# LAB 02

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## The use case diagram

A diagram of a company structure

Description automatically generated

## The Class Diagram

A screenshot of a computer

Description automatically generated

## The Reading Assignment

A diagram of a method

Description automatically generated

## Source Code

### Aims.java:

**public** **class** Aims {

**public** **static** **void** main(String[] args) {

// **TODO** Auto-generated method stub

Cart anOrder = **new** Cart();

DigitalVideoDisc dvd1 = **new** DigitalVideoDisc("The lion King",

"Animation", "Roger Allers", 87, 20f);

anOrder.addDigitalVideoDisc(dvd1);

DigitalVideoDisc dvd2 = **new** DigitalVideoDisc("The lion King",

"Animation", "Roger Allers", 87, 20f);

anOrder.addDigitalVideoDisc(dvd2);

DigitalVideoDisc dvd3 = **new** DigitalVideoDisc("The lion King",

"Animation", "Roger Allers", 87, 20f);

anOrder.addDigitalVideoDisc(dvd3);

System.***out***.println("Total cost is: " + anOrder.totalCost());

//Remove by number in Order list

anOrder.removeDigitalVideoDisc(0);

System.***out***.println("Total cost is: " + anOrder.totalCost());

//See infor DigitalVideoDisc by Orderlist

anOrder.seeInfo(1);

}

}

### DigitalVideoDisc.java

**public** **class** DigitalVideoDisc {

**private** String title;

**private** String category;

**private** String director;

**private** **int** length;

**private** **float** cost;

**public** String getTitle() {

**return** title;

}

**public** String getCategory() {

**return** category;

}

**public** String getDirector() {

**return** director;

}

**public** **int** getLength() {

**return** length;

}

**public** **float** getCost() {

**return** cost;

}

**public** DigitalVideoDisc(String title, String category, String director, **float** cost) {

**super**();

**this**.title = title;

**this**.category = category;

**this**.director = director;

**this**.cost = cost;

}

**public** DigitalVideoDisc(String title, String category, **float** cost) {

**super**();

**this**.title = title;

**this**.category = category;

**this**.cost = cost;

}

**public** DigitalVideoDisc(String title) {

**super**();

**this**.title = title;

}

**public** DigitalVideoDisc(String title, String category, String director, **int** length, **float** cost) {

**super**();

**this**.title = title;

**this**.category = category;

**this**.director = director;

**this**.length = length;

**this**.cost = cost;

}

}

### Cart.java

**import** java.util.ArrayList;

**public** **class** Cart {

**public** **static** **final** **int** ***MAX\_NUMBERS\_ORDERED*** = 20;

**public** **int** Count\_Number;

**private** ArrayList<DigitalVideoDisc> itemsOrdered = **new** ArrayList<>();

**void** addDigitalVideoDisc(DigitalVideoDisc dvd) {

**if** (Count\_Number == ***MAX\_NUMBERS\_ORDERED***) {

System.***out***.println("The cart is almost full");

} **else** {

itemsOrdered.add(dvd);

Count\_Number++;

System.***out***.println("The disc has been added!");

}

}

**void** removeDigitalVideoDisc(**int** arg) {

itemsOrdered.remove(arg);

Count\_Number--;

}

**float** totalCost() {

**float** total = 0;

**for** (DigitalVideoDisc a : itemsOrdered) {

total += a.getCost();

}

**return** total;

}

**void** seeInfo(**int** index) {

DigitalVideoDisc a = itemsOrdered.get(index);

System.***out***.println("DVD so: " + index);

System.***out***.println("Title: " + a.getTitle());

System.***out***.println("Category: " + a.getCategory());

System.***out***.println("Diretor: " + a.getDirector());

System.***out***.println("Length: " + a.getLength());

System.***out***.println("Cost: " + a.getCost());

System.***out***.println("-----------------------------");

}

}