:\Program Files\Java\jdk1.8.0_92\bin\javaw.exe (6 févr. 2018 à 16:04:34)
[INFO] --- maven-compiler-plugin:3.1:testCompile (default-testCompile) @ banque-metier ---
[INFO] Nothing to compile - all classes are up to date
[INFO] --- maven-surefire-plugin:2.12.4:test (default-test) @ banque-metier ---
[INFO] --- maven-jar-plugin:2.4:jar (default-jar) @ banque-metier ---
[INFO] Building jar: D:\olivier\eclipse_sts_ws\banque-metier\target\banque-metier-0.0.1-SNAPSHOT.jar
[INFO] --- maven-install-plugin:2.4:install (default-install) @ banque-metier ---
[INFO] Installing D:\olivier\eclipse_sts_ws\banque-metier\target\banque-metier-0.0.1-SNAPSHOT.jar to C:\Users\olivier\.m2\repository\fr\formation\m2\spring\banque\metier\banque-metier-0.0.1-SNAPSHOT.jar
[INFO] BUILD SUCCESS
[INFO] Total time: 0.1s
[INFO] Finished at: 2018-02-06 16:04:34
[INFO] Final Memory: 10M

```

créer une classe `BanqueServiceImpl` qui implémente l'interface précédente et créer deux objets `ClientDAO`, `CompteDAO`

eclipse\_sts\_ws - banque-metier/src/main/java/fr/formation/m2/spring/banque/metier/BanqueServiceImpl.java - Spring Tool Suite

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer Navigator

banque-bdd [banque-bdd master]  
banque-metier  
src/main/java  
fr.formation.m2.spring.banque.metier  
BanqueService.java  
BanqueService  
authentifier(String, String): Client  
mesComptes(long): List<Compte>  
virement(long, long, double): void  
BanqueServiceImpl.java  
src/main/resources  
src/test/java  
JRE System Library [J2SE-1.5]  
Maven Dependencies  
target  
pom.xml  
Demo [Demo master]

banque-metier/pom.xml metier-context.xml BanqueService.java \*BanqueServiceImpl.java

```
1 package fr.formation.m2.spring.banque.metier;  
2  
3 import java.util.List;  
4  
5 import fr.formation.m2.spring.banque.bdd.dao.ClientDAO;  
6 import fr.formation.m2.spring.banque.bdd.dao.CompteDAO;  
7 import fr.formation.m2.spring.banque.bdd.entities.Client;  
8 import fr.formation.m2.spring.banque.bdd.entities.Compte;  
9 import fr.formation.m2.spring.banque.bdd.util.BanqueException;  
10  
11 public class BanqueServiceImpl implements BanqueService {  
12  
13     private ClientDAO clientDAO;  
14     private CompteDAO compteDAO;  
15  
16     @Override  
17     public Client authentifier(String login, String password) {  
18         // TODO Auto-generated method stub  
19         return null;  
20     }  
21  
22     @Override  
23     public List<Compte> mesComptes(long clientId) {  
24         // TODO Auto-generated method stub  
25         return null;  
26     }  
27  
28     @Override  
29     public void virement(long clientId, long destinationId, double montant) {  
30         // TODO Auto-generated method stub  
31     }  
32  
33  
34 }
```

Generate Getters and Setters

Select getters and setters to create:

- ☒ clientDAO
  - ☐ getClientDAO()
  - ☒ setClientDAO(ClientDAO)
- ☒ compteDAO
  - ☐ getCompteDAO()
  - ☒ setCompteDAO(CompteDAO)

☐ Allow setters for final fields (remove 'final' modifier from fields if necessary)

Insertion point:  
After 'compteDAO'

Sort by:  
Fields in getter/setter pairs

Access modifier:  
☒ public ☐ protected ☐ package ☐ private  
☐ final ☐ synchronized

☐ Generate method comments

The format of the getters/setters may be configured on the [Code Templates](#) preference page.

2 of 4 selected.

OK Cancel

<terminated> C:\Program Files\J...  
[INFO] --- maven-compiler:3.1.0:compile (default-compile) @ banque-metier ---  
[INFO] Nothing to compile - all classes are up to date  
[INFO] --- maven-surefire:2.19.1:test (default-test) @ banque-metier ---  
[INFO] --- maven-jar-plugin:2.4:jar (default-jar) @ banque-metier ---  
[INFO] Building jar: D:\eclipse\_sts\_ws\banque-metier\target\banque-metier-0.0.1-SNAPSHOT.jar  
[INFO] --- maven-install-plugin:2.4:install (default-install) @ banque-metier ---  
[INFO] Installing D:\eclipse\_sts\_ws\banque-metier\target\banque-metier-0.0.1-SNAPSHOT.jar to C:\Users\olivier\.m2\repository\fr\formation\m2\spring\banque\metier\banque-metier-0.0.1-SNAPSHOT.jar  
[INFO] BUILD SUCCESS  
[INFO] Total time: 1.5s  
[INFO] Finished at: 2019-07-10 14:10:10  
[INFO] Final Memory: 12M/192M

Servers  
Pivotal tc Server Developer Edition v3.2 [Stopped, Sy...

générer les setters pour l'injection des dépendances



eclipse\_sts\_ws - banque-metier/src/main/java/fr/formation/m2/spring/banque/metier/BanqueServiceImpl.java - Spring Tool Suite

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer Navigator

banque-bdd [banque-bdd master]  
 banque-metier  
 src/main/java  
 fr.formation.m2.spring.banque.metier  
 BanqueService.java  
 BanqueService  
 authentifier(String, String): Client  
 mesComptes(long): List<Compte>  
 virement(long, long, double): void  
 BanqueServiceImpl.java  
 src/main/resources  
 src/test/java  
 JRE System Library [J2SE-1.5]  
 Maven Dependencies  
 src  
 target  
 pom.xml  
 Demo [Demo master]

banque-metier/pom.xml metier-context.xml BanqueService.java BanqueServiceImpl.java

```

12 private ClientDAO clientDAO;
13 private CompteDAO compteDAO;
14
15
16
17
18 public void setClientDAO(ClientDAO clientDAO) {
19     this.clientDAO = clientDAO;
20 }
21
22 public void setCompteDAO(CompteDAO compteDAO) {
23     this.compteDAO = compteDAO;
24 }
25
26 @Override
27 public Client authentifier(String identifiant, String motDePasse) throws BanqueException {
28     try {
29         Client client = clientDAO.rechercherClientParId(Long.parseLong(identifiant));
30         if (client != null && client.getMotdepasse().equals(motDePasse)) {
31             return client;
32         } else {
33             throw new BanqueException();
34         }
35     } catch (Exception e) {
36         e.printStackTrace();
37         throw new BanqueException("Erreur d'authentification.");
38     }
39 }
40
41 @Override
42 public List<Compte> mesComptes(long idClient) throws BanqueException {
43     // TODO Auto-generated method stub
44     return null;
45 }

```

Outline

fr.formation.m2.spring.ba  
 BanqueServiceImpl  
 clientDAO: ClientDA  
 compteDAO: Compt  
 setClientDAO(ClientD  
 setCompteDAO(Com  
 authentifier(String, St  
 mesComptes(long): l  
 virement(long, long, i

Console Progress Problems Search Properties

<terminated> C:\Program Files\Java\jdk1.8.0\_92\bin\javaw.exe (6 févr. 2018 à 16:04:34)

```

[INFO] --- maven-compiler-plugin:3.1:testCompile (default-testCompile) @ banque-metier ---
[INFO] Nothing to compile - all classes are up to date
[INFO] --- maven-surefire-plugin:2.12.4:test (default-test) @ banque-metier ---
[INFO] --- maven-jar-plugin:2.4:jar (default-jar) @ banque-metier ---
[INFO] Building jar: D:\olivier\eclipse_sts_ws\banque-metier\target\banque-metier-0.0.1-SNAPSHOT.jar
[INFO] --- maven-install-plugin:2.4:install (default-install) @ banque-metier ---
[INFO] Installing D:\olivier\eclipse_sts_ws\banque-metier\target\banque-metier-0.0.1-SNAPSHOT.jar to C:
[INFO] Installing D:\olivier\eclipse_sts_ws\banque-metier\pom.xml to C:\Users\olivier\.m2\repository\or
[INFO] BUILD SUCCESS
[INFO] Total time:
[INFO] Finished at:
[INFO] Final Memory:

```

Servers

Pivotal tc Server Developer Edition v3.2 [Stopped, Sy

codrer la méthode authentifier

eclipse\_sts\_ws - banque-metier/src/main/java/fr/formation/m2/spring/banque/metier/BanqueServiceImpl.java - Spring Tool Suite

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer Navigator

banque-bdd [banque-bdd master]  
 banque-metier  
 src/main/java  
 fr.formation.m2.spring.banque.metier  
 BanqueService.java  
 BanqueService  
 authentifier(String, String): Client  
 mesComptes(long): List<Compte>  
 virement(long, long, double): void  
 BanqueServiceImpl.java  
 src/main/resources  
 src/test/java  
 JRE System Library [J2SE-1.5]  
 Maven Dependencies  
 src  
 target  
 pom.xml  
 Demo [Demo master]

banque-metier/pom.xml metier-context.xml BanqueService.java BanqueServiceImpl.java

```

20 }
21
22 public void setCompteDAO(CompteDAO compteDAO) {
23     this.compteDAO = compteDAO;
24 }
25
26 @Override
27 public Client authentifier(String identifiant, String motDePasse) throws BanqueException {
28     try {
29         Client client = clientDAO.rechercherClientParId(Long.parseLong(identifiant));
30         if (client != null && client.getMotdepasse().equals(motDePasse)) {
31             return client;
32         } else {
33             throw new BanqueException();
34         }
35     } catch (Exception e) {
36         e.printStackTrace();
37         throw new BanqueException("Erreur d'authentification.");
38     }
39 }
40
41 @Override
42 public List<Compte> mesComptes(long idClient) throws BanqueException {
43     try {
44         Client client = clientDAO.rechercherClientParId(idClient);
45         return compteDAO.rechercherComptesClient(client);
46     } catch (Exception e) {
47         e.printStackTrace();
48         throw new BanqueException("Erreur lors de la récupération de vos comptes");
49     }
50 }
51
52 @Override
53 public void virement(long numeroADebiter, long numeroACrediter, double montant) throws BanqueException {

```

Outline

fr.formation.m2.spring.banque.metier  
 BanqueServiceImpl  
 clientDAO: ClientDAO  
 compteDAO: CompteDAO  
 setClientDAO(ClientDAO)  
 setCompteDAO(CompteDAO)  
 authentifier(String, String): Client  
 mesComptes(long): List<Compte>  
 virement(long, long, double): void

Console

```

<terminated> C:\Program Files\Java\jdk1.8.0_92\bin\javaw.exe (6 févr. 2018 à 16:04:34)
[INFO] --- maven-compiler-plugin:3.1:testCompile (default-testCompile) @ banque-metier ---
[INFO] Nothing to compile - all classes are up to date
[INFO] --- maven-surefire-plugin:2.12.4:test (default-test) @ banque-metier ---
[INFO] --- maven-jar-plugin:2.4:jar (default-jar) @ banque-metier ---
[INFO] Building jar: D:\olivier\eclipse_sts_ws\banque-metier\target\banque-metier-0.0.1-SNAPSHOT.jar
[INFO] --- maven-install-plugin:2.4:install (default-install) @ banque-metier ---
[INFO] Installing D:\olivier\eclipse_sts_ws\banque-metier\target\banque-metier-0.0.1-SNAPSHOT.jar to C:\Users\olivier\.m2\repository\fr\formation\m2\spring\banque\metier\banque-metier-0.0.1-SNAPSHOT.jar
[INFO] BUILD SUCCESS
[INFO] Total time: 0.158s
[INFO] Finished at: 2018-02-06 16:04:34
[INFO] Final Memory: 10M

```

Servers

Pivotal tc Server Developer Edition v3.2 [Stopped, Sy...

codrer la méthode mesComptes

eclipse\_sts\_ws - banque-metier/src/main/java/fr/formation/m2/spring/banque/metier/BanqueServiceImpl.java - Spring Tool Suite

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer Navigator

banque-bdd [banque-bdd master]  
 banque-metier  
 src/main/java  
 fr.formation.m2.spring.banque.metier  
 BanqueService.java  
 BanqueService  
 authentifier(String, String): Client  
 mesComptes(long): List<Compte>  
 virement(long, long, double): void  
 BanqueServiceImpl.java  
 src/main/resources  
 src/test/java  
 JRE System Library [J2SE-1.5]  
 Maven Dependencies  
 src  
 target  
 pom.xml  
 Demo [Demo master]

banque-metier/pom.xml metier-context.xml BanqueService.java BanqueServiceImpl.java

```

40
41 @Override
42 public List<Compte> mesComptes(long idClient) throws BanqueException {
43     try {
44         Client client = clientDAO.rechercherClientParId(idClient);
45         return compteDAO.rechercherComptesClient(client);
46     } catch (Exception e) {
47         e.printStackTrace();
48         throw new BanqueException("Erreur lors de la récupération de vos comptes");
49     }
50 }
51
52 @Override
53 public void virement(long numeroADebiter, long numeroACrediter, double montant)
54     throws BanqueException {
55     try {
56         Compte CompteADebiter = compteDAO.rechercherCompteParNumero(numeroADebiter);
57         Compte CompteACrediter = compteDAO.rechercherCompteParNumero(numeroACrediter);
58
59         CompteADebiter.setSolde((Double)(CompteADebiter.getSolde() - montant));
60         CompteACrediter.setSolde(CompteACrediter.getSolde() + montant);
61
62         compteDAO.modifierCompte(CompteADebiter);
63         compteDAO.modifierCompte(CompteACrediter);
64
65     } catch (Exception e) {
66         e.printStackTrace();
67         throw new BanqueException("Erreur lors de l'enregistrement de votre virement");
68     }
69 }
70
71 }
72
73 }

```

Outline

fr.formation.m2.spring.banque.metier  
 BanqueServiceImpl  
 clientDAO: ClientDAO  
 compteDAO: CompteDAO  
 setClientDAO(ClientDAO)  
 setCompteDAO(CompteDAO)  
 authentifier(String, String): Client  
 mesComptes(long): List<Compte>  
 virement(long, long, double): void

Console

```

<terminated> C:\Program Files\Java\jdk1.8.0_92\bin\javaw.exe (6 févr. 2018 à 16:04:34)
[INFO] --- maven-compiler-plugin:3.1:testCompile (default-testCompile) @ banque-metier ---
[INFO] Nothing to compile - all classes are up to date
[INFO] --- maven-surefire-plugin:2.12.4:test (default-test) @ banque-metier ---
[INFO] --- maven-jar-plugin:2.4:jar (default-jar) @ banque-metier ---
[INFO] Building jar: D:\olivier\eclipse_sts_ws\banque-metier\target\banque-metier-0.0.1-SNAPSHOT.jar
[INFO] --- maven-install-plugin:2.4:install (default-install) @ banque-metier ---
[INFO] Installing D:\olivier\eclipse_sts_ws\banque-metier\target\banque-metier-0.0.1-SNAPSHOT.jar to C:\Users\olivier\.m2\repository\org\springframework\banking\banque-metier\0.0.1-SNAPSHOT\banque-metier-0.0.1-SNAPSHOT.jar
[INFO] BUILD SUCCESS
[INFO] Total time: 0.158s
[INFO] Finished at: 2018-02-06 16:04:34
[INFO] Final Memory: 10M

```

Servers

Pivotal tc Server Developer Edition v3.2 [Stopped, Sy...

codrer la méthode virement



eclipse\_sts\_ws - banque-metier/src/main/resources/metier-context.xml - Spring Tool Suite

File Edit Refactor Navigate Search Project Run Design Window Help

Package Explorer Navigator

- banque-bdd [banque-bdd master]
- banque-metier
  - src/main/java
    - fr.formation.m2.spring.banque.metier
      - BanqueService.java
        - BanqueService
          - authentifier(String, String) : Client
          - mesComptes(long) : List<Compte>
          - virement(long, long, double) : void
    - src/main/resources
      - metier-context.xml
    - src/test/java
    - JRE System Library [J2SE-1.5]
    - Maven Dependencies
    - src
    - target
    - pom.xml
  - Demo [Demo master]

Spring Beans

Beans Overview

Select an element to edit its details.

type filter text

New Bean

Create New Bean

Bean Definition

Enter bean attributes.

Bean definitions file:

\banque-metier\src\main\resources\metier-context.xml

Browse...

Id: BanqueService

Name:

Class: fr.formation.m2.spring.banque.metier.BanqueServiceImpl

Browse...

Parent:

☐ Ignore errors

< Back Next > Finish Cancel

Console

```
<terminated> C:\Program Files\Java\jdk1.8.0_92\bin\javaw.exe (6 févr. 2018 à 16:04:34)
[INFO] --- maven-compiler-plugin:3.1:testCompile (default-testCompile) @ banque-metier ---
[INFO] Nothing to compile - all classes are up to date
[INFO] --- maven-surefire-plugin:2.12.4:test (default-test) @ banque-metier ---
[INFO] --- maven-jar-plugin:2.4:jar (default-jar) @ banque-metier ---
[INFO] Building jar: D:\olivier\eclipse_sts_ws\banque-metier\target\banque-metier-0.0.1-SNAPSHOT.jar
[INFO] --- maven-install-plugin:2.4:install (default-install) @ banque-metier ---
[INFO] Installing D:\olivier\eclipse_sts_ws\banque-metier\target\banque-metier-0.0.1-SNAPSHOT.jar to C:
[INFO] BUILD SUCCESS
[INFO] Total time:
[INFO] Finished at:
[INFO] Final Memory:
[INFO]
```

Servers

- Pivotal tc Server Developer Edition v3.2 [Stopped, Syn]

Outline

- xml
- beans xmlns=http://www.sp

créer le bean banqueService puis 'next'

The screenshot shows the Eclipse IDE interface. The Package Explorer on the left displays the project structure: banque-bdd [banque-bdd master], banque-metier, src/main/java (fr.formation.m2.spring.banque.metier, BanqueService, BanqueServiceImpl.java), src/main/resources (metier-context.xml), src/test/java, JRE System Library [J2SE-1.5], Maven Dependencies, src, target, pom.xml, and Demo [Demo master]. The main editor shows the 'Spring Beans' configuration for 'metier-context.xml'. The 'Beans Overview' tab is active, showing a 'Create New Bean' dialog box. The 'New Property' dialog box is open, displaying an error message: 'Bean ref is unknown.' The 'Name' field is 'clientDAO', the 'Value' field is empty, and the 'Ref' field is 'clientDAO'. The 'Finish' button is highlighted. The Console at the bottom shows the output of the Maven build process, including messages for maven-compiler-plugin, maven-surefire-plugin, maven-jar-plugin, and maven-install-plugin. The build was successful.

Spring Beans

Beans Overview

Select an element to edit its details.

type filter text

Create New Bean

Properties and Constructor Parameters

Create or edit bean properties and constructor arguments.

Properties

New Property

Bean ref is unknown.

Name: clientDAO

Value:

Ref: clientDAO

OK Cancel

< Back Next > Finish Cancel

Console

```
<terminated> C:\Program Files\Java\jdk1.8.0_92\bin\javaw.exe (6 févr. 2018 à 16:04:34)
[INFO] --- maven-compiler-plugin:3.1:testCompile (default-testCompile) @ banque-metier ---
[INFO] Nothing to compile - all classes are up to date
[INFO] --- maven-surefire-plugin:2.12.4:test (default-test) @ banque-metier ---
[INFO] --- maven-jar-plugin:2.4:jar (default-jar) @ banque-metier ---
[INFO] Building jar: D:\olivier\eclipse_sts_ws\banque-metier\target\banque-metier-0.0.1-SNAPSHOT.jar
[INFO] --- maven-install-plugin:2.4:install (default-install) @ banque-metier ---
[INFO] Installing D:\olivier\eclipse_sts_ws\banque-metier\target\banque-metier-0.0.1-SNAPSHOT.jar to C:
[INFO] Installing D
[INFO] BUILD SUCCESS
[INFO] Total time:
[INFO] Finished at:
[INFO] Final Memory
```

créer la propriété clientDAO.

NOTA: l'erreur est liée au fait qu'il n'y a pas de visibilité inter projets => respecter le nom d'origine de banque-bdd

eclipse\_sts\_ws - banque-metier/src/main/resources/metier-context.xml - Spring Tool Suite

File Edit Refactor Navigate Search Project Run Design Window Help

Package Explorer Navigator

banque-bdd [banque-bdd master]  
 banque-metier  
 src/main/java  
 fr.formation.m2.spring.banque.metier  
 BanqueService.java  
 BanqueService  
 authentifier(String, String) : Client  
 mesComptes(long) : List<Compte>  
 virement(long, long, double) : void  
 BanqueServiceImpl.java  
 src/main/resources  
 metier-context.xml  
 src/test/java  
 JRE System Library [J2SE-1.5]  
 Maven Dependencies  
 src  
 target  
 pom.xml  
 Demo [Demo master]

banque-metier/pom.xml BanqueService.java BanqueServiceImpl.java metier-context.xml

### Spring Beans

Beans Overview

Select an element to edit its details.

type filter text New Bean

Create New Bean

Properties and Constructor Parameters

There are 2 warnings in the Properties section.

Properties

Name	Value / Ref
clientDAO	clientDAO
compteDAO	compteDAO

Add... Edit... Remove

Constructor Args

☒ Ignore errors

Back Next Finish Cancel

Console Progress Problems Search Properties

```
<terminated> C:\Program Files\Java\jdk1.8.0_92\bin\javaw.exe (6 févr. 2018 à 16:04:34)
[INFO] --- maven-compiler-plugin:3.1:testCompile (default-testCompile) @ banque-metier ---
[INFO] Nothing to compile - all classes are up to date
[INFO] --- maven-surefire-plugin:2.12.4:test (default-test) @ banque-metier ---
[INFO] --- maven-jar-plugin:2.4:jar (default-jar) @ banque-metier ---
[INFO] Building jar: D:\olivier\eclipse_sts_ws\banque-metier\target\banque-metier-0.0.1-SNAPSHOT.jar
[INFO] --- maven-install-plugin:2.4:install (default-install) @ banque-metier ---
[INFO] Installing D:\olivier\eclipse_sts_ws\banque-metier\target\banque-metier-0.0.1-SNAPSHOT.jar to C:
[INFO] Installing D:\olivier\eclipse_sts_ws\banque-metier\target\banque-metier-0.0.1-SNAPSHOT.jar to C:
[INFO] BUILD SUCCESS
[INFO] Total time:
[INFO] Finished at:
[INFO] Final Memory
```

Servers

Pivotal tc Server Developer Edition v3.2 [Stopped, Syn]

Outline

xml  
 beans xmlns=http://www.sp

idem pour compteDAO et cocher 'ignore errors' pour pouvoir faire 'finish'

The screenshot displays the Eclipse IDE interface for a Spring project named 'banque-metier'. The Package Explorer on the left shows the project structure, including the 'src/main/resources' directory where 'bdd-context.xml' is located. The main editor shows the 'pom.xml' file with the following XML snippet:

```
<?xml version="1.0" encoding="UTF-8"?>
<beans xmlns="http://www.springframework.org/schema/beans"
       xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
       xsi:schemaLocation="http://www.springframework.org/schema/beans http://www.springframework.org/schema/beans.xsd">
  <import resource="classpath:bdd-context.xml"/>
  <bean id="banqueService"
        class="fr.formation.m2.spring.banque.metier.BanqueServiceImpl">
    <property name="compteDAO" ref="compteDAO"/>
    <property name="clientDAO" ref="clientDAO"/>
  </bean>
</beans>
```

The Console at the bottom shows the build output, including warnings and success messages:

```
<terminated> C:\Program Files\Java\jdk1.8.0_92\bin\javaw.exe (6 févr. 2018 à 16:04:34)
[INFO] --- maven-compiler-plugin:3.1:testCompile (default-testCompile) @ banque-metier ---
[INFO] Nothing to compile - all classes are up to date
[INFO] --- maven-surefire-plugin:2.12.4:test (default-test) @ banque-metier ---
[INFO] --- maven-jar-plugin:2.4:jar (default-jar) @ banque-metier ---
[INFO] Building jar: D:\olivier\eclipse_sts_ws\banque-metier\target\banque-metier-0.0.1-SNAPSHOT.jar
[INFO] --- maven-install-plugin:2.4:install (default-install) @ banque-metier ---
[INFO] Installing D:\olivier\eclipse_sts_ws\banque-metier\target\banque-metier-0.0.1-SNAPSHOT.jar to C:
[INFO] BUILD SUCCESS
[INFO] Total time:
[INFO] Finished at:
[INFO] Final Memory:
```

les deux warnings apparaissent mais ça n'empêchera pas la liaison inter projets...

**ATTENTION** : il est nécessaire d'importer la ressource **bdd-context.xml** via la balise **<import>**

eclipse\_sts\_ws - banque-metier/src/main/resources/metier-context.xml - Spring Tool Suite

File Edit Source Refactor Navigate Search Project Run Window Help

Package Explorer Navigator

banque-bdd [banque-bdd master]

- src/main/java
- src/main/resources
- src/test/java
- JRE System Library [J2SE-1.5]
- Maven Dependencies
- src
- target
- bdd-context.xml
- pom.xml

banque-metier

- src/main/java
  - fr.formation.m2.spring.banque.metier
    - BanqueService.java
      - BanqueService
        - authentifier(String, String) : Client
        - mesComptes(long) : List<Compte>
        - virement(long, long, double) : void
  - src/main/resources
    - metier-context.xml
  - src/test/java
  - JRE System Library [J2SE-1.5]
  - Maven Dependencies
  - src
  - target
  - pom.xml

Demo [Demo master]

banque-metier/pom.xml BanqueService.java BanqueServiceImpl.java metier-context.xml

```
<?xml version="1.0" encoding="UTF-8"?>
<beans xmlns="http://www.springframework.org/schema/beans"
       xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
       xsi:schemaLocation="http://www.springframework.org/schema/beans http://www.springframework.o
7
<import resource="classpath:bdd-context.xml"/>
8
9
10
11 <bean id="banqueService"
12       class="fr.formation.m2.spring.banque.metier.BanqueServiceImpl">
13   <property name="compteDAO" ref="compteDAO"/></property>
14   <property name="clientDAO" ref="clientDAO"/></property>
15 </bean>
16 </beans>
```

Outline

xml

- beans xmlns=http://www.sp

Source Namespaces Overview beans Beans Graph

Console Progress Problems Search Properties

```
<terminated> C:\Program Files\Java\jdk1.8.0_92\bin\javaw.exe (6 févr. 2018 à 16:04:34)
[INFO] --- maven-compiler-plugin:3.1:testCompile (default-testCompile) @ banque-metier ---
[INFO] Nothing to compile - all classes are up to date
[INFO]
[INFO] --- maven-surefire-plugin:2.12.4:test (default-test) @ banque-metier ---
[INFO]
[INFO] --- maven-jar-plugin:2.4:jar (default-jar) @ banque-metier ---
[INFO] Building jar: D:\olivier\eclipse_sts_ws\banque-metier\target\banque-metier-0.0.1-SNAPSHOT.jar
[INFO]
[INFO] --- maven-install-plugin:2.4:install (default-install) @ banque-metier ---
[INFO] Installing D:\olivier\eclipse_sts_ws\banque-metier\target\banque-metier-0.0.1-SNAPSHOT.jar to C:
[INFO] Installing D:\olivier\eclipse_sts_ws\banque-metier\pom.xml to C:\Users\olivier\.m2\repository\or
[INFO]
[INFO] BUILD SUCCESS
[INFO]
[INFO] Total time: 2.034 s
[INFO] Finished at: 2018-02-06T16:04:38+01:00
[INFO] Final Memory: 11M/245M
[INFO]
[INFO]
```

Servers

- Pivotal tc Server Developer Edition v3.2 [Stopped, Syn

vérifier le BUILD SUCCESS