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BankAccount.java
package org.bank;
import javax.persistence.DiscriminatorColumn;
import javax.persistence.DiscriminatorType;
import javax.persistence.DiscriminatorValue;
import javax.persistence.Entity;
import javax.persistence.GeneratedValue;
import javax.persistence.Id;
import javax.persistence.Inheritance;
import javax.persistence.InheritanceType;

@Entity
@Inheritance(strategy = InheritanceType.SINGLE_TABLE)
@DiscriminatorColumn(name = "account", discriminatorType = DiscriminatorType.STRING)
@DiscriminatorValue("bank")
public class BankAccount
{
    @Id
    @GeneratedValue
    private long accountNumber;
    private String accountHolder;
    private String address;
    private long phoneNumber;
    private String emailId;
    protected double balance;

    public BankAccount() {
        super();
        // TODO Auto-generated constructor stub
    }

    public BankAccount(long accountNumber, String accountHolder, String address,
long phoneNumber, String emailId,
double balance)
    {
        super();
        this.accountNumber = accountNumber;
        this.accountHolder = accountHolder;
        this.address = address;
        this.phoneNumber = phoneNumber;
        this.emailId = emailId;
        this.balance = balance;
    }

    public long getAccountNumber()
    {
        return accountNumber;
    }

    public void setAccountNumber(long accountNumber) {
        this.accountNumber = accountNumber;
    }

    public String getAccountHolder()
    {
        return accountHolder;
    }

    public void setAccountHolder(String accountHolder) {

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        this.accountHolder = accountHolder;
    }

    public String getAddress()
    { return address;
    }

    public void setAddress(String address) {
        this.address = address;
    }

    public long getPhoneNumber() {
        return phoneNumber;
    }

    public void setPhoneNumber(long phoneNumber) {
        this.phoneNumber = phoneNumber;
    }

    public String getEmailId()
    { return emailId;
    }

    public void setEmailId(String emailId) {
        this.emailId = emailId;
    }

    public double getBalance()
    { return balance;
    }

    public void setBalance(double balance) {
        this.balance = balance;
    }

    public Double withdraw(double amount)
    { return this.balance - amount;
    }

    public Double deposit(double amount) {
        return this.balance + amount;
    }
}

```

Savings.java

```

package org.bank;
import javax.persistence.DiscriminatorValue;
import javax.persistence.Entity;

@Entity
@DiscriminatorValue("savings")
public class Savings extends BankAccount {
    private static double maximumAmountTransfer = 100000;
}

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private static int maximumNumberOfTransaction = 5;
private double amountTransferred;
private int numberOfTransaction;

public Savings() {
    super();
    // TODO Auto-generated constructor stub
}

public Savings(long accountNumber, String accountHolder, String address,
long phoneNumber, String emailId,
double balance, double amountTransferred,
int numberOfTransaction) {
    super(accountNumber, accountHolder, address, phoneNumber, emailId,
balance);
    this.amountTransferred = amountTransferred;
    this.numberOfTransaction = numberOfTransaction;
    // TODO Auto-generated constructor stub
}

public static double getMaximumAmountTransfer()
{ return maximumAmountTransfer;
}

public static void setMaximumAmountTransfer(double maximumAmountTransfer)
{ Savings.maximumAmountTransfer = maximumAmountTransfer;
}

public static int getMaximumNumberOfTransaction()
{ return maximumNumberOfTransaction;
}

public static void setMaximumNumberOfTransaction(int
maximumNumberOfTransaction) {
    Savings.maximumNumberOfTransaction = maximumNumberOfTransaction;
}

public double getAmountTransferred()
{ return amountTransferred;
}

public void setAmountTransferred(double amountTransferred) {
    this.amountTransferred = amountTransferred;
}

public int getNumberOfTransaction()
{ return numberOfTransaction;
}

public void setNumberOfTransaction(int numberOfTransaction)
{ this.numberOfTransaction = numberOfTransaction;
}

@Override
public Double withdraw(double amount) {

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        if (maximumAmountTransfer <= 100000 && maximumNumberOfTransaction <= 5)
        {
            return super.withdraw(amount);
        } else {
            System.out.println("process cannot be done");
        }
        return amount;
    }

    @Override
    public Double deposit(double amount) {
        if (maximumAmountTransfer <= 100000 && maximumNumberOfTransaction <= 5)
        {
            return super.deposit(amount);
        } else {
            System.out.println("process cannot be done");
        }
        return amount;
    }
}

```

Current.java

```

package org.bank;
import javax.persistence.DiscriminatorValue;
import javax.persistence.Entity;
@Entity
@DiscriminatorValue("current")
public class Current extends BankAccount {
    private static double minimumAmountTransfer =
    500000; private static int minimumNoOfTransaction =
    7; private double amountTransferred;
    private int NoOfTransactionHeld;

    public Current() {
        super();
        // TODO Auto-generated constructor stub
    }

    public Current(long accountNumber, String accountHolder, String address,
    long phoneNumber, String emailId,
        double balance, double minimumAmountTransfer,
    int minimumNoOfTransaction, double amountTransferred,
        int NoOfTransactionHeld) {
        super(accountNumber, accountHolder, address, phoneNumber, emailId,
    balance);
        // TODO Auto-generated constructor stub
    }

    public static double getMinimumAmountTransfer()
    { return minimumAmountTransfer;
    }
}

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    public static void setMinimumAmountTransfer(double minimumAmountTransfer)
    { Current.minimumAmountTransfer = minimumAmountTransfer;
    }

    public static int getMinimumNoOfTransaction()
    { return minimumNoOfTransaction;
    }

    public static void setMinimumNoOfTransaction(int minimumNoOfTransaction) {
    Current.minimumNoOfTransaction = minimumNoOfTransaction;
    }

    public double getAmountTransferred()
    { return amountTransferred;
    }

    public void setAmountTransferred(double amountTransferred) {
    this.amountTransferred = amountTransferred;
    }

    public int getNoOfTransactionHeld()
    { return NoOfTransactionHeld;
    }

    public void setNoOfTransactionHeld(int noOfTransactionHeld)
    { NoOfTransactionHeld = noOfTransactionHeld;
    }

    @Override
    public Double withdraw(double amount) {
        if (minimumAmountTransfer <= 500000 && minimumNoOfTransaction <= 7)
            { return super.withdraw(amount);
            } else {
                System.out.println("process cannot be done");
            }
        return amount;
    }

    @Override
    public Double deposit(double amount) {
        if (minimumAmountTransfer <= 500000 && minimumNoOfTransaction <= 7)
            { return super.deposit(amount);
            } else {
                System.out.println("process cannot be done");
            }
        return amount;
    }
}

```

Solution.java

```

package org.bank;
import java.io.BufferedReader

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import java.io.IOException;
import java.io.InputStreamReader;
import org.hibernate.Session;
import org.hibernate.SessionFactory;
import org.hibernate.cfg.Configuration;

public class Solution {

    public static void main(String[] args) throws NumberFormatException,
IOException {
        SessionFactory sf = new
Configuration().configure().buildSessionFactory();
        Session session = sf.openSession();
        session.beginTransaction();
        BufferedReader bf = new
BufferedReader(new InputStreamReader(System.in));
        System.out.println("enter account number");
        long accountNumber = Long.valueOf(bf.readLine());
        System.out.println("enter account holder"); String
accountHolder = bf.readLine();
        System.out.println("enter address");
        String address = bf.readLine();
        System.out.println("enter phone number");
        long phoneNumber = Long.valueOf(bf.readLine());
        System.out.println("enter emailid");
        String emailId = bf.readLine();
        System.out.println("enter balance");
        double balance = Double.valueOf(bf.readLine());
        System.out.println("enter amount");
        double amount = Double.valueOf(bf.readLine());
        BankAccount bankaccount = new BankAccount(accountNumber,
accountHolder, address, phoneNumber, emailId, balance);
        System.out.println("the deposited value is:"
+ bankaccount.deposit(amount));
        System.out.println("the withdrew value is:" +
bankaccount.withdraw(amount));
        System.out.println("enter amount transferd");
        double amountTransferred = Double.valueOf(bf.readLine());
        System.out.println("enter number of transaction");
        int numberOfTransaction = Integer.valueOf(bf.readLine());
        Savings savings = new Savings(accountNumber, accountHolder, address,
phoneNumber, emailId, balance,
        amountTransferred, numberOfTransaction);
        System.out.println("the deposited value is:" + savings.deposit(amount));
        System.out.println("the withdrew value is:" +
savings.withdraw(amount));
        System.out.println("enter number of transaction held"); int
noOfTransactionHeld = Integer.valueOf(bf.readLine());
        Current current = new Current(accountNumber, accountHolder, address,
phoneNumber, emailId, balance,
        amountTransferred, noOfTransactionHeld, amountTransferred,
noOfTransactionHeld);
        System.out.println("the deposited value is:" + current.deposit(amount));

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        System.out.println("the withdrawn value is:" +
current.withdraw(amount));
        System.out.println(bankaccount.getAccountNumber());
        System.out.println(bankaccount.getAddress());
        System.out.println(bankaccount.getPhoneNumber());
        System.out.println(bankaccount.getEmailId());
        System.out.println(bankaccount.getBalance());
        System.out.println(savings.getAmountTransferred());
        System.out.println(savings.getNumberOfTransaction());
        System.out.println(current.getAmountTransferred());
        System.out.println(current.getNoOfTransactionHeld());
        session.save(bankaccount);
        session.save(savings);
        session.save(current);
        session.getTransaction().commit();
        session.close();
    }
}

```

Hibernate.cfg.xml

```

<?xml version='1.0' encoding='utf-8'?>
<!-- ~ Hibernate, Relational Persistence for Idiomatic Java ~ ~ License:
    GNU Lesser General Public License (LGPL), version 2.1 or later. ~ See the
    lgpl.txt file in the root directory or <http://www.gnu.org/licenses/lgpl-2.1.html>. -->
<!DOCTYPE hibernate-configuration PUBLIC "-
    //Hibernate/Hibernate Configuration DTD 3.0//EN"
    "http://www.hibernate.org/dtd/hibernate-configuration-3.0.dtd">

<hibernate-configuration>

    <session-factory>

        <!-- Database connection settings --
        > <property
name="connection.driver_class">com.mysql.jdbc.Driver</property>
        <property
name="connection.url">jdbc:mysql://localhost:3306/sample</property>
        <property name="connection.username">root</property>
        <property name="connection.password"></property>

        <!-- JDBC connection pool (use the built-in) -->
        <property name="connection.pool_size">10</property>

        <!-- SQL dialect -->
        <property name="dialect">org.hibernate.dialect.MySQL5Dialect</property>

        <!-- Disable the second-level cache --
        > <property
name="cache.provider_class">org.hibernate.cache.internal.NoCacheProvider</property>

        <!-- Echo all executed SQL to stdout -->

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<property name="show_sql">true</property>

<!-- Drop and re-create the database schema on startup --> <property
name="hbm2ddl.auto">create</property>

<!-- Names the annotated entity class --> <mapping
class="org.bank.BankAccount" /> <mapping
class="org.bank.Savings" /> <mapping
class="org.bank.Current" />

</session-factory>

</hibernate-configuration>
```


