Modificación Patrón Adapter

Objetivo

Agregar un nuevo banco "zBank" con respuesta síncrona, en el cual, si no se autoriza el crédito se debe lanzar una excepción

Resolución

A continuación, se detallarán los pasos realizados para completar el objetivo de la tarea

i. Creación de los componentes para "zBank" (Api, Request, Response)

```java
package oscarblancarte.ipd.adapter.creditapi.bankz;
public class ZBankCreditAPI {
    public ZBankCreditResponse sendCreditRequest(ZBankCreditRequest request) throws Exception {
        ZBankCreditResponse response =new ZBankCreditResponse();
        if(request.getRequestAmount() <= 50000) {
            response.setAproval(true);
        } else {
            response.setAproval(false);
            throw new Exception("Aprobacion rechazada zBank");
        }
        return response;
    }
}
```

```java
public class ZBankCreditRequest {
    private String customerName;
    private double requestAmount;

    public String getCustomerName() { return customerName; }
    public void setCustomerName(String customerName) { this.customerName = customerName; }

    public double getRequestAmount() { return requestAmount; }
    public void setRequestAmount(double requestAmount) { this.requestAmount = requestAmount; }
}
```

```java
public class ZBankCreditResponse {
    public boolean aproval;

    public boolean isAproval() { return aproval; }
    public void setAproval(boolean aproval) { .aproval = aproval; }
}
```

ii. Creación del Adapter para el nuevo banco

```java
public class ZBankCreditAdapter implements IBankAdapter {
    @Override
    public BankCreditResponse sendCreditRequest(BankCreditRequest request) {
        ZBankCreditRequest zrequest = new ZBankCreditRequest();
        zrequest.setCustomerName(request.getCustomer());
        zrequest.setRequestAmount(request.getAmount());

        ZBankCreditAPI api = new ZBankCreditAPI();
        ZBankCreditResponse zresponse = new ZBankCreditResponse();
        try {
            zresponse = api.sendCreditRequest(zrequest);
        } catch(Exception ex) {
            ex.printStackTrace();
            zresponse.setAproval(false);
        }
```

```
BankCreditResponse response = new BankCreditResponse();
response.setApproved(zresponse.isAproval());
return response;
    }

}
```

iii. Modificación de la clase "AdapterMain" para llamar al nuevo banco

```java
public class AdapterMain {

    public static void main(String[] args) {
        //Generic request for the two API's
        BankCreditRequest request = new BankCreditRequest();
        request.setCustomer("Oscar Blancarte");
        request.setAmount(250000);

        System.out.println("Solicitante: " + request.getCustomer() +
                "\nMonto: " + request.getAmount() + "\n\n \n ");

        IBankAdapter xBank = new XBankCreditAdapter();
        BankCreditResponse xresponse = xBank.sendCreditRequest(request);
        System.out.println("xBank approved > " + xresponse.isApproved() + "\n");

        IBankAdapter yBank = new YBankCreditAdapter();
        BankCreditResponse yresponse = yBank.sendCreditRequest(request);
        System.out.println("yBank approved > " + yresponse.isApproved() + "\n");

        IBankAdapter zBank = new ZBankCreditAdapter();
        BankCreditResponse zresponse = zBank.sendCreditRequest(request);
        System.out.println("zBank approved > " + zresponse.isApproved() + "\n");

        if (xresponse.isApproved()) {
            System.out.println("xBank approved your credit, congratulations!!");
        } else if (yresponse.isApproved()) {
            System.out.println("yBank approved your credit, congratulations!!");
        } else if (zresponse.isApproved()) {
            System.out.println("zBank approved your credit, congratulations!!");
        } else {
            System.out.println("Sorry your credit has not been approved");
        }
    }
}
```

Resultado

Resultado con crédito rechazado:

```
run:
Solicitante: Oscar Blancarte
Monto: 250000.0

xBank approved > false

yBank received your request in a moment you will have the answer, be patient please
yBank request on hold....
yBank request on hold....
yBank request on hold....
yBank request on hold....
yBank approved > false

zBank approved > false
```
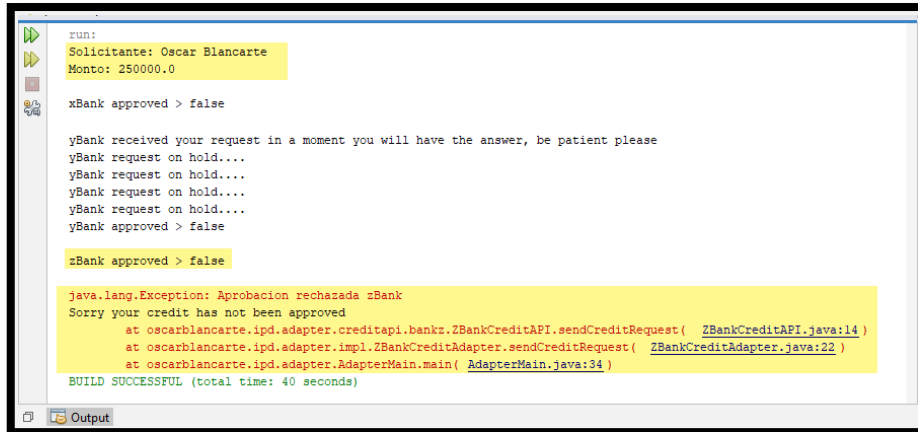
java.lang.Exception: Aprobacion rechazada zBank
Sorry your credit has not been approved
    at oscarblancarte.ipd.adapter.creditapi.bankz.ZBankCreditAPI.sendCreditRequest(ZBankCreditAPI.java:14)
    at oscarblancarte.ipd.adapter.impl.ZBankCreditAdapter.sendCreditRequest(ZBankCreditAdapter.java:22)
    at oscarblancarte.ipd.adapter.AdapterMain.main(AdapterMain.java:34)
BUILD SUCCESSFUL (total time: 40 seconds)

Resultado con crédito aprobado:

run:
Solicitante: Oscar Blancarte
Monto: 25000.0

xBank approved > false

yBank received your request in a moment you will have the answer, be patient please
yBank request on hold....
yBank request on hold....
yBank request on hold....
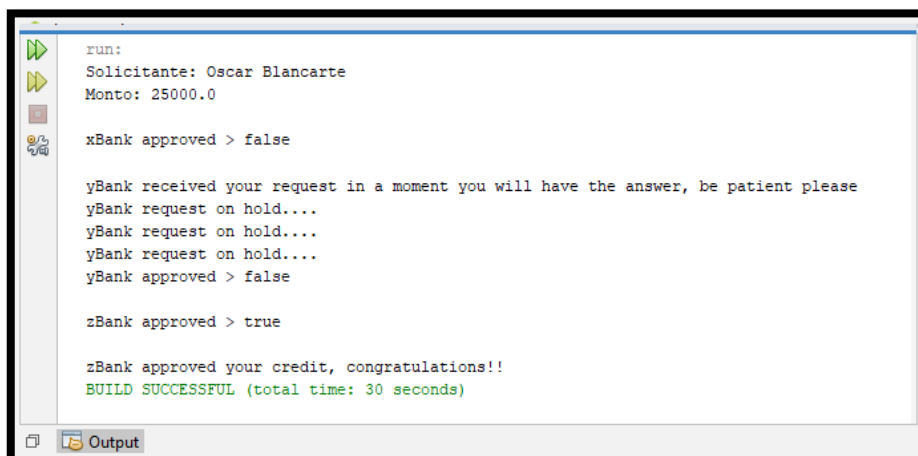yBank approved > false

zBank approved > true

zBank approved your credit, congratulations!!
BUILD SUCCESSFUL (total time: 30 seconds)