}

CASE STUDY PRODUCT POJO CLASS

Step 1: Product.java (POJO Class)

```
package com.example.model;

public class Product {
    private String name;
    private String description;

    // Default constructor
    public Product() {}

    // Parameterized constructor
    public Product(String name, String description) {
        this.name = name;
        this.description = description;
    }

    // Getters and Setters
    public String getName() {
        return name;
    }

    public void setName(String name) {
        this.name = name;
    }
```

```java
    public String getDescription() {
        return description;
    }

    public void setDescription(String description) {
        this.description = description;
    }

    // toString() method
    @Override
    public String toString() {
        return "Product{name='" + name + "', description='" + description + "'}";
    }
}
```

Step 2: beans.xml (Enable CDI)

```xml
<!-- beans.xml -->
<?xml version="1.0" encoding="UTF-8"?>
<beans xmlns="https://jakarta.ee/xml/ns/jakartaee"
       xmlns:xsi="http://www.w3.org/2001/XMLSchema-instance"
       xsi:schemaLocation="https://jakarta.ee/xml/ns/jakartaee
https://jakarta.ee/xml/ns/jakartaee/beans_3_0.xsd"
       bean-discovery-mode="all">
</beans>
```

Step 3: App.java (Main class with @Inject)

```
package com.example.main;

import com.example.model.Product;

import jakarta.enterprise.context.Dependent;
import jakarta.enterprise.inject.se.SeContainer;
import jakarta.enterprise.inject.se.SeContainerInitializer;
import jakarta.inject.Inject;

@Dependent
public class App {

    @Inject
    private Product product;

    public void run() {
        product.setName("Laptop");
        product.setDescription("A high-performance laptop for developers");
        System.out.println("Product Info: " + product);
    }

    public static void main(String[] args) {
        SeContainerInitializer initializer = SeContainerInitializer.newInstance();
        try (SeContainer container = initializer.initialize()) {
            App app = container.select(App.class).get();
            app.run();
        }
    }
}
```

Maven Dependencies (pom.xml)

```
<dependencies>
    <!-- Jakarta CDI API -->
    <dependency>
        <groupId>jakarta.enterprise</groupId>
        <artifactId>jakarta.enterprise.cdi-api</artifactId>
        <version>4.0.1</version>
        <scope>provided</scope>
    </dependency>

    <!-- Weld CDI SE Implementation -->
    <dependency>
        <groupId>org.jboss.weld.se</groupId>
        <artifactId>weld-se-core</artifactId>
        <version>5.1.0.Final</version>
    </dependency>
</dependencies>
```