**ĐẠI HỌC BÁCH KHOA HÀ NỘI  
TRƯỜNG CÔNG NGHỆ THÔNG TIN VÀ TRUYỀN THÔNG**

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BÁO CÁO THỰC HÀNH  
IT3103 – 744529 - 2024.1

BÀI THỰC HÀNH 4

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Hà Nội 12/2024

# BÁO CÁO THỰC HÀNH LAB 4

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# Create the Book class

A screen shot of a computer program

Description automatically generated

Hình : Book Class 1

A screen shot of a computer program

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Hình : Book Class 2

# Creating the abstract Media class



Hình : Media Class 1

A black screen with colorful text

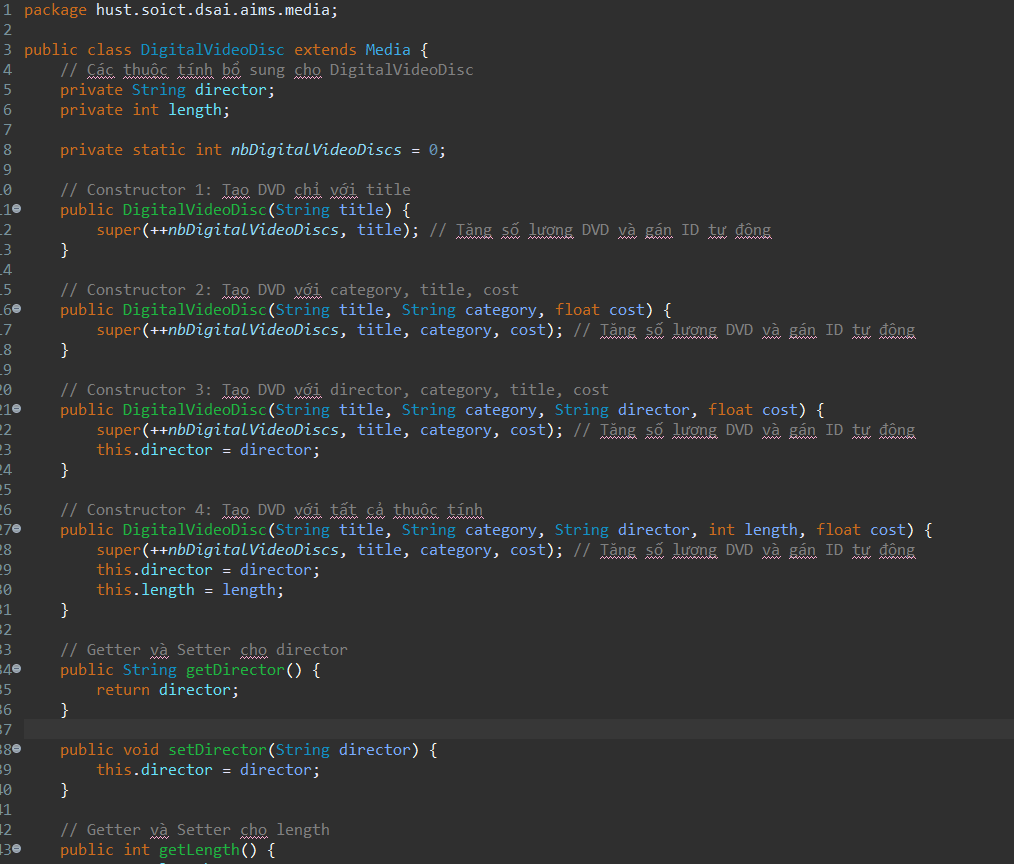
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Hình : Media Class 2

A screen shot of a computer program

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Hình : Book Class extends Media



Hình : DigitalVideoDisc Class extends Media 1

A computer screen shot of a program code

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Hình : DigitalVideoDisc Class extends Media 2

# Creating the CompactDisc class

## Create the Disc class extending the Media class

A screen shot of a computer program

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Hình : Disc Class

A screen shot of a computer program

Description automatically generated

Hình : DigitalVideoDisc Class extends Disc

A screen shot of a computer program

Description automatically generated

Hình : CompactDisc Class extends Disc

## Create the Track class

A screen shot of a computer program

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Hình : Track Class

## Open the CompactDisc class

A screen shot of a computer program

Description automatically generated

Hình : CompactDisc Class using Track

A screen shot of a computer code

Description automatically generated

Hình : Method getLength of CompactDisc

# Create the Playable interface

A screen shot of a computer

Description automatically generated

Hình : Playable interface

A screen shot of a computer

Description automatically generated

Hình : Implement the Playable with CompactDisc

A screen shot of a computer code

Description automatically generated

Hình : Implement the Playable with DigitalVideoDisc

A screen shot of a computer code

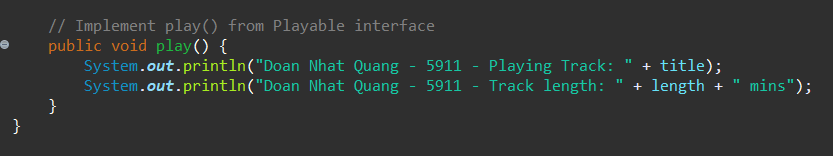
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Hình : Implement the Playable with Track

A screenshot of a computer program

Description automatically generated

Hình : Implement play() for DigitalVideoDisc



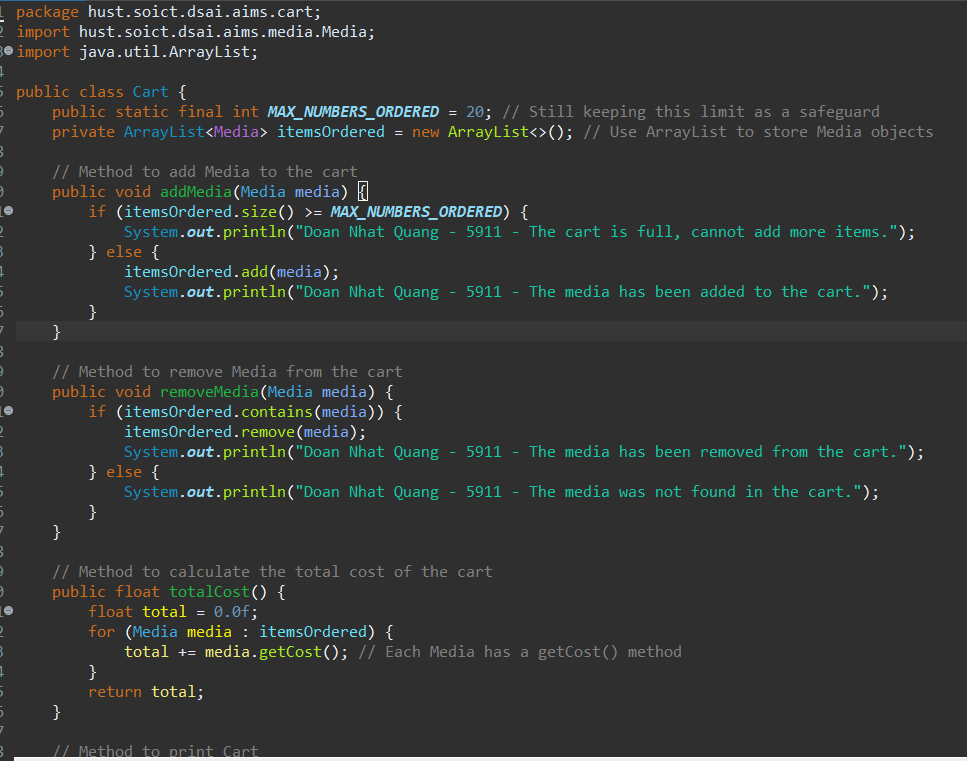
Hình : Implement play() for Track

A screenshot of a computer

Description automatically generated

Hình : Implement play() for CompactDisc

# Update the Cart class to work with Media



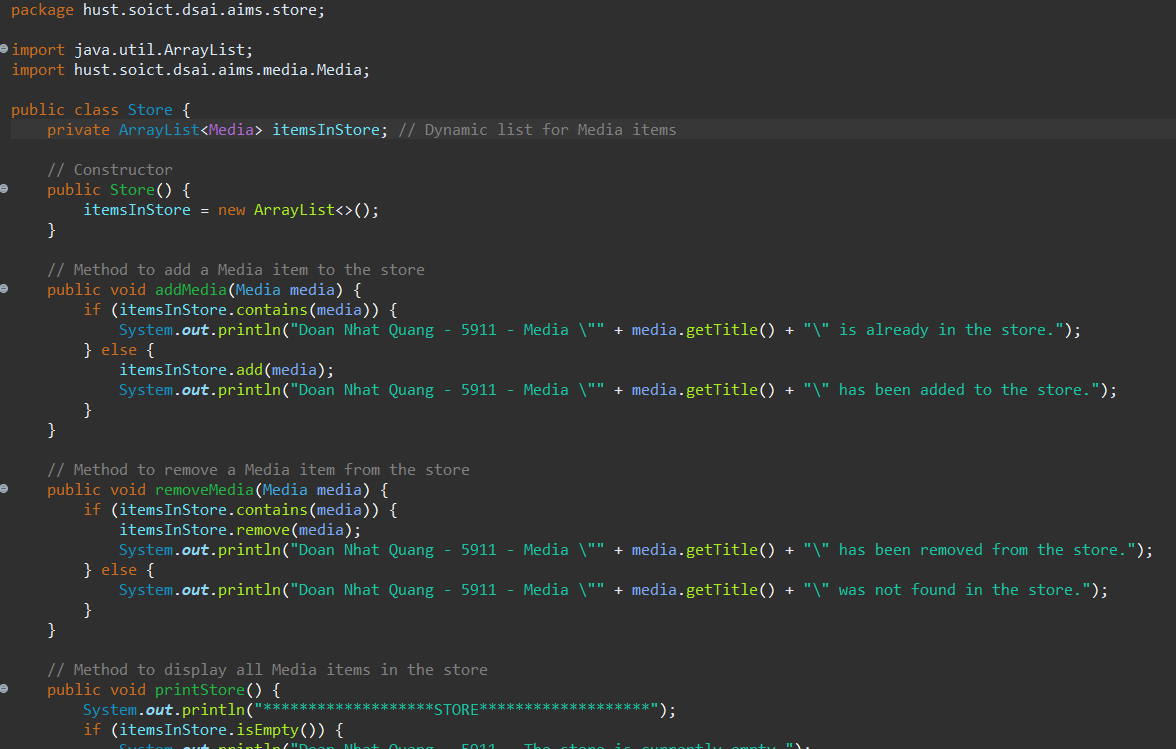
Hình : Update the Cart class to work with Media 1

A screen shot of a computer program

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Hình : Update the Cart class to work with Media 2

# Update the Store class to work with Media

 A computer screen shot of text

Description automatically generated

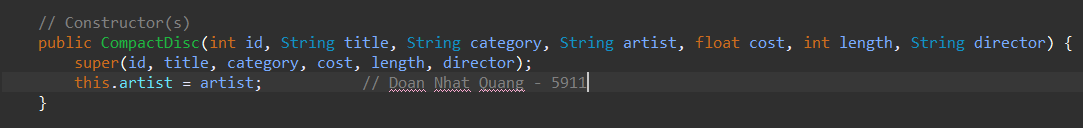
Hình : Update the Store class to work with Media

# Constructors of whole classes and parent classes

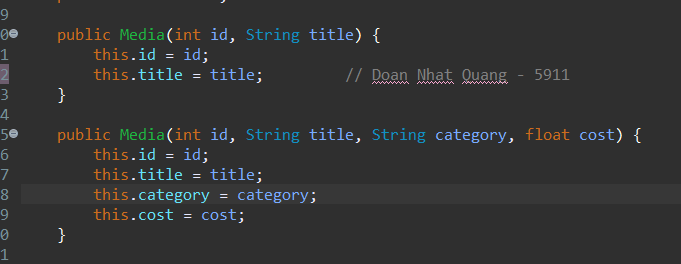
A screen shot of a computer code

Description automatically generated

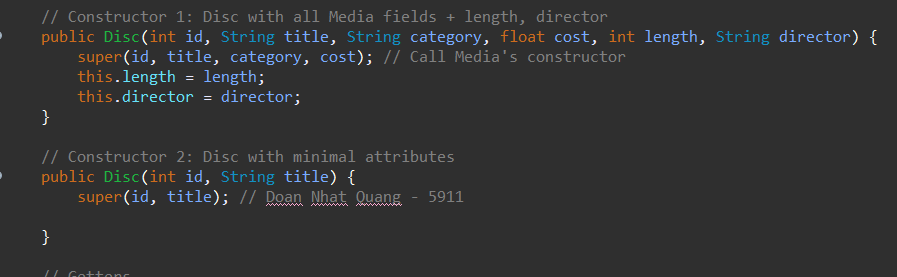
Hình : Constructor of Track



Hình : Constructor of CompactDisc

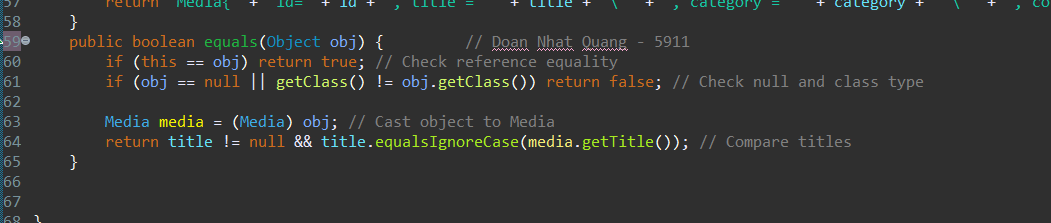


Hình : Constructor of Media

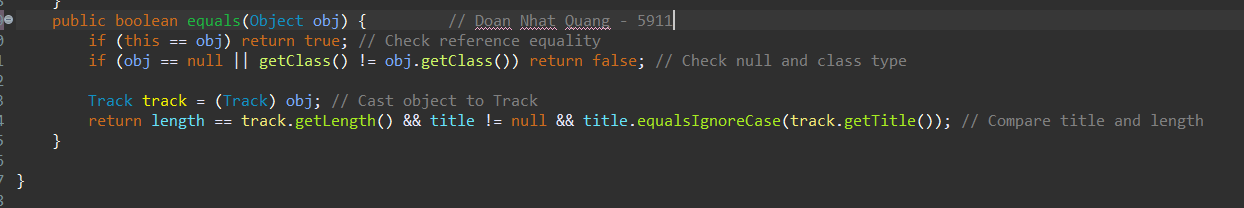


Hình : Constructor of Disc

# Unique item in a list

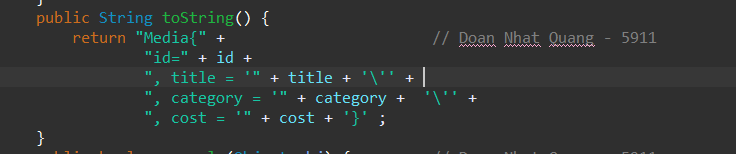


Hình : Override equals in Media class



Hình : Override equals in Track class

# Polymorphism with toString() method



Hình : Override toString in Media Class

A screen shot of a computer program

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Hình : Sample code for Polymorphism

A screenshot of a computer program

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Hình : Result of Polymorphism

# Sort media in the cart

A screen shot of a computer program

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Hình : Media Comparator by title-cost

A screen shot of a computer program

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Hình : Media Comparator by cost-title

A screen shot of a computer code

Description automatically generated

Hình : Add two Comparators to Media

A screen shot of a computer program

Description automatically generated

Hình : Sample code for Sorting media in cart

A screenshot of a computer program

Description automatically generated

Hình : Result of sorting

# Create a complete console application in the Aims class

A screen shot of a computer

Description automatically generated

Hình : Main menu

## View store

A screenshot of a computer

Description automatically generated

Hình : View store menu

### See a media’s details

A screenshot of a computer program

Description automatically generated A black background with white text

Description automatically generated

Hình : See a media’s details

### Add a media to cart

A screenshot of a computer

Description automatically generated

Hình : Add a media to cart

### Play a media

A screenshot of a computer

Description automatically generated

Hình : Play a media

### See current cart

A screenshot of a computer

Description automatically generated

Hình : See current cart

## Update store

A screenshot of a computer

Description automatically generated

Hình : Update store menu

### Add a media

A screenshot of a computer

Description automatically generated

Hình : Add a media

### Remove a media

A screen shot of a computer

Description automatically generated

Hình : Remove a media

## See current cart

A screenshot of a computer

Description automatically generated

Hình : See current cart

### Filter medias in cart

A screenshot of a computer program

Description automatically generated

Hình : Filter by ID

A screen shot of a computer

Description automatically generated

Hình : Filter by title

### Sort medias in cart

A screenshot of a computer program

Description automatically generated

Hình : Sort by title

A computer screen with white text

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Hình : Sort by cost

### Remove media from cart

A screenshot of a computer program

Description automatically generated

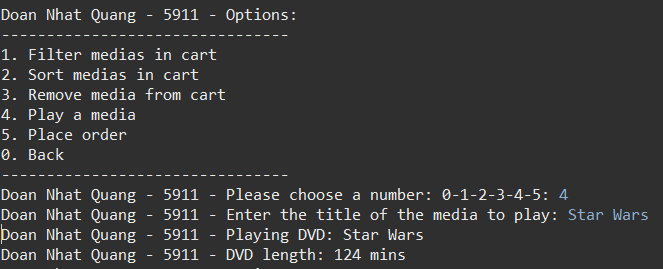
Hình : Remove media from cart

A screenshot of a computer program

Description automatically generated

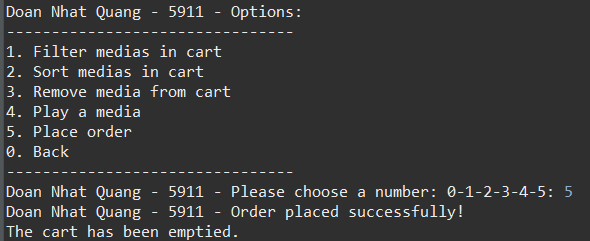
Hình : Result of remove media from cart

### Play a media



Hình : Play a media

### Place order



Hình : Place order

A screenshot of a computer program

Description automatically generated

Hình : Result of Place order

# Class Diagram

A screenshot of a computer screen

Description automatically generated

Hình : Class Diagram

# UseCase Diagram

A diagram of a diagram

Description automatically generated

Hình : UseCase Diagram