package main;

public interface Database {

public void store(String \_d);

public void setStoreStrategy(String \_s);

}

package main;

import main.Database;

public class Graph implements Database{

String[] arr = new String[10];

int i=0;

String strategy;

public Graph()

{

}

public void store(String \_d)

{

if(strategy.equals("node"))

{

arr[i++] = \_d;

System.out.println("Storing " + \_d + " using Graph strategy\n");

}

}

public void setStoreStrategy(String \_s)

{

strategy = \_s;

}

}

package main;

import main.Database;

import java.util.Scanner;

public class Main {

static Database[] d = new Database[3];

static Scanner scan = new Scanner(System.in);

public static void main(String[] args)

{

d[0] = new Relational();

d[1] = new NoSQL();

d[2] = new Graph();

//Set default stategy

\_setStoreStrategy("table");

//Gets data from user

while(getUserData()){}

}

public static void \_store(String \_s)

{

for(int i=0; i<3; i++)

{

d[i].store(\_s);

}

}

public static void \_setStoreStrategy(String \_s)

{

long start\_time, end\_time;

start\_time = System.nanoTime();

for(int i=0; i<3; i++)

{

d[i].setStoreStrategy(\_s);

}

end\_time = System.nanoTime();

System.out.println("Switch\_time = " + (end\_time - start\_time) + "ns" );

}

public static boolean getUserData()

{

System.out.println("Set storage strategy");

System.out.print("Default=0, Relational=1, NoSql=2, Graph=3, done storing data=anything else: ");

String input = scan.next();

int \_i = Integer.parseInt(input);

switch (\_i)

{

case 0:

getInput();

break;

case 1:

\_setStoreStrategy("table");

getInput();

break;

case 2:

\_setStoreStrategy("document");

getInput();

break;

case 3:

\_setStoreStrategy("node");

getInput();

break;

default:

return false;

}

return true;

}

public static String getInput()

{

String ret\_val = "";

System.out.print("Enter data to store: ");

\_store(scan.next());

return ret\_val;

}

}

package main;

import main.Database;

public class NoSQL implements Database{

String[] arr = new String[10];

int i=0;

String strategy;

public NoSQL()

{

}

public void store(String \_d)

{

if(strategy.equals("document"))

{

arr[i++] = \_d;

System.out.println("Storing " + \_d + " using NoSql strategy\n");

}

}

public void setStoreStrategy(String \_s)

{

strategy = \_s;

}

}

package main;

import main.Database;

public class Relational implements Database{

String[] arr = new String[10];

int i=0;

String strategy;

public Relational()

{

}

public void store(String \_d)

{

if(strategy.equals("table"))

{

arr[i++] = \_d;

System.out.println("Storing " + \_d + " using Relational strategy\n");

}

}

public void setStoreStrategy(String \_s)

{

strategy = \_s;

}

}