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

BÁO CÁO THỰC HÀNH  
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Hà Nội 12/2024

BÁO CÁO THỰC HÀNH LAB 5 LẬP TRÌNH HƯỚNG ĐỐI TƯỢNG

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# Swing components

## AWTAccumulator

## A screenshot of a computer program Description automatically generated

Figure 1.1: Source code of AWTAccumulator

A screenshot of a computer

Description automatically generated

## SwingAccumulator

Figure 1.2: Demo of AWTAccumulator

*A screenshot of a computer program

Description automatically generated*

Figure 1.3: Source code of SwingAccumulator

A screenshot of a computer

Description automatically generated

Figure 1.4: Demo of SwingAccumulator

# Organizing Swing components with Layout Managers

## Code

## A screenshot of a computer program Description automatically generated

Figure 2.1: Source code of NumberGrid 1

A screenshot of a computer program

Description automatically generated

Figure 2.2: Source code of NumberGrid 2

## Demo

A screenshot of a calculator

Description automatically generated

Figure 2.3: Demo buttons 0-9

*A screenshot of a calculator

Description automatically generated*

Figure 2.4: Demo DEL button

*A screenshot of a calculator

Description automatically generated*

Figure 2.5: Demo C button

# Create a graphical user interface for AIMS with Swing

## Create class StoreScreen

## A screenshot of a computer program Description automatically generated

Figure 3.1: Class StoreScreen 1

A screenshot of a computer program

Description automatically generated

Figure 3.2: Class StoreScreen 2

*A screenshot of a computer code

Description automatically generated*

Figure 3.3: Class StoreScreen 3

## Create class MediaStore

## A screenshot of a computer program Description automatically generated

Figure 3.7: Class MediaStore 1

*A screen shot of a computer code

Description automatically generated*

Figure 3.8: Class MediaStore 2

A screenshot of a computer code

Description automatically generated

## Demo

Figure 3.9: Class MediaStore 3

*A screenshot of a computer

Description automatically generated*

Figure 3.10: StoreScreen

A screenshot of a computer screen

Description automatically generated

Figure 3.11 Demo Add to cart button

A screenshot of a computer screen

Description automatically generated

Figure 3.12 Demo Play button

*A screenshot of a computer

Description automatically generated*

Figure 3.13 Demo View cart button

# JavaFX API

## Create class Painter

## A screen shot of a computer code Description automatically generated

## Create Painter.fxml

Figure 4.1: Class Painter

A screen shot of a computer code

Description automatically generated

Figure 4.2: Painter.fxml 1

A screenshot of a computer program

Description automatically generated

## Create class PainterController

Figure 4.3: Painter.fxml 2

A screenshot of a computer

Description automatically generated

Figure 4.4: PainterController

A screenshot of a computer

Description automatically generated

Figure 4.5: Use Pen

*A screenshot of a computer

Description automatically generated*

Figure 4.6: Use Eraser

*A screenshot of a computer

Description automatically generated*

Figure 4.7: Clear button

# View Cart Screen

## Create cart.fxml

## A computer screen shot of a computer code Description automatically generated

Figure 5.1: Cart.fxml 1

*A screenshot of a computer

Description automatically generated*

Figure 5.2: Cart.fxml 2

A white background with colorful lines

Description automatically generated

## Create class CartScreen

Figure 5.3: Cart.fxml 3

A screenshot of a computer code

Description automatically generated

Figure 5.4: CartScreen class

## Create class CartScreenController

## A screen shot of a computer Description automatically generated

Figure 5.5: CartScreenController 1

*A screenshot of a computer code

Description automatically generated*

Figure 5.6: CartScreenController 2

## Demo

## A screenshot of a computer Description automatically generated

Figure 5.7: Demo CartScreen

1. Updating buttons based on selected item in TableView –

ChangeListener

## Edit class CartScreenController

## 

Figure 6.1: CartScreenController 1

A white background with blue lines

Description automatically generated

## Demo

Figure 6.2: CartScreenController 2

A screenshot of a computer

Description automatically generated

Figure 6.3: Demo media playable

A screenshot of a computer screen

Description automatically generated

Figure 6.4: Demo media unplayable

# Deleting a media

## Code

## A screen shot of a computer code Description automatically generated

Figure 7.1: btnRemovePressed Method

## Demo

## A screenshot of a computer Description automatically generated

Figure 7.2: button Remove

*A screenshot of a computer

Description automatically generated*

Figure 7.3: button Remove

# Complete the Aims GUI application

# A screenshot of a computer Description automatically generated

Figure 8.1: Store before add book

*A screenshot of a computer

Description automatically generated*

Figure 8.2: Add book

A screenshot of a computer

Description automatically generated

Figure 8.3: Store after add book

*A screenshot of a computer

Description automatically generated*

Figure 8.4: Add CD

A screenshot of a computer

Description automatically generated

Figure 8.5: Store after add CD

A screenshot of a computer

Description automatically generated

Figure 8.6 Add DVD

A screenshot of a computer

Description automatically generated

Figure 8.7: Store after add DVD

*A screenshot of a computer

Description automatically generated*

Figure 8.8: Cart

# Use case Diagram

Figure 8.9: Exception

# Class Diagram

# A yellow diagram with black text Description automatically generated with medium confidence