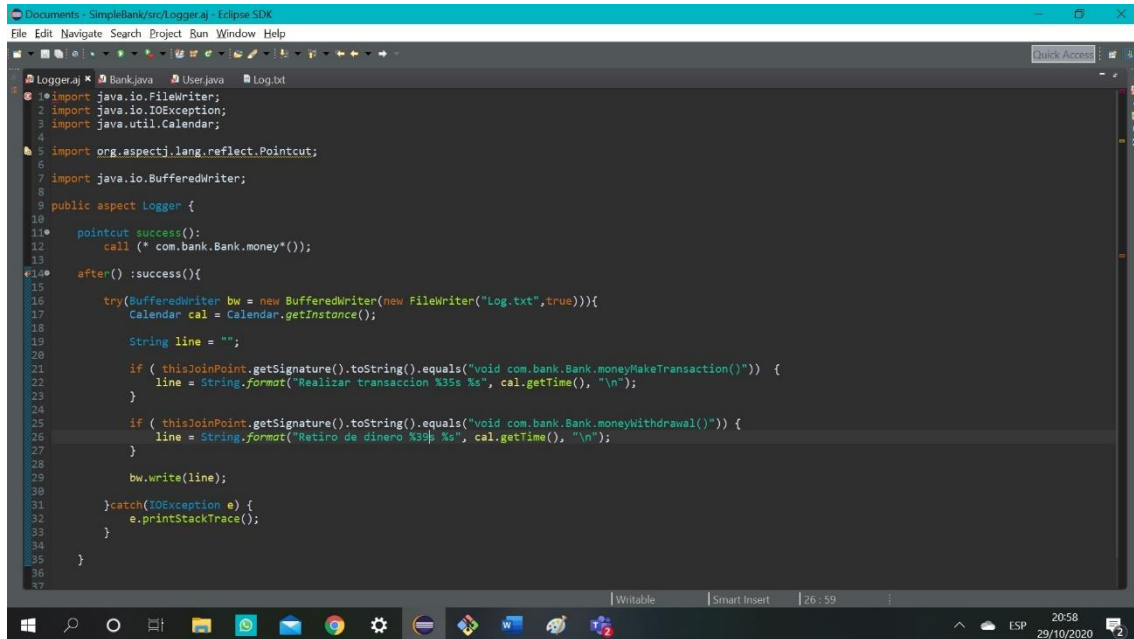


AOP 9:

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- Edwin Eras

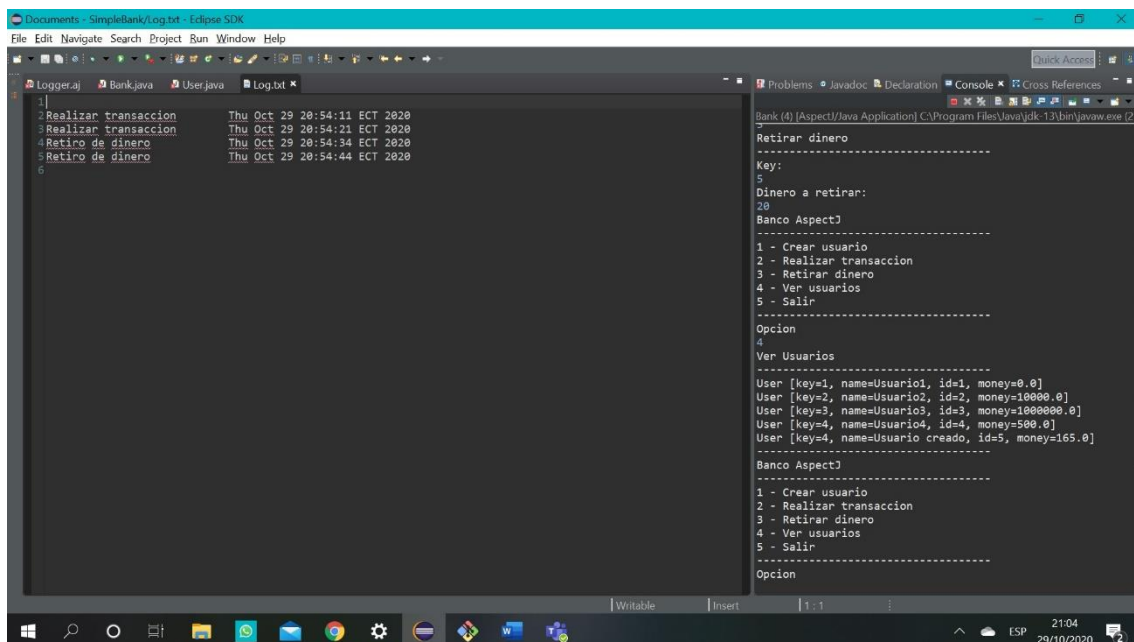
Captura del aspecto Logger.aj.



The screenshot shows the Eclipse IDE with the file `Logger.aj` open. The code defines an aspect named `Logger` that uses `pointcut` and `after` advice to log transactions. The `pointcut` is defined as `success()` and the `after` advice is defined as `after():success(){}`. The `after` advice logs the transaction details to a file named `Log.txt`.

```
1 import java.io.*;
2 import java.io.IOException;
3 import java.util.*;
4
5 import org.aspectj.lang.reflect.*;
6
7 import java.io.*;
8
9 public aspect Logger {
10
11     pointcut success():
12         call (* com.bank.Bank.money*());
13
14     after():success(){
15
16         try(BufferedWriter bw = new BufferedWriter(new FileWriter("Log.txt",true))){
17             Calendar cal = Calendar.getInstance();
18
19             String line = "";
20
21             if ( thisJoinPoint.getSignature().toString().equals("void com.bank.Bank.moneyMakeTransaction()")) {
22                 line = String.format("Realizar transaccion %35s %s", cal.getTime(), "\n");
23             }
24
25             if ( thisJoinPoint.getSignature().toString().equals("void com.bank.Bank.moneyWithdrawal()")) {
26                 line = String.format("Retiro de dinero %35s %s", cal.getTime(), "\n");
27             }
28
29             bw.write(line);
30
31         }catch(IOException e){
32             e.printStackTrace();
33         }
34     }
35 }
36
37
```

Captura del Usuario creado y sus operaciones en Log.txt.



The screenshot shows the Eclipse IDE with the file `Log.txt` open. The file contains the log output from the `Logger.aj` aspect. The log output shows the following transactions:

```
1 Realizar transaccion Thu Oct 29 20:54:11 ECT 2020
2 Realizar transaccion Thu Oct 29 20:54:21 ECT 2020
3 Retiro de dinero Thu Oct 29 20:54:34 ECT 2020
4 Retiro de dinero Thu Oct 29 20:54:44 ECT 2020
5
```

The Console output shows the following messages:

```
Bank (4) [AspectJ/Java Application] C:\Program Files\Java\jdk-13\bin\javaw.exe [29]
Retirar dinero
Key:
5
Dinero a retirar:
20
Banco AspectJ
-----
1 - Crear usuario
2 - Realizar transaccion
3 - Retirar dinero
4 - Ver usuarios
5 - Salir
-----
Opcion
4
Ver Usuarios
-----
User [key=1, name=Usuario1, id=1, money=0.0]
User [key=2, name=Usuario2, id=2, money=10000.0]
User [key=3, name=Usuario3, id=3, money=1000000.0]
User [key=4, name=Usuario4, id=4, money=500.0]
User [key=5, name=Usuario creado, id=5, money=165.0]
-----
Banco AspectJ
-----
1 - Crear usuario
2 - Realizar transaccion
3 - Retirar dinero
4 - Ver usuarios
5 - Salir
-----
Opcion
```

Enlace del repositorio: <https://github.com/EdwinEras/taller-aspectj>