Report

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```java
public void addDigitalVideoDisc(DigitalVideoDisc[] discList ) {
    for(DigitalVideoDisc disc : discList) {
      if(qtyOrdered < MAX_NUMBERS_ORDERED) {
        itemsOdered[qtyOrdered] = disc;
        qtyOrdered++;
        System.out.println(x:"The disc has been added");
      }
      else {
        System.out.println(x:"The cart is almost full");
      }
    }
  }

  public void addDigitalVideoDisc(DigitalVideoDisc dvd1,DigitalVideoDisc dvd2){
    if(qtyOrdered +2 <= MAX_NUMBERS_ORDERED){
      itemsOdered[qtyOrdered] = dvd1;
      qtyOrdered++;
      itemsOdered[qtyOrdered] = dvd2;
      qtyOrdered++;
      System.out.println(x:"Both disc has been added");
    } else if (qtyOrdered +1 <= MAX_NUMBERS_ORDERED) {
      itemsOdered[qtyOrdered] = dvd1;
      qtyOrdered++;
      System.out.println(x:"The first disc has been added");
    } else {
      System.out.println(x:"The cart is almost full");
    }
  }
```

```java
public void printCart() {
  System.out.println(x:"**********CART**********");
  System.out.println(x:"Ordered Items:");
  for (int i = 0; i < qtyOrdered; i++) {
    System.out.println((i + 1) + ". " + itemsOdered[i].toString());
  }
  System.out.println("Total cost: " + totalCost());
  System.out.println(x:"**************************************************");
}
public void searchById(int id) {
  boolean found = false;
  for (int i = 0; i < qtyOrdered; i++) {
    if (itemsOdered[i].getId() == id) {
      System.out.println(itemsOdered[i].toString());
      found = true;
      break;
    }
  }
  if (!found) {
    System.out.println("No match found for ID: " + id);
  }
}

public void searchByTitle(String title) {
  boolean found = false;
  for (int i = 0; i < qtyOrdered; i++) {
    if (isMatch(itemsOdered[i], title)) {
      System.out.println(itemsOdered[i].toString());
      found = true;
    }
  }
  if (!found) {
    System.out.println("No match found for title: " + title);
```

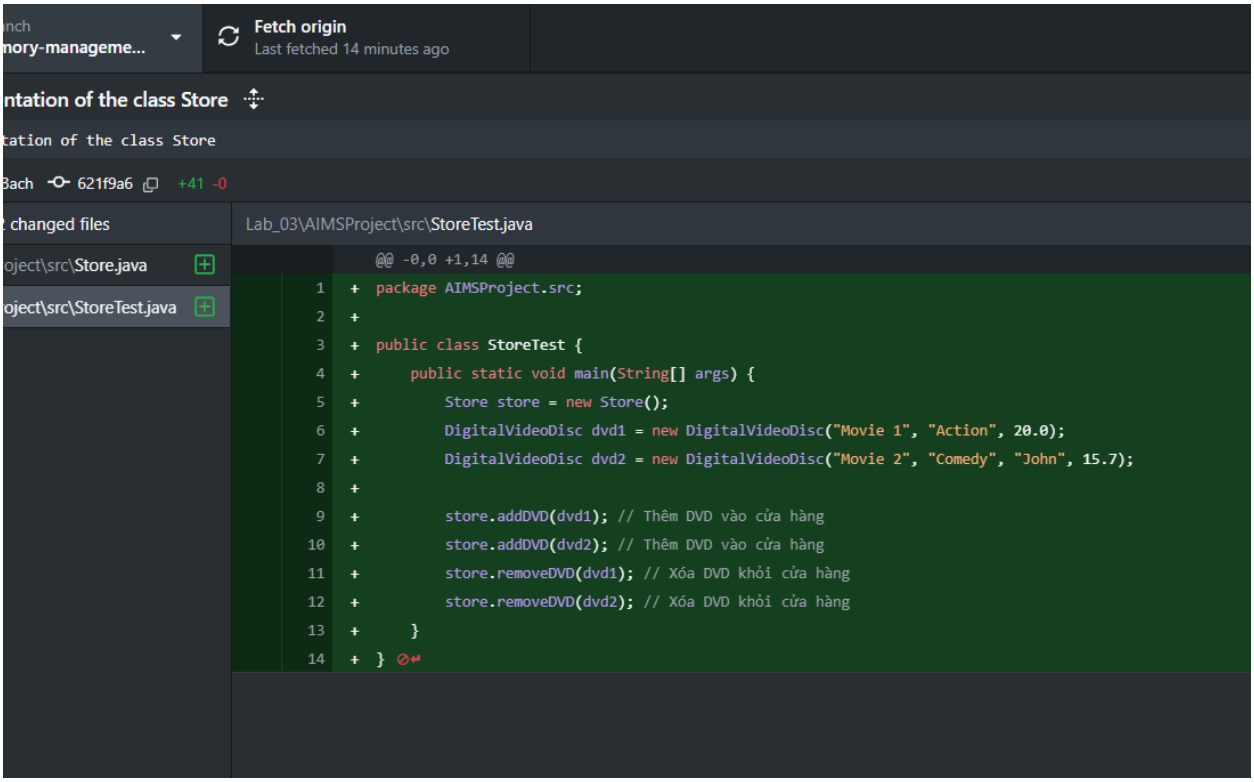
```
    System.out.println("No match found for title: " + title);
  }
}

private boolean isMatch(DigitalVideoDisc disc, String title) {
  String[] discWords = disc.getTitle().toLowerCase().split(regex:"\\s+");
  String[] searchWords = title.toLowerCase().split(regex:"\\s+");

  for (String searchWord : searchWords) {
    boolean wordFound = false;
    for (String discWord : discWords) {
      if (discWord.equals(searchWord)) {
        wordFound = true;
        break;
      }
    }
    if (!wordFound) return false;
  }
  return true;
}
}
```

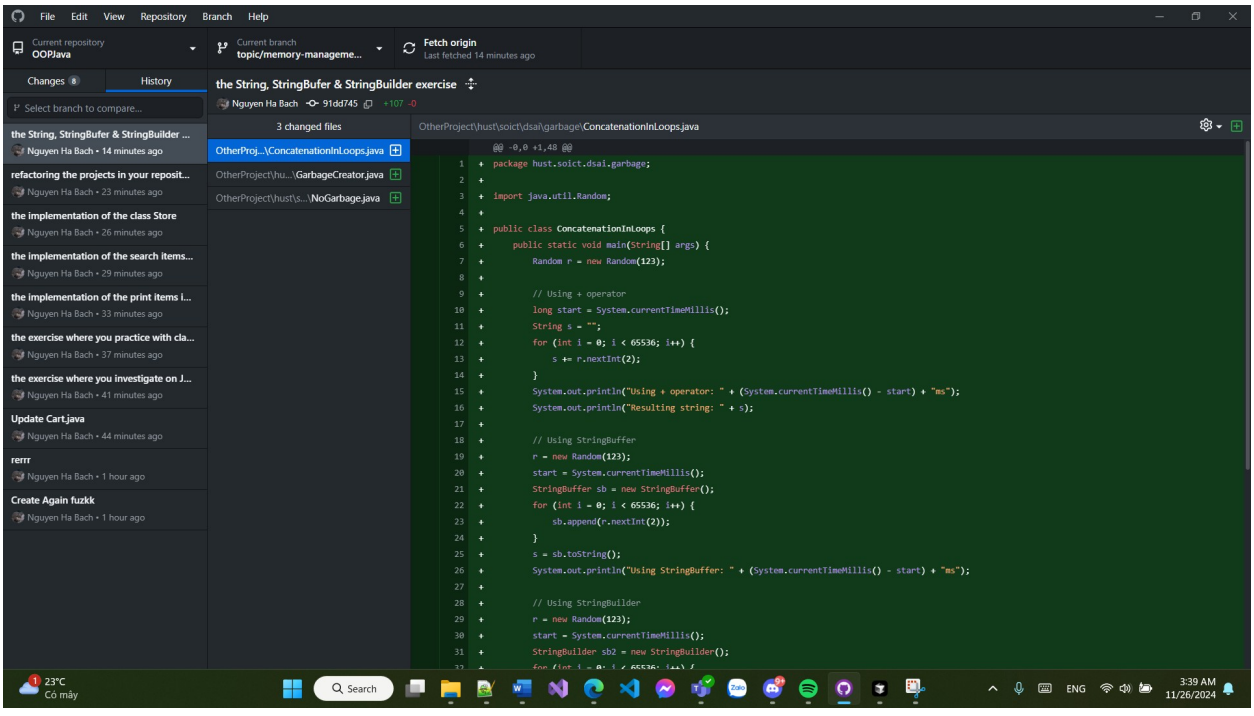
```
private static int nbDigitalVideoDiscs = 0;
```

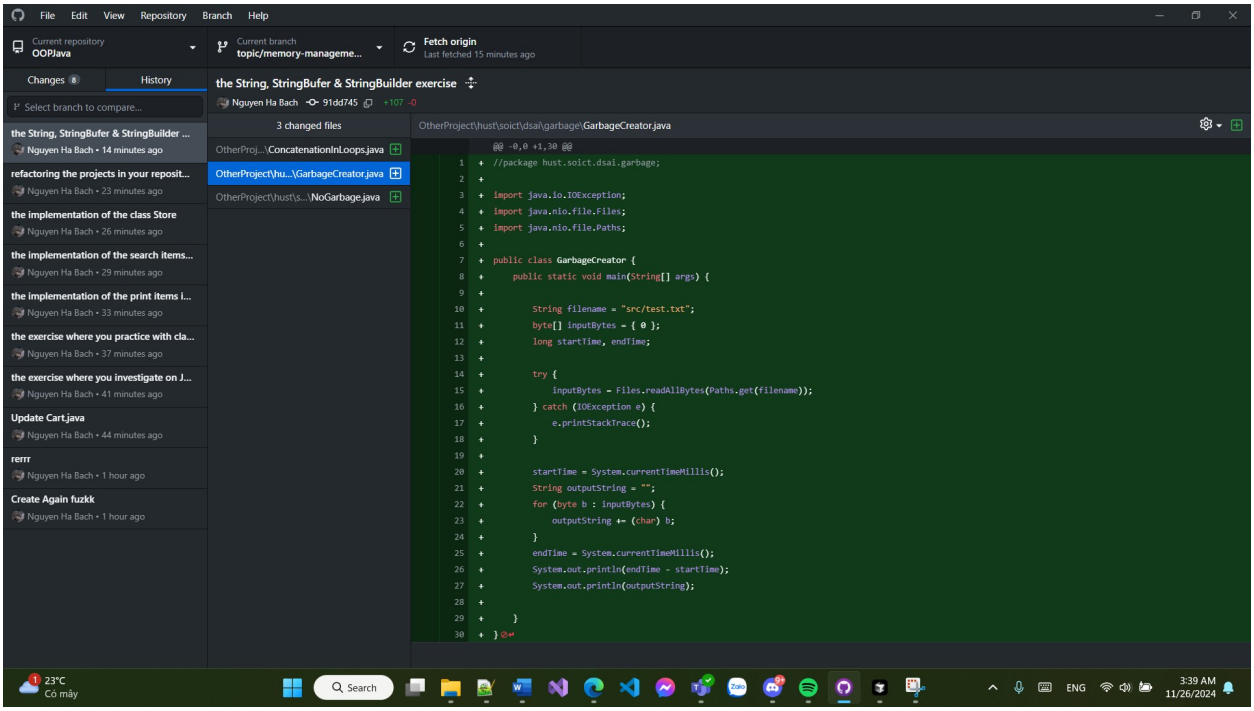
```
  this.director = director;
  this.length = length;
  this.cost = cost;
  this.id = ++nbDigitalVideoDiscs;
  //this.addDate = LocalDate.now();
}

public String toString() {
  return "DVD - " + this.getTitle() + " - " +
                    this.getCategory() + " - " +
                    this.getDirector() + " - " +
                    this.getLength() + ": " +
                    this.getCost() + " $";
}
```

hust > soict > dsai > aims > store > Store > Store.java > hust.soict.dsai.aims.store.Store

```java
package hust.soict.dsai.aims.store.Store;
import hust.soict.dsai.aims.disc.DigitalVideoDisc.DigitalVideoDisc;

public class Store {
    private DigitalVideoDisc itemsInStore[] = new DigitalVideoDisc[100]; // Khai báo mảng chứa

    public void addDVD(DigitalVideoDisc disc) {
        for (int i = 0; i < itemsInStore.length; i++) {
            if (itemsInStore[i] == null) {
                itemsInStore[i] = disc;
                System.out.println(x:"DVD has been added to the store.");
                return;
            }
        }
        System.out.println(x:"The store is full, cannot add more DVDs.");
    }

    public void removeDVD(DigitalVideoDisc disc) {
        for (int i = 0; i < itemsInStore.length; i++) {
            if (itemsInStore[i] == disc) {
                itemsInStore[i] = null;
                System.out.println(x:"DVD has been removed from the store.");
                return;
            }
        }
        System.out.println(x:"DVD not found in the store.");
    }
}
```


Fetch origin
Last fetched 14 minutes ago
ntation of the class Store
tation of the class Store
Bach 621f9a6 +41 -0
changed files
oject\src\Store.java
oject\src\StoreTest.java
Lab_03\AIMSProject\src\StoreTest.java
@@ -0,0 +1,14 @@
1 + package AIMSProject.src;
2 +
3 + public class StoreTest {
4 + public static void main(String[] args) {
5 + Store store = new Store();
6 + DigitalVideoDisc dvd1 = new DigitalVideoDisc("Movie 1", "Action", 20.0);
7 + DigitalVideoDisc dvd2 = new DigitalVideoDisc("Movie 2", "Comedy", "John", 15.7);
8 +
9 + store.addDVD(dvd1); // Thêm DVD vào cửa hàng
10 + store.addDVD(dvd2); // Thêm DVD vào cửa hàng
11 + store.removeDVD(dvd1); // Xóa DVD khỏi cửa hàng
12 + store.removeDVD(dvd2); // Xóa DVD khỏi cửa hàng
13 + }
14 + }


File Edit View Repository Branch Help
Current repository
OOPJava
Current branch
topic/memory-manageme...
Fetch origin
Last fetched 14 minutes ago
Changes 8
History
Select branch to compare...
the String, StringBufer & StringBuilder ...
Nguyen Ha Bach • 14 minutes ago
refactoring the projects in your reposit...
Nguyen Ha Bach • 23 minutes ago
the implementation of the class Store
Nguyen Ha Bach • 26 minutes ago
the implementation of the search items...
Nguyen Ha Bach • 29 minutes ago
the implementation of the print items i...
Nguyen Ha Bach • 33 minutes ago
the exercise where you practice with cla...
Nguyen Ha Bach • 37 minutes ago
the exercise where you investigate on J...
Nguyen Ha Bach • 41 minutes ago
Update Cart.java
Nguyen Ha Bach • 44 minutes ago
rerrr
Nguyen Ha Bach • 1 hour ago
Create Again fuzkk
Nguyen Ha Bach • 1 hour ago
the String, StringBufer & StringBuilder exercise
Nguyen Ha Bach 91dd745 +107 -0
3 changed files
OtherProj...\ConcatenationInLoops.java
OtherProject\hu...\GarbageCreator.java
OtherProject\hust\s...\NoGarbage.java
OtherProject\hust\soict\dsai\garbage\ConcatenationInLoops.java
@@ -0,0 +1,48 @@
1 + package hust.soict.dsai.garbage;
2 +
3 + import java.util.Random;
4 +
5 + public class ConcatenationInLoops {
6 + public static void main(String[] args) {
7 + Random r = new Random(123);
8 +
9 + // Using + operator
10 + long start = System.currentTimeMillis();
11 + String s = "";
12 + for (int i = 0; i < 65536; i++) {
13 + s += r.nextInt(2);
14 + }
15 + System.out.println("Using + operator: " + (System.currentTimeMillis() - start) + "ms");
16 + System.out.println("Resulting string: " + s);
17 +
18 + // Using StringBuffer
19 + r = new Random(123);
20 + start = System.currentTimeMillis();
21 + StringBuffer sb = new StringBuffer();
22 + for (int i = 0; i < 65536; i++) {
23 + sb.append(r.nextInt(2));
24 + }
25 + s = sb.toString();
26 + System.out.println("Using StringBuffer: " + (System.currentTimeMillis() - start) + "ms");
27 +
28 + // Using StringBuilder
29 + r = new Random(123);
30 + start = System.currentTimeMillis();
31 + StringBuilder sb2 = new StringBuilder();
23°C
Có mây
Search
ENG
3:39 AM
11/26/2024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OtherProject\hust\s...\NoGarbage.java
OtherProject\hust\soict\dsai\garbage\GarbageCreator.java
@@ -0,0 +1,30 @@
//package hust.soict.dsai.garbage;
import java.io.IOException;
import java.nio.file.Files;
import java.nio.file.Paths;
public class GarbageCreator {
public static void main(String[] args) {
String filename = "src/test.txt";
byte[] inputBytes = { 0 };
long startTime, endTime;
try {
inputBytes = Files.readAllBytes(Paths.get(filename));
} catch (IOException e) {
e.printStackTrace();
}
startTime = System.currentTimeMillis();
String outputString = "";
for (byte b : inputBytes) {
outputString += (char) b;
}
endTime = System.currentTimeMillis();
System.out.println(endTime - startTime);
System.out.println(outputString);
}
}
23°C
Có mây
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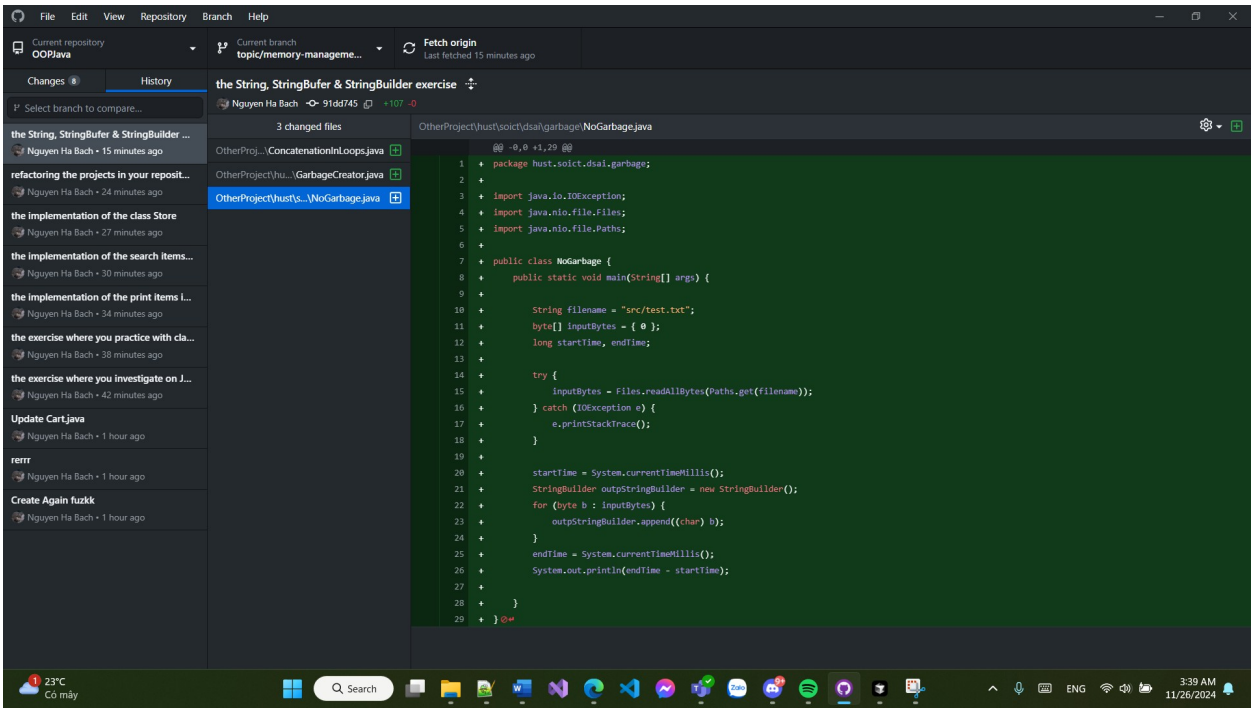
ENG
3:39 AM
11/26/2024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Nguyen Ha Bach • 24 minutes ago
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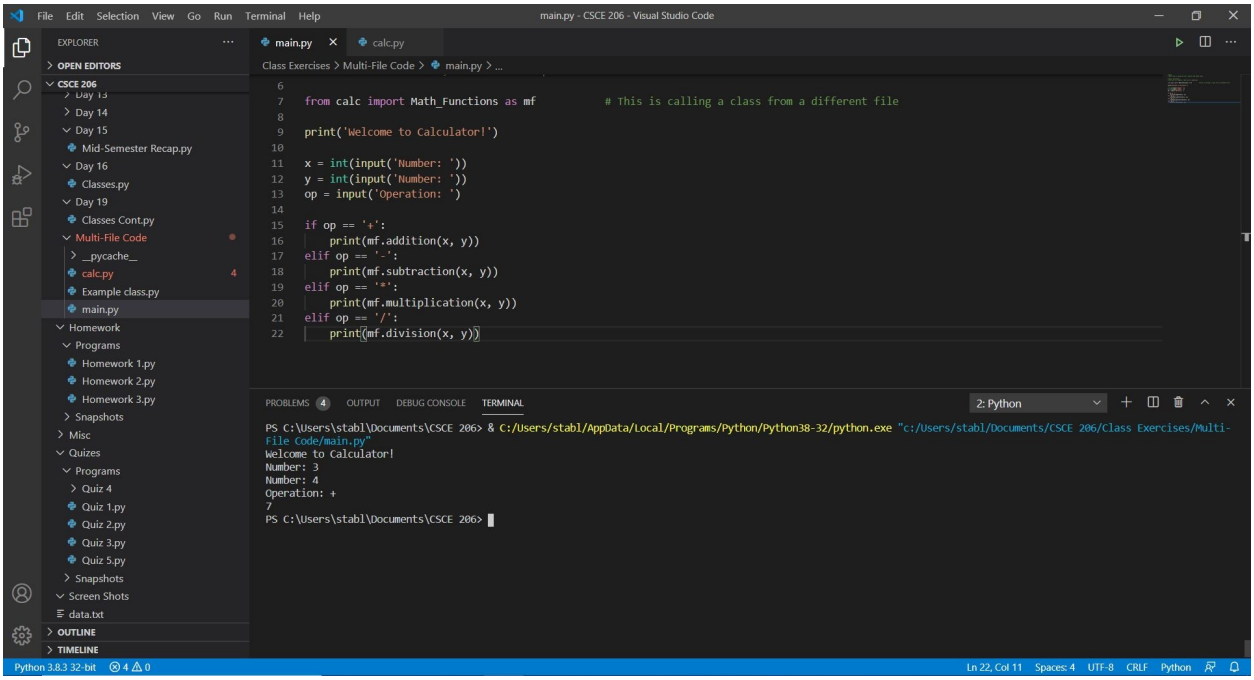
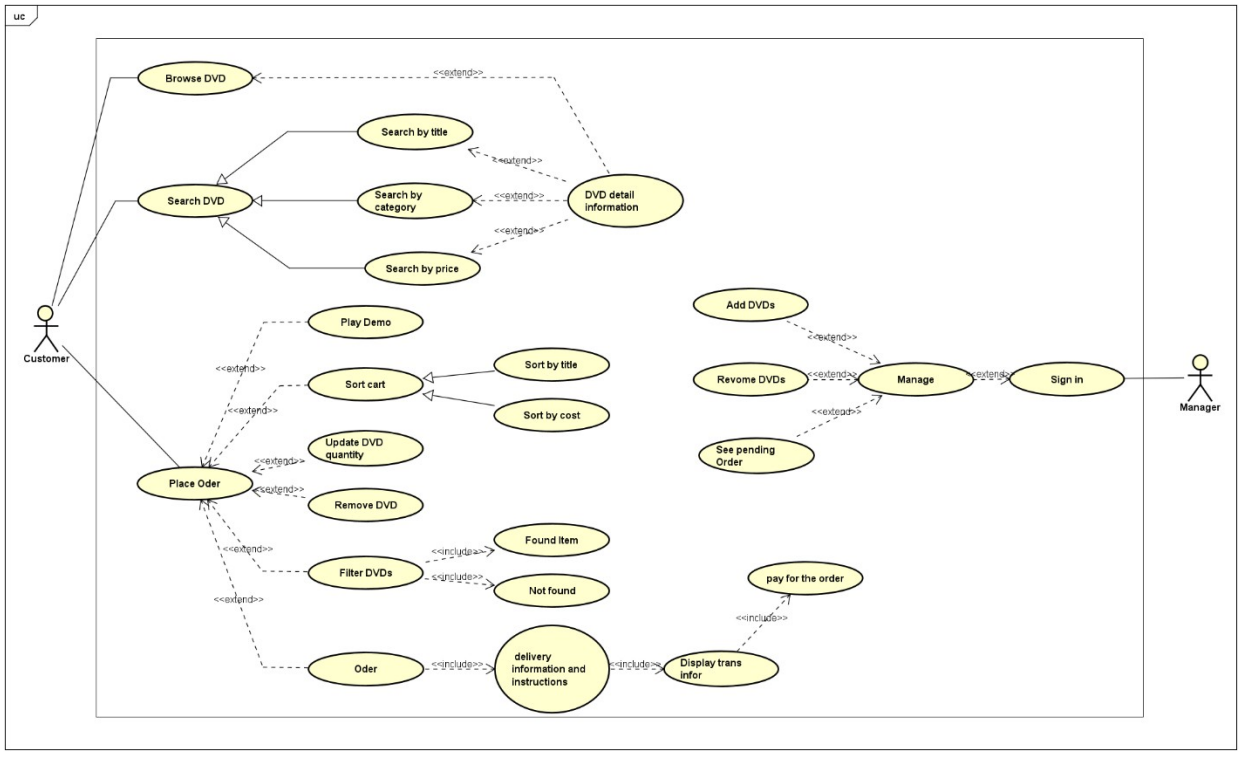
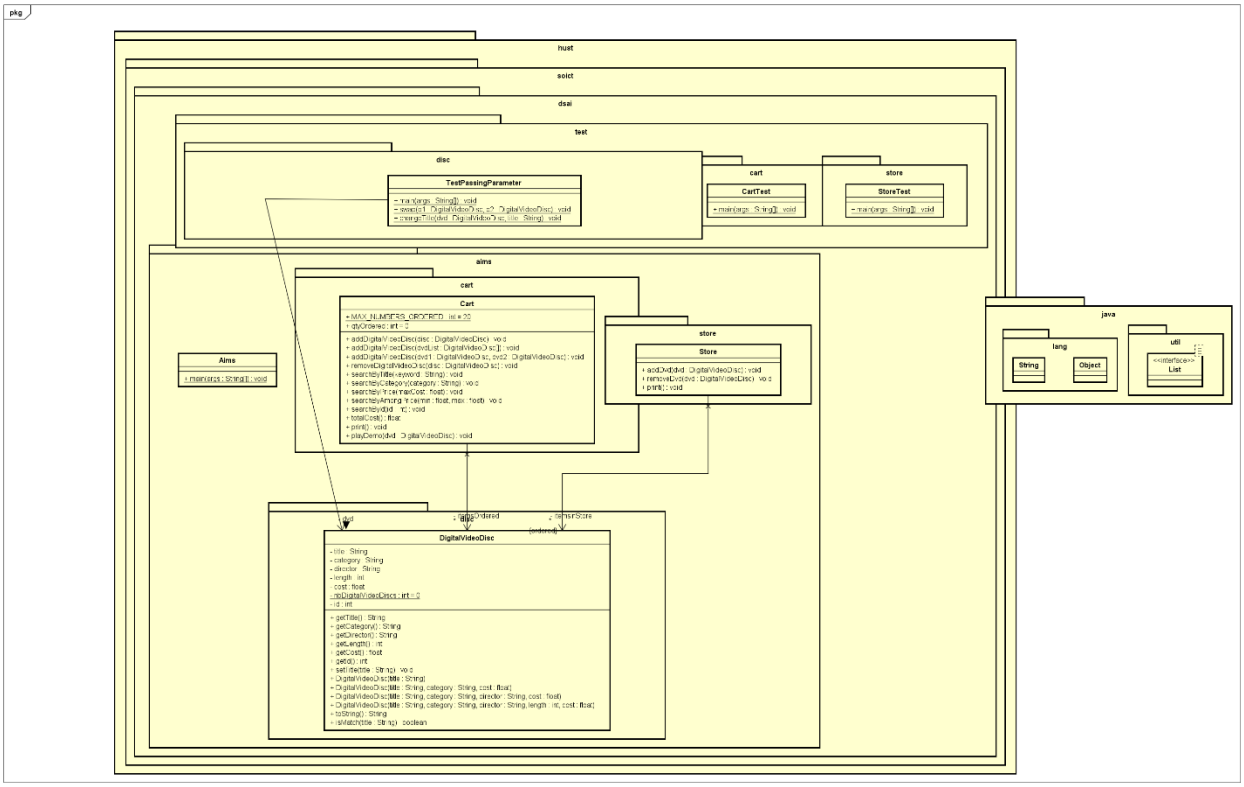
OtherProj...\ConcatenationInLoops.java
OtherProject\hu...\GarbageCreator.java
OtherProject\hust\s...\NoGarbage.java
OtherProject\hust\soict\dsai\garbage\NoGarbage.java
@@ -0,0 +1,29 @@
package hust.soict.dsai.garbage;
import java.io.IOException;
import java.nio.file.Files;
import java.nio.file.Paths;
public class NoGarbage {
public static void main(String[] args) {
String filename = "src/test.txt";
byte[] inputBytes = { 0 };
long startTime, endTime;
try {
inputBytes = Files.readAllBytes(Paths.get(filename));
} catch (IOException e) {
e.printStackTrace();
}
startTime = System.currentTimeMillis();
StringBuilder outpStringBuilder = new StringBuilder();
for (byte b : inputBytes) {
outpStringBuilder.append((char) b);
}
endTime = System.currentTimeMillis();
System.out.println(endTime - startTime);
}
}
23°C
Có mây
Search
ENG
3:39 AM
11/26/2024


File Edit Selection View Go Run Terminal Help
main.py - CSCE 206 - Visual Studio Code
EXPLORER
OPEN EDITORS
CSCE 206
Day 14
Day 15
Mid-Semester Recap.py
Day 16
Classes.py
Day 19
Classes Cont.py
Multi-File Code
__pycache__
calc.py
Example class.py
main.py
Homework
Programs
Homework 1.py
Homework 2.py
Homework 3.py
Snapshots
Misc
Quizes
Programs
Quiz 4
Quiz 1.py
Quiz 2.py
Quiz 3.py
Quiz 5.py
Snapshots
Screen Shots
data.txt
OUTLINE
TIMELINE
main.py
calc.py
Class Exercises > Multi-File Code > main.py > ...
from calc import Math_Functions as mf # This is calling a class from a different file
print('Welcome to Calculator!')
x = int(input('Number: '))
y = int(input('Number: '))
op = input('Operation: ')
if op == '+':
print(mf.addition(x, y))
elif op == '-':
print(mf.subtraction(x, y))
elif op == '*':
print(mf.multiplication(x, y))
elif op == '/':
print(mf.division(x, y))
PROBLEMS 4 OUTPUT DEBUG CONSOLE TERMINAL
2: Python
PS C:\Users\stabl\Documents\CSCE 206> & C:/Users/stabl/AppData/Local/Programs/Python/Python38-32/python.exe "c:/Users/stabl/Documents/CSCE 206/Class Exercises/Multi-File Code/main.py"
Welcome to Calculator!
Number: 3
Number: 4
Operation: +
7
PS C:\Users\stabl\Documents\CSCE 206>
Python 3.8.3 32-bit 4 0
Ln 22, Col 11 Spaces: 4 UTF-8 CRLF Python


uc
Browse DVD
Search by title
Search DVD
Search by category
DVD detail information
Search by price
Customer
Play Demo
Sort cart
Sort by title
Sort by cost
Update DVD quantity
Place Oder
Remove DVD
Found Item
Filter DVDs
Not found
Oder
delivery information and instructions
Display trans infor
pay for the order
Add DVDs
Revome DVDs
Manage
Sign in
Manager
See pending Order
<<extend>>
<<include>>



Answer:

1. Is JAVA a Pass by Value or a Pass by Reference programming language?

Java is a passed by value programming language.

2. After the call of swap(jungleDVD, cinderellaDVD) why does the title of these two objects still remain?

After calling swap(jungleDVD, cinderellaDVD), the titles remain unchanged because the method only swaps the title field values, not the object references.

The jungleDVD and cinderellaDVD references still point to the same objects, so the objects themselves remain the same, with only their title fields swapped.

3. After the call of changeTitle(jungleDVD, cinderellaDVD.getTitle()) why is the title of the JungleDVD changed?

The title of jungleDVD changes because changeTitle() directly modifies its title field using the value from cinderellaDVD.getTitle().

4. Write a toString() method for the DigitalVideoDisc class. What should be the return type of this method?

The return type should be String.