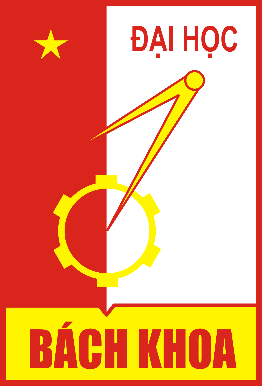
**ĐẠI HỌC BÁCH KHOA HÀ NỘI  
TRƯỜNG CÔNG NGHỆ THÔNG TIN VÀ TRUYỀN THÔNG**

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BÁO CÁO THỰC HÀNH  
IT3103 – 744529 - 2024.1

BÀI THỰC HÀNH 5

Họ và tên sinh viên: Đoàn Nhật Quang

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Hà Nội 12/2024

BÁO CÁO THỰC HÀNH LAB 5

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# Swing components

## AWTAccumulator

A screen shot of a computer program

Description automatically generated

Hình 1: Source code of AWTAccumulator

A screenshot of a computer

Description automatically generated

A screenshot of a computer

Description automatically generated

Hình 2: Demo of AWTAccumulator

## SwingAccumulator

A screen shot of a computer program

Description automatically generated

Hình 3: Source code of SwingAccumulator

A screenshot of a calculator

Description automatically generated A screenshot of a computer

Description automatically generated

Hình 4: Demo of SwingAccumulator

# Organizing Swing components with Layout Managers

## Code

A screen shot of a computer program

Description automatically generated

Hình 5: Source code of NumberGrid 1

A computer screen shot of text

Description automatically generated

Hình 6: Source code of NumberGrid 2

## 2.2. Demo

A screenshot of a cell phone

Description automatically generated

Hình 7: Demo buttons 0 – 9

A screenshot of a cell phone

Description automatically generated

Hình 8: Demo button DEL

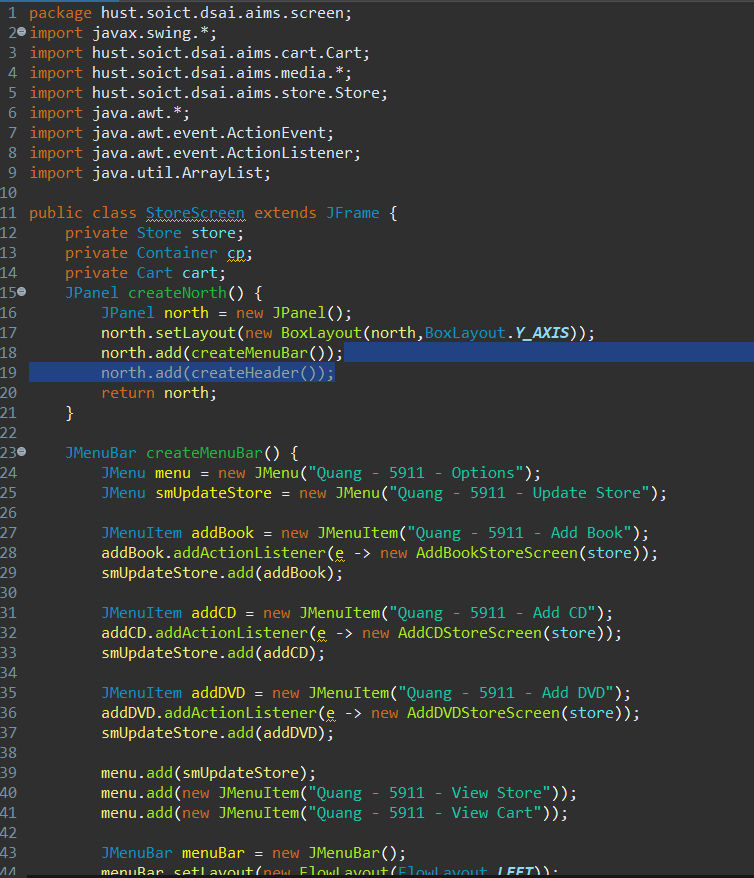
A screenshot of a cell phone

Description automatically generated

Hình 9: Demo button C

# Create a graphical user interface for AIMS with Swing

## Create class StoreScreen



Hình 10: Class StoreScreen 1

A screen shot of a computer program

Description automatically generated

Hình 11: Class StoreScreen 2

A screen shot of a computer program

Description automatically generated

Hình 12: Class StoreScreen 3

A screen shot of a computer program

Description automatically generated

Hình 13: Class StoreScreen 4

## 3.2. Create class MediaStore

A screen shot of a computer program

Description automatically generated

Hình 14: Class MediaStore 1

A screen shot of a computer program

Description automatically generated

Hình 15: Class MediaStore 2

## 3.3. Demo

A screenshot of a computer

Description automatically generated

Hình 16: Store Screen

A screenshot of a computer

Description automatically generated

Hình 17: Demo Add to cart button

A screenshot of a computer

Description automatically generated

Hình 18: Demo Play button

# JavaFX API

## Create class Painter

A screen shot of a computer program

Description automatically generated

Hình 19: Class Painter

## Create Painter.fxml

A screen shot of a computer program

Description automatically generated

Hình 20: Painter.fxml 1

A screen shot of a computer

Description automatically generated

Hình 21: Painter.fxml 2

## 4.3. Create Painter Controller

A screen shot of a computer program

Description automatically generated

Hình 22: Classm PainterController

## 4.4. Demo

A screenshot of a computer

Description automatically generated

Hình 23: Use pen

A screenshot of a computer

Description automatically generated

Hình 24: Use eraser

A screenshot of a computer

Description automatically generated

Hình 25: Use Clear

# View Cart Screen

## Create Cart.fxml

A screen shot of a computer

Description automatically generated

Hình 26: Cart.fxml 1

A screen shot of a computer program

Description automatically generated

Hình 27: Cart.fxml 2

A screenshot of a computer program

Description automatically generated

Hình 28: Cart.fxml 3

A screen shot of a computer code

Description automatically generated

Hình 29: Cart.fxml 4

## Create class CartScreen

A screen shot of a computer program

Description automatically generated

Hình 30: Class CartScreen 1

A screen shot of a computer program

Description automatically generated

Hình 31: Class CartScreen 2

## Create class CartSceenController

A screen shot of a computer program

Description automatically generated

Hình 32: Class CartSceenController 1

A screen shot of a computer program

Description automatically generated

Hình 33: Class CartScreenController 2

A screen shot of a computer program

Description automatically generated

Hình 34: Class CartScreenController 3

A screen shot of a computer program

Description automatically generated A computer screen shot of a code

Description automatically generated

Hình 35: Class CartScreenController 4

## Demo

A screenshot of a computer

Description automatically generated

Hình 36: Demo CartScreen

# Updating buttons based on selected item in TableView – ChangeListener

## Edit class CartScreenController

A screen shot of a computer program

Description automatically generated

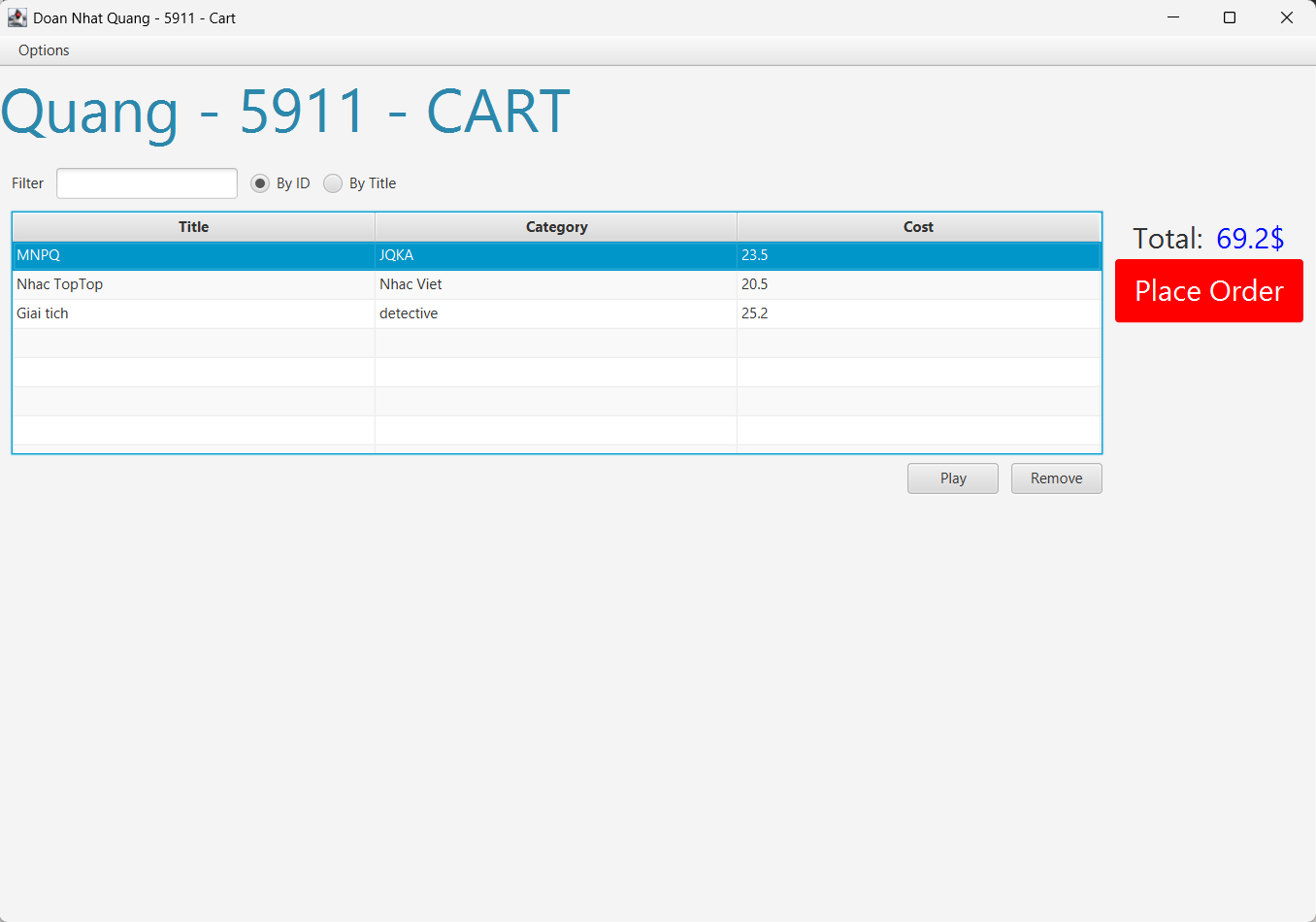
Hình 37: Edit class CartScreenController 1

A screen shot of a computer program

Description automatically generated

Hình 38: Edit class CartScreenController 2

## Demo



Hình 39: Demo media playable

A screenshot of a computer

Description automatically generated

Hình 40: Demo media unplayable

# Deleting a media

## Code

A screen shot of a computer code

Description automatically generated

Hình 41: Code Delete a media

## Demo

A screenshot of a computer

Description automatically generated

Hình 42: Demo delete Media (before)

A screenshot of a computer

Description automatically generated

Hình 43: Demo delete Media (after)

# Filter items in cart – FilteredList

## Code

A computer screen shot of text

Description automatically generated

Hình 44: Filter items in cart

## Demo

A screenshot of a computer

Description automatically generated

Hình 45: Demo before filtered

A screenshot of a computer

Description automatically generated

Hình 46: Demo filtered by ID

A screenshot of a computer

Description automatically generated

Hình 47: Demo filtered by Title

# Complete the Aims GUI application

## Update StoreScreen with AddItemToStoreScreen, AddBookStoreScreen, AddCDStoreScreen, AddDVDStoreScreen

A screen shot of a computer program

Description automatically generated

Hình 48: Update StoreScreen

A screen shot of a computer program

Description automatically generated A screen shot of a computer program

Description automatically generated

Hình 49: Abstract class AddItemsToStore

A screen shot of a computer program

Description automatically generated

Hình 50: Class AddDVDStoreScreen

A screen shot of a computer program

Description automatically generated

Hình 51: Class AddCDStoreScreen

A screen shot of a computer program

Description automatically generated

Hình 52: Class AddBookStoreScreen

## Demo



Hình 53: Add Book (before)

A screenshot of a computer

Description automatically generated

Hình 54: Add Book (after)

A screenshot of a computer

Description automatically generated

Hình 55: Add CD (before)

A screenshot of a computer

Description automatically generated

Hình 56: Add CD (after)

A screenshot of a computer

Description automatically generated

Hình 57: Add DVD (before)

A screenshot of a computer

Description automatically generated

Hình 58: Add DVD (after)

# Exception

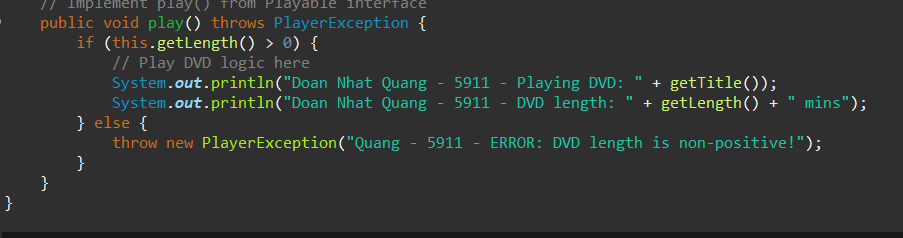
## Class PlayerException

A screen shot of a computer program

Description automatically generated

Hình 59: Class PlayerException

## Raise the PlayerException in the play() method



Hình 60: Update play() in DigitalVideoDisc

A screenshot of a computer program

Description automatically generated

Hình 61: Update play() in Track

## Update play() in the Playable interface

A screen shot of a computer program

Description automatically generated

Hình 62: Update play() in the Playable interface

## Update play() in CompactDisc

A screen shot of a computer program

Description automatically generated

Hình 63: Update play() in CompactDisc

# Modify the equals() method of Media class

A screen shot of a computer program

Description automatically generated

Hình 64: Modify the equals() method of Media class

# Usecase Diagram

A diagram of a company

Description automatically generated

Hình 65: Usecase Diagram

# Class Diagram

A yellow paper with black text

Description automatically generated with medium confidence

Hình 66: Class Diagram