



## PROJECT REPORT

[Laptop Store](#)

Semester:	Programming Fundamentals
Class:	PF13
Group:	Group 6
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## I. Project introduction

This system will provide some basic features including:

There are 2 main features include create order, confirm payment or cancel order which includes additional features such as view laptop list, search laptop, view laptop details, view order list, view order details.

### 1. Proposed System

- Creating a program to Seller create order
- Creating a program to Accountant confirm payment or cancel order

### 2. The scope of the project to be applied

- Make for actor are Seller and Accountant

### 3. System Name

- Order management system

### 4. Deployment Environment

- Windows, Linux, Mac

### 5. Development Tools

- Visual Studio Code
- Draw.io Diagram
- MySQL Workbench 8.0 CE

### 6. Customer Requirements

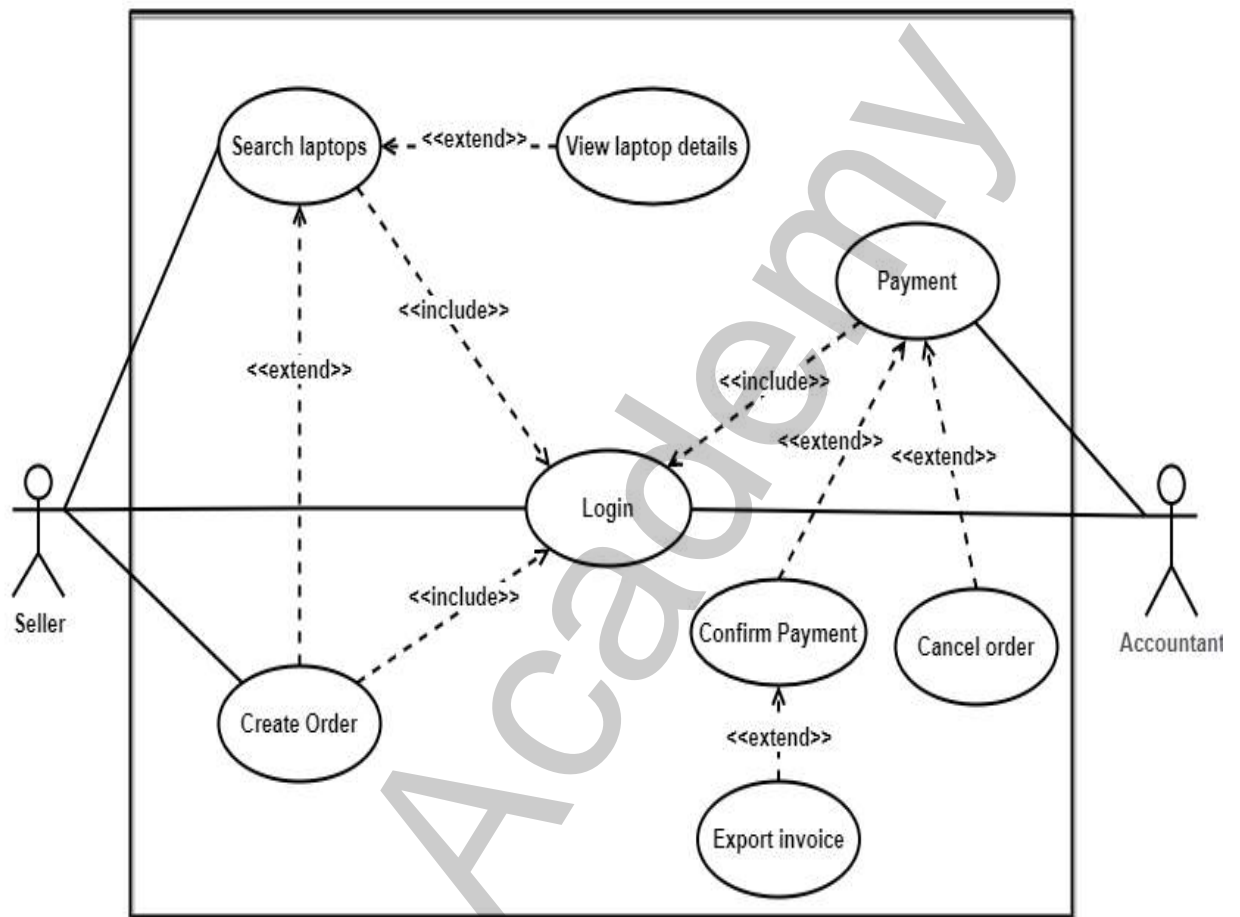
- Seller login
- Show laptops
- Create order
- Accountant login
- Show orders
- View order details
- Confirm payment or Cancel order

## II. Analyze System Requirements

This system was created to help laptop stores manage orders more easily. It can help the seller to have more information about the laptops sold in the store, that information can include price, brand, type, information about hardware configuration etc so that the seller can give more specific advice to the buyer according to the needs of each person. The main function of this system for the seller is that it helps the seller to create the order according to the buyer's request. As for accountants, this system allows them to view the information of unpaid orders and confirm successful payment if enough money has been received from the buyer, cancel the order when the buyer changes his mind or pause payment in case of necessity.

## 1. Use Case

### 1.1 Use Case



## 1.2 Login description

Name	Login
ID	UC_001
Description	Used to access the program and define the feature accessible depending on the type of account.
Actor	Seller and Accountant
Organizational Benefits	This feature was created to define the features and data that seller and accountant can access in the program.
Trigger	Login will be automatically activated as soon as we start the program.
Preconditions	Must enter the correct username and password, the database must be connected, accounts must be made available.
Postconditions	<p>Success: Seller or accountant have logged into the system, the main menu of the program must be displayed.</p> <p>Fail: Seller or accountant haven't logged into the system</p>
Main Course	<ol style="list-style-type: none"> <li>1. Input username and password</li> <li>2. Verify login</li> <li>3. Show main menu</li> </ol>
Alternate Courses	<p>AC 2.1: User enters wrong username, password</p> <ol style="list-style-type: none"> <li>1. Display message error</li> <li>2. Show the login screen again</li> <li>3. Re-enter request</li> </ol> <p>AC2.2: Username and password exists</p> <ol style="list-style-type: none"> <li>1. Show successful login message</li> <li>2. Show main menu</li> </ol>
Exceptions	<p>EX 1.1: Input Username/Password</p> <ol style="list-style-type: none"> <li>1. Display: "Invalid username or password, please re-enter!" and ask to re-enter until correct</li> <li>2. Request to re-enter username and password.</li> </ol> <p>EX 2.1: Disconnect to database</p> <ol style="list-style-type: none"> <li>1. Step 1: Display "Error!!! Can't connect to database"</li> <li>2. Request to recheck internet connection</li> </ol>



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### 1.3 Search laptops description

Name	Search laptops
ID	UC_002
Description	Used to search for laptops
Actor	Seller
Organizational Benefits	You can search laptops in the system
Trigger	Login to the program by the seller's account and you can use this feature.
Preconditions	Must have at least one laptop previously created.
Postconditions	Success: Show list of valid laptops.  Fail: No valid laptop
Main Course	<ol style="list-style-type: none"> <li>1. Input laptop name/category/manufactory or laptop id you want to find</li> <li>2. Show list of laptop found</li> </ol>
Alternate Courses	AC3.1: Data doesn't exist in the database. Display "Laptop not found!"
Exceptions	EX1: Disconnect to database <ol style="list-style-type: none"> <li>1. Request to recheck internet connection.</li> <li>2. Request program restart.</li> </ol>

#### 1.4 View laptop details description

Name	View laptop details
ID	UC_003
Description	Used to view laptop details
Actor	Seller
Organizational Benefits	You can view all laptop information
Trigger	Login to the program by the seller's account and you can use this feature.
Preconditions	Must have at least one laptop previously created.
Postconditions	Success: Show all laptop information.  Fail: No laptop found.
Main Course	<ol style="list-style-type: none"> <li>1. Input laptop id you want to find</li> <li>2. If laptop id valid, show all laptop information</li> </ol>
Alternate Courses	AC2.1: No data exists in the database. <ol style="list-style-type: none"> <li>1. Display msg: "Laptop not found!"</li> <li>2. Requires pressing any key to go back</li> </ol>
Exceptions	EX1: Disconnect to database <ol style="list-style-type: none"> <li>1. Request to recheck internet connection.</li> <li>2. Request program restart.</li> </ol>

### 1.5 Create order description

Name	Create order
ID	UC_004
Description	Used to create order
Actor	Seller
Organizational Benefits	You can create one or more orders according to customer's request
Trigger	Login to the program by the seller's account and you can use this feature.
Preconditions	Must have at least one laptop previously created.
Postconditions	Success: Create order complete.  Fail: Create order not complete.
Main Course	<ol style="list-style-type: none"> <li>1. Input laptop id and quantity you want to add to order</li> <li>2. Valid data</li> <li>3. Input customer information</li> <li>4. Create order complete.</li> </ol>
Alternate Courses	AC 2.1: Invalid laptop id or quantity. <ol style="list-style-type: none"> <li>1. Display msg error</li> <li>2. Request re-entry</li> </ol> AC 3.1: Customer information already exists. <ol style="list-style-type: none"> <li>1. You just need to enter the customer's phone number</li> <li>2. The rest of the information will be entered automatically</li> </ol> AC 3.2: Invalid customer's phone number <ol style="list-style-type: none"> <li>1. Display msg error</li> <li>2. Request re-entry</li> </ol>
Exceptions	EX1: Disconnect to database <ol style="list-style-type: none"> <li>1. Request to recheck internet connection.</li> <li>2. Request program restart.</li> </ol>

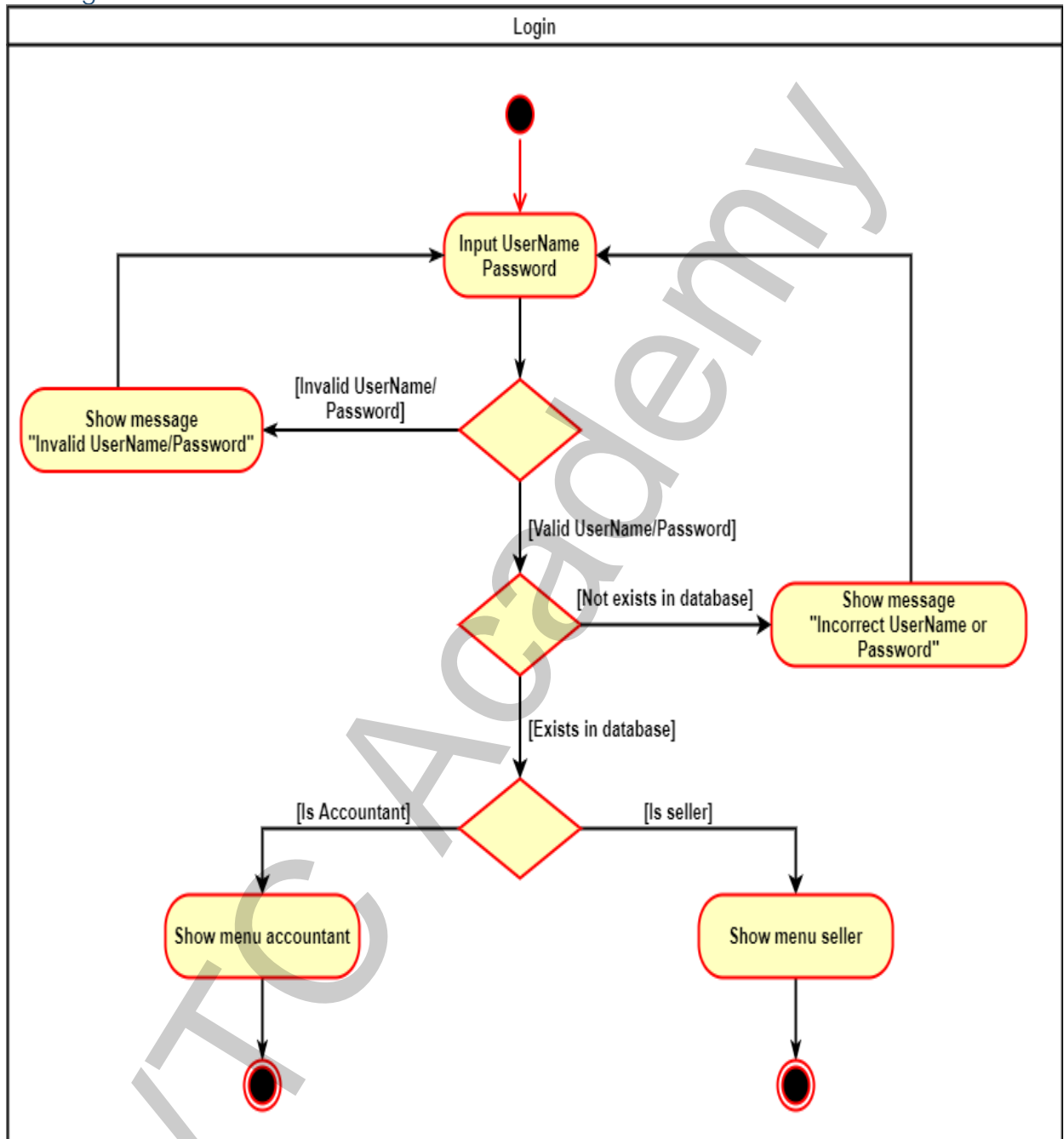
## 1.6 Payment description

Name	Payment
ID	UC_005
Description	Used to confirm payment or cancel payment
Actor	Accountant
Organizational Benefits	Allow accountants to confirm paid orders or cancel orders
Trigger	Login to the program by the accountant's account and you can use this feature.
Preconditions	Must have at least one order in unpaid status.
Postconditions	<p>Success: Confirm payment/Cancel order complete or payment pause.</p> <p>Fail: Confirm payment or cancel order not complete.</p>
Main Course	<ol style="list-style-type: none"> <li>1. Input order id you want</li> <li>2. Show order information</li> <li>3. Choose to payment, cancel order or exit</li> <li>4. Request complete</li> </ol>
Alternate Courses	<p>AC 3.1: Confirm payment</p> <ol style="list-style-type: none"> <li>1. Enter the amount given by the customer (input 0 to skip)</li> <li>2. Export invoice</li> </ol> <p>AC 3.2: Cancel order</p> <ol style="list-style-type: none"> <li>1. Press combination CTRL+X to cancel order</li> <li>2. Display msg "Cancel order complete!"</li> <li>3. Requires pressing any movie to go back to list order</li> </ol> <p>AC 3.3: Exit</p> <ol style="list-style-type: none"> <li>1. Press ESCAPE to exit</li> <li>2. Payment pause</li> <li>3. Requires pressing any movie to go back to list order</li> </ol> <p>AC 4.1: If payment or cancel order not complete</p> <ol style="list-style-type: none"> <li>1. Display msg error</li> <li>2. Requires pressing any key to go back to list order</li> </ol>

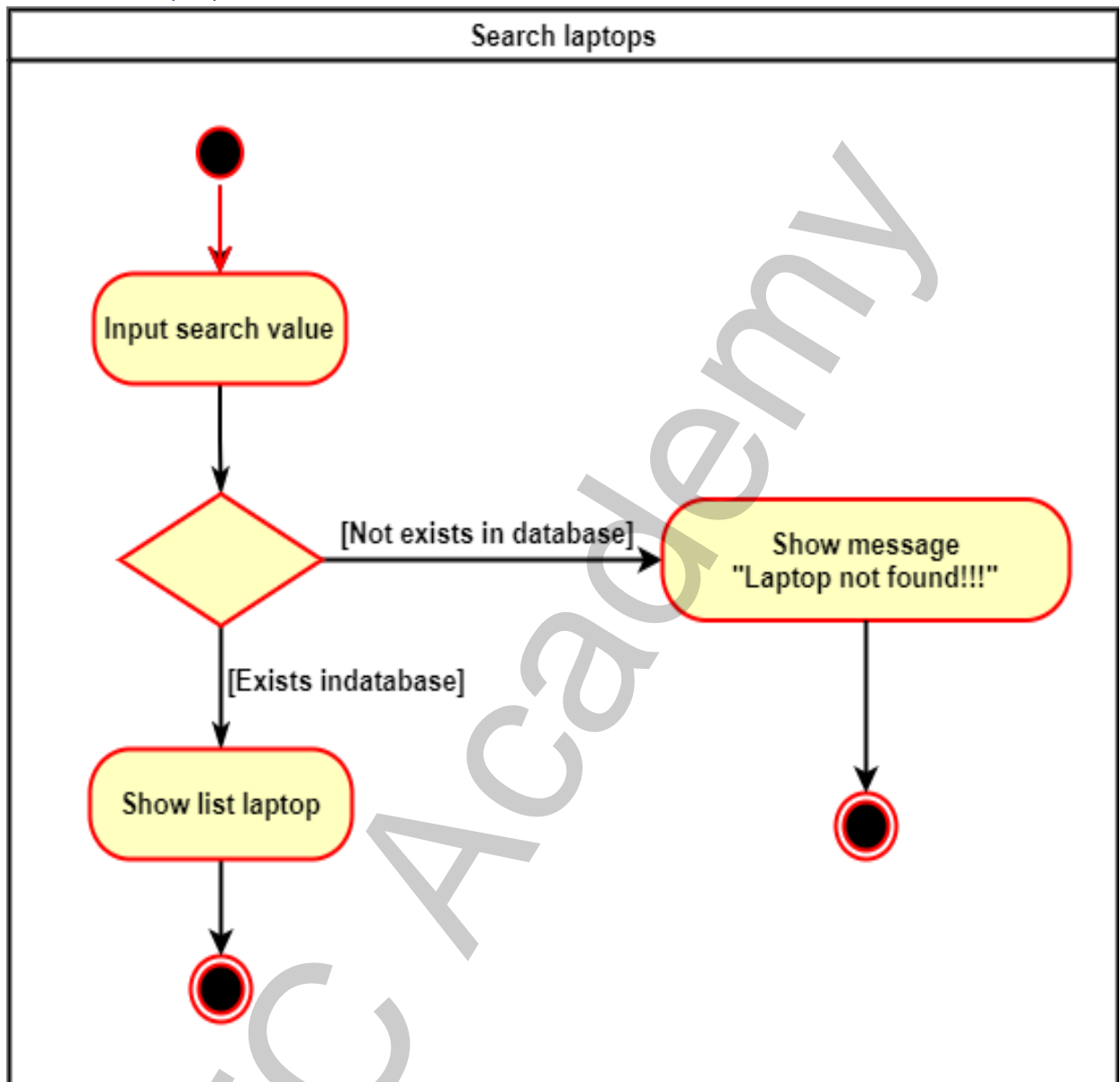
Exceptions	<p>EX1: Disconnect to database</p> <ol style="list-style-type: none"> <li>3. Request to recheck internet connection.</li> <li>4. Request program restart.</li> </ol>
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## 2. Activity Diagram

### 2.1 Login

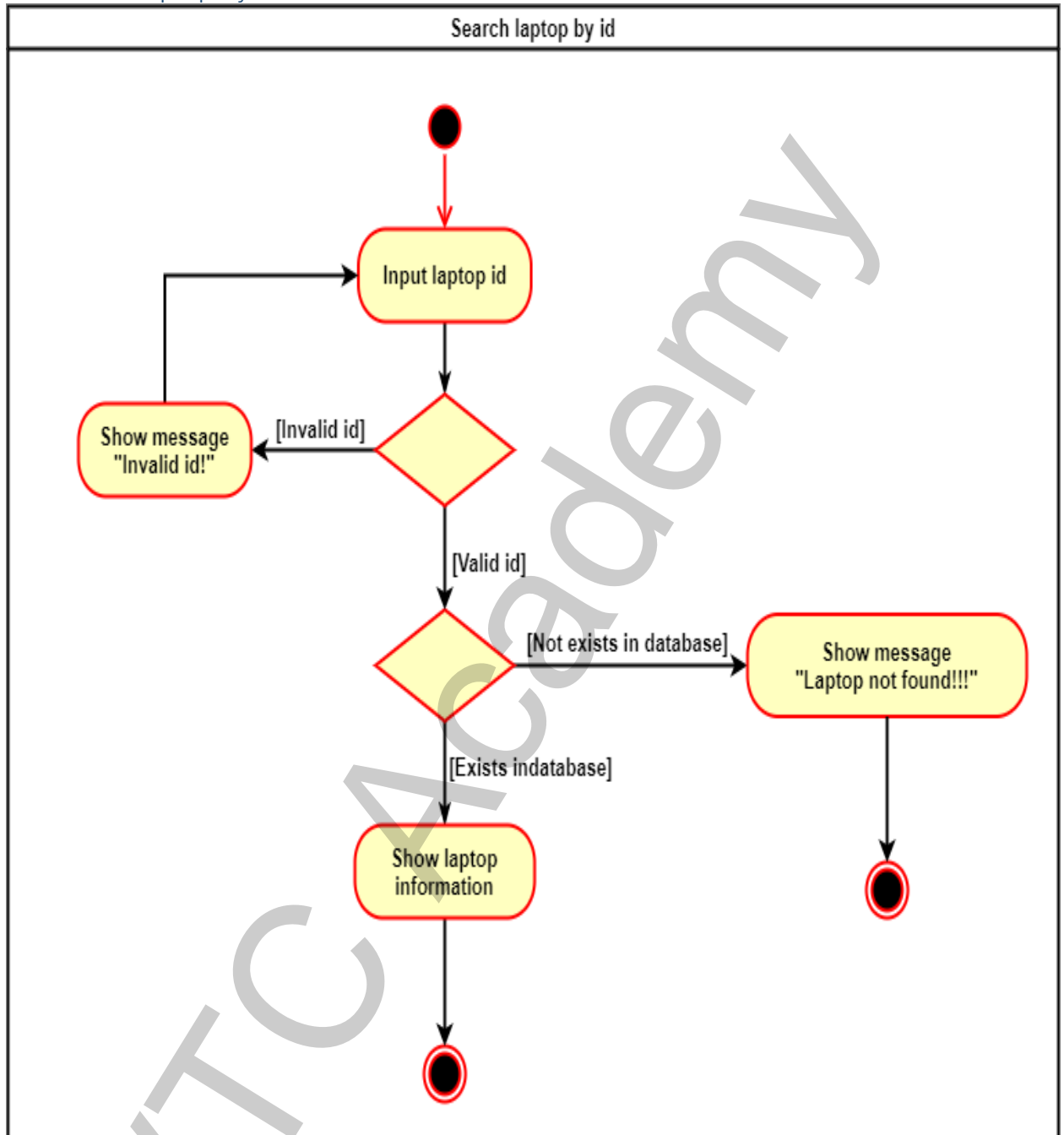


## 2.2 Search laptop

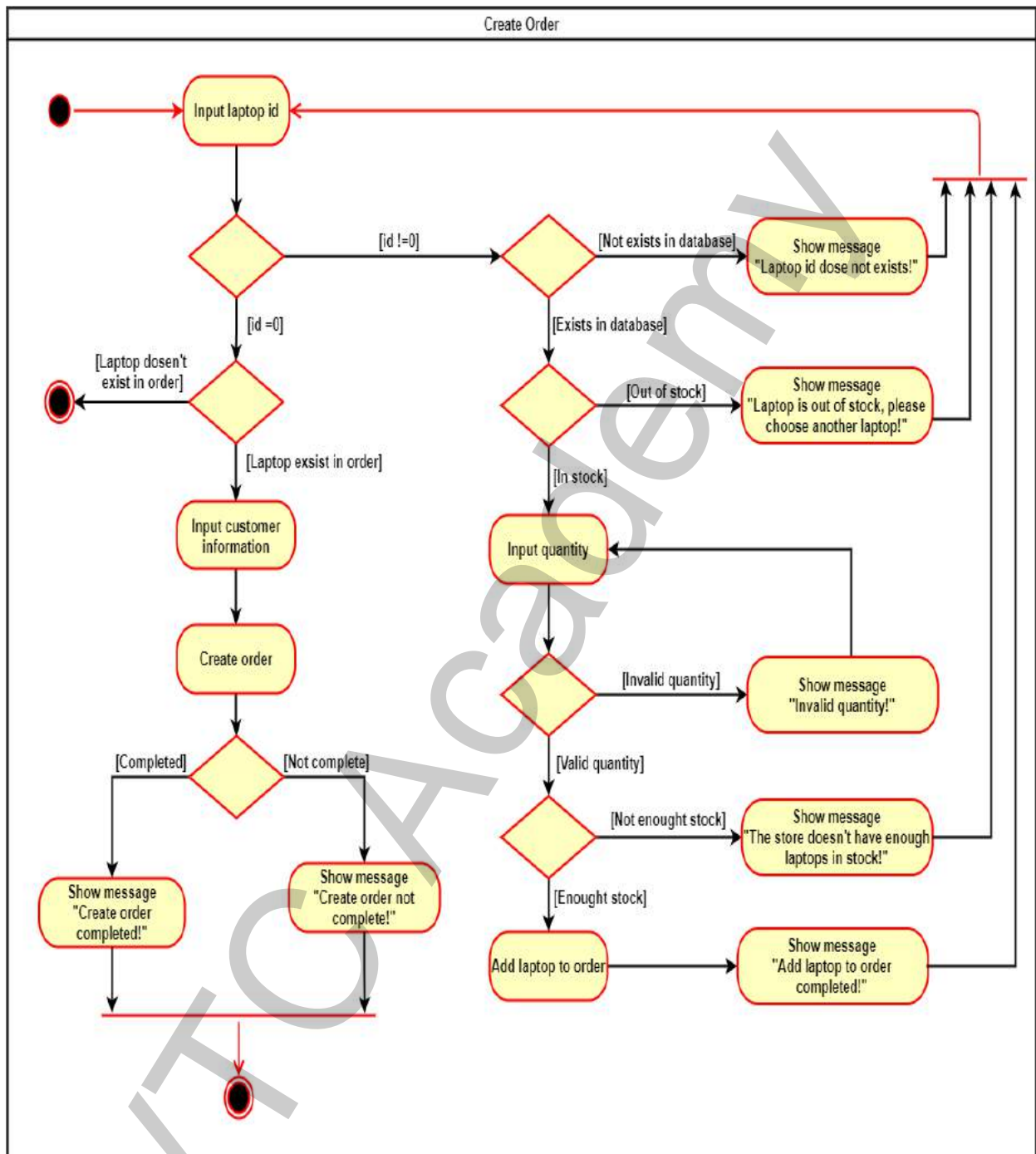




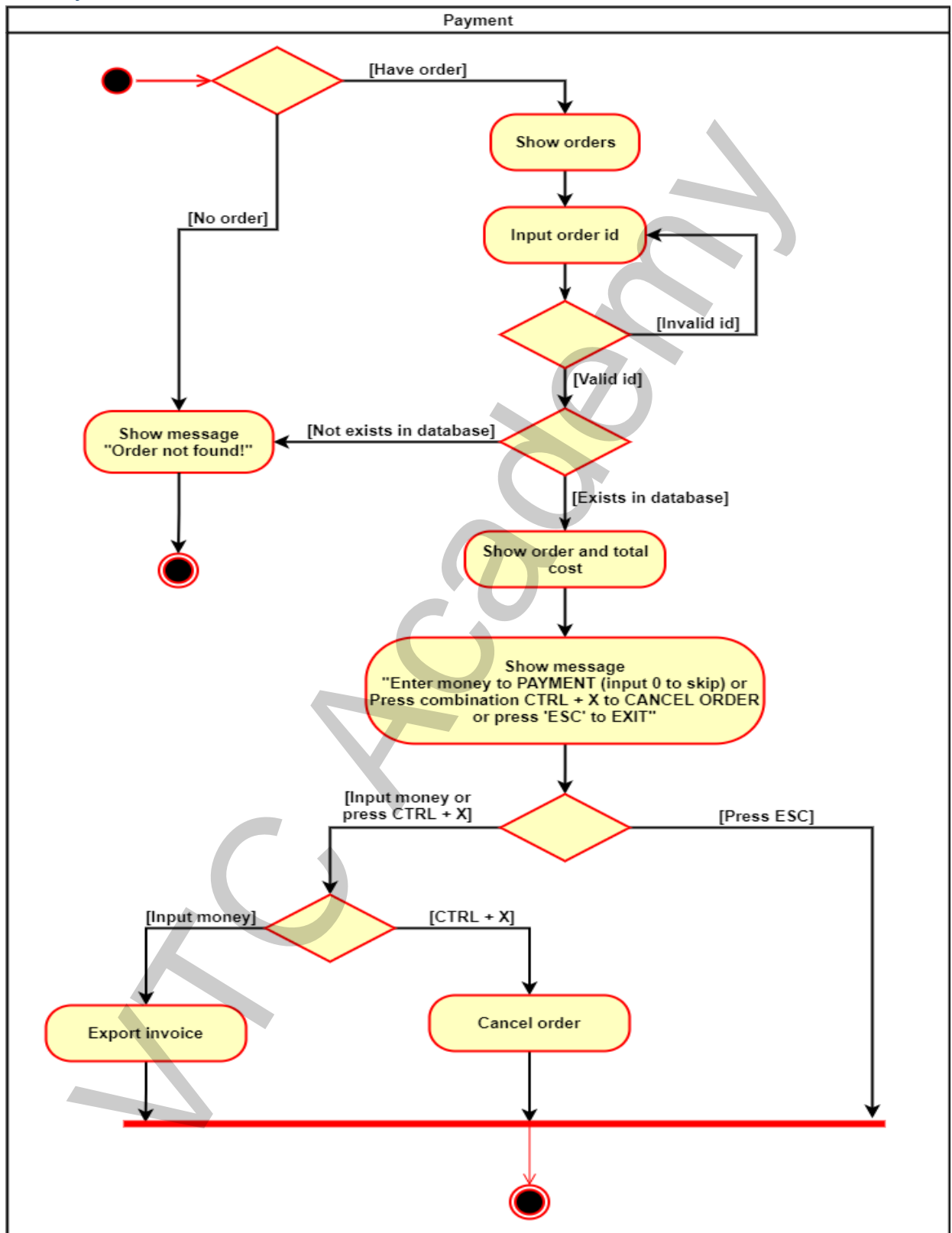
### 2.3 Search laptop by id



## 2.4 Create order



## 2.5 Payment



### III. Design Details

#### 1. UI Design

##### 1.1 Login



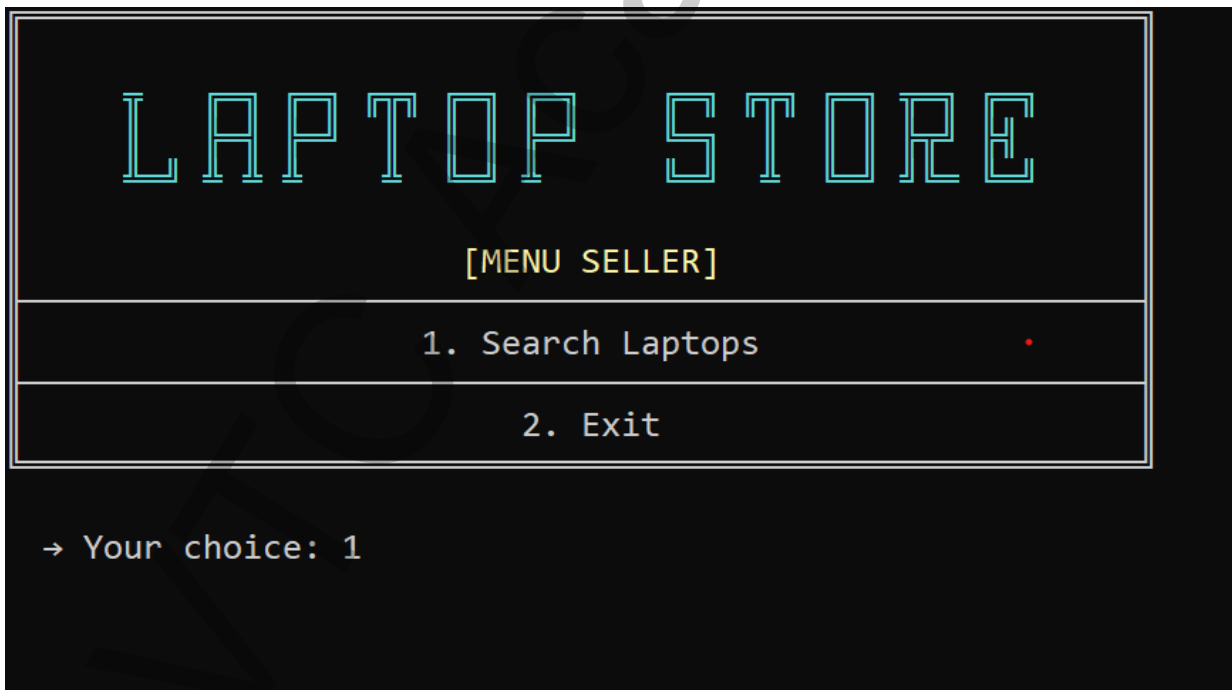
LAPTOP STORE

[LOGIN]

→ Username: seller001

→ Password: \*\*\*\*

##### 1.2 Menu seller



LAPTOP STORE

[MENU SELLER]

1. Search Laptops	•
2. Exit	

→ Your choice: 1

### 1.3 List of laptop

==== SEARCH LAPTOP ====

ID	Laptop Name	Manufactory	Category	CPU	RAM	Price(VND)
11	Acer Nitro 5 Eagle AN515 57...	Acer	Gaming	Intel Core i7-11800H	8GB	27,690,000
12	Acer Predator Helios 300 PH...	Acer	Gaming	Intel Core i7-10750H	16GB	39,990,000
13	Acer Aspire 3 A315 56 37DV	Acer	Office	Intel Core i3-1005G1	4GB	10,990,000
14	Acer Swift 3 SF314 511 56G1	Acer	Multimedia	Intel Core i5-1135G7	16GB	19,690,000
15	MSI GF63 Thin 10SC 468VN	MSI	Gaming	Intel Core i5-10500H	8GB	20,490,000
16	MSI GL65 Leopard 10SCXK 093...	MSI	Gaming	Intel Core i7-10750H	8GB	22,690,000
17	MSI Stealth 15M A11SDK 061V...	MSI	Gaming	Intel Core i7-1185G7	16GB	30,490,000
18	Lenovo IdeaPad Slim 3 15IIL...	Lenovo	Office	Intel Core i3 1005G1	4GB	12,690,000
19	Lenovo Ideapad Slim 5 15ITL...	Lenovo	Multimedia	Intel Core i5 1135G7	16GB	20,199,000
20	Lenovo Legion 5-15ACH6	Lenovo	Gaming	AMD Ryzen 7 5600H	8GB	28,789,000

◀ [2/3] ▶

- Press 'LEFT' or 'RIGHT' arrow to switch page
- Press 'F' to search laptops, 'D' to view laptop details, 'C' to Create Order, 'ESC' to exit

### 1.4 Search laptop

==== SEARCH LAPTOP ====

ID	Laptop Name	Manufactory	Category	CPU	RAM	Price(VND)
1	ASUS TUF Gaming F15 FX506HC...	ASUS	Gaming	Intel Core i5-11400H	8GB	24,990,000
2	Asus TUF Dash FX516PE HN005...	ASUS	Gaming	Intel Core i7-11370H	8GB	27,990,000
3	Asus ROG Strix G15 G513QC H...	ASUS	Gaming	AMD Ryzen R7-5800H	8GB	27,990,000
4	Asus ROG Zephyrus G14 Alan ...	ASUS	Gaming	AMD Ryzen 9-5900HS	16GB	49,990,000

- Press 'F' to search laptops, 'D' to view laptop details, 'C' to Create Order, 'ESC' to exit

Press combination CTRL + H to view instructions

→ Input search value: asus

\* NAME|MANUFACTORY|CATEGORY: Search by NAME or MANUFACTORY or CATEGORY

\* NAME|MANUFACTORY|CATEGORY # desc|asc: Search by NAME or MANUFACTORY or CATEGORY, PRICE: High → Low or Low → High

\* MANUFACTORY # CATEGORY: Search by MANUFACTORY and CATEGORY

\* MANUFACTORY # CATEGORY # desc|asc: Search by MANUFACTORY and CATEGORY, PRICE: High → Low or Low → High

→ Input search value: asus #gaming|

## 1.5 Show laptop information

```

LAPTOP INFORMATION

Laptop Id: 1
Laptop name: ASUS TUF Gaming F15 FX506HC HN002T
Manufactory: ASUS
Category: Gaming
CPU: Intel Core I5-11400H
RAM: 8GB DDR4 2933MHz
Hard drive: 512GB SSD M.2 PCIE G3X2
VGA: NVIDIA GeForce RTX 3050 Laptop
Display: 15.6" FHD (1920 x 1080) IPS, 144Hz, Wide View, 250nits, Narrow Bezel, Non-Glare with 45% NTSC, 62.5% sRGB
Battery: 48WHrs
Weight: 2.3 Kg
Materials: Plastic
Ports: 2x Type C USB 3.2 Gen 2 with Power Delivery and Display Port, 2x USB 3.2 Gen 2 Type-A, 1x HDMI 2.0b, 1x 3.5mm Combo Audio Jack, 1x RJ45 LAN
Network and connection: LAN, Wifi 6 802.11AC (2X2), Bluetooth 5.0
Security: PIN code
Keyboard: 1-Zone RGB
Audio: DTS:X Ultra
Size: 35.9 x 25.6 x 2.28 ~ 2.43 cm
Operating system: Windows 10 Home
Quantity: 50
Price: 24,990,000 VND
Warranty period: 24 month

Press any key to back...

```

## 1.6 Create order

```

• Press 'LEFT' or 'RIGHT' arrow to switch page
• Press 'F' to search laptops, 'D' to view laptop details, 'C' to Create Order, 'ESC' to exit

■ Input List Laptop
→ Input ID(input 0 to cancel): 1
* Laptop Name: ASUS TUF Gaming F15 FX506HC HN002T
* Price: 24,990,000 VND
→ Input quantity: 1
ADD LAPTOP TO ORDER COMPLETED!!!
→ Input ID(input 0 to cancel): 0

■ Customer information
→ Phone: 0904844014
→ Customer name: Customer10
→ Address: Nam Định
CREATE ORDER COMPLETED!!!
Press any key to back...

```

## 1.7 Menu Accountant

# LAPTOP STORE

## [MENU ACCOUNTANT]

1. Payment

2. Exit

→ Your choice: 1\_

## 1.8 Show order list

— ORDER LIST —

Order ID	Customer Name	Phone	Order Date	Total cost(VND)	Status
1	Pham Cong Hung	0904844014	26/10/2021 9:07 PM	131,757,000	UNPAID
2	Pham Cong Ha	0906450904	26/10/2021 9:07 PM	77,239,000	UNPAID
3	Customer1	0836984311	26/10/2021 9:07 PM	104,498,000	UNPAID
4	Pham Cong Hung	0904844014	26/10/2021 9:07 PM	77,239,000	UNPAID
5	Pham Cong Ha	0906450904	26/10/2021 9:07 PM	77,239,000	UNPAID
6	Customer1	0836984311	26/10/2021 9:07 PM	77,239,000	UNPAID
7	Ma Van Truong	0836984302	26/10/2021 9:08 PM	99,960,000	UNPAID

● Press 'ESC' to BACK  
→ Input order id to payment: |



## 1.9 Payment

**— PAYMENT —**

Order ID : 7  
 Customer Name : Ma Van Truong  
 Customer Phone : 0836984302  
 Address : Bac Giang

NO	Laptop Name	Price(VND)	Quantity	Amount(VND)
1	ASUS TUF Gaming F15 FX506HC HN002T	24,990,000	4	99,960,000
<b>TOTAL PAYMENT</b>				<b>99,960,000</b>

• Enter money to PAYMENT (enter 0 to skip) or Press combination CTRL + X to CANCEL ORDER or press 'ESC' to EXIT  
 → Enter money: 100,000,000

## 1.10 Invoice

**— INVOICE —**

Invoice No : 7  
 Invoice Date : 10/26/2021 9:14:29 PM

Store : LAPTOP STORE  
 Phone : 0999999999  
 Address : 18 Tam Trinh, Minh Khai Ward, Hai Ba Trung District, Ha Noi

Customer Name : Ma Van Truong  
 Customer Phone : 0836984302  
 Address : Bac Giang

NO	Laptop Name	Price(VND)	Quantity	Amount(VND)
1	ASUS TUF Gaming F15 FX506HC HN002T	24,990,000	4	99,960,000
<b>TOTAL PAYMENT</b>				<b>99,960,000</b>

SELLER

Nguyen Van A

ACCOUNTANT

Nguyen Van D

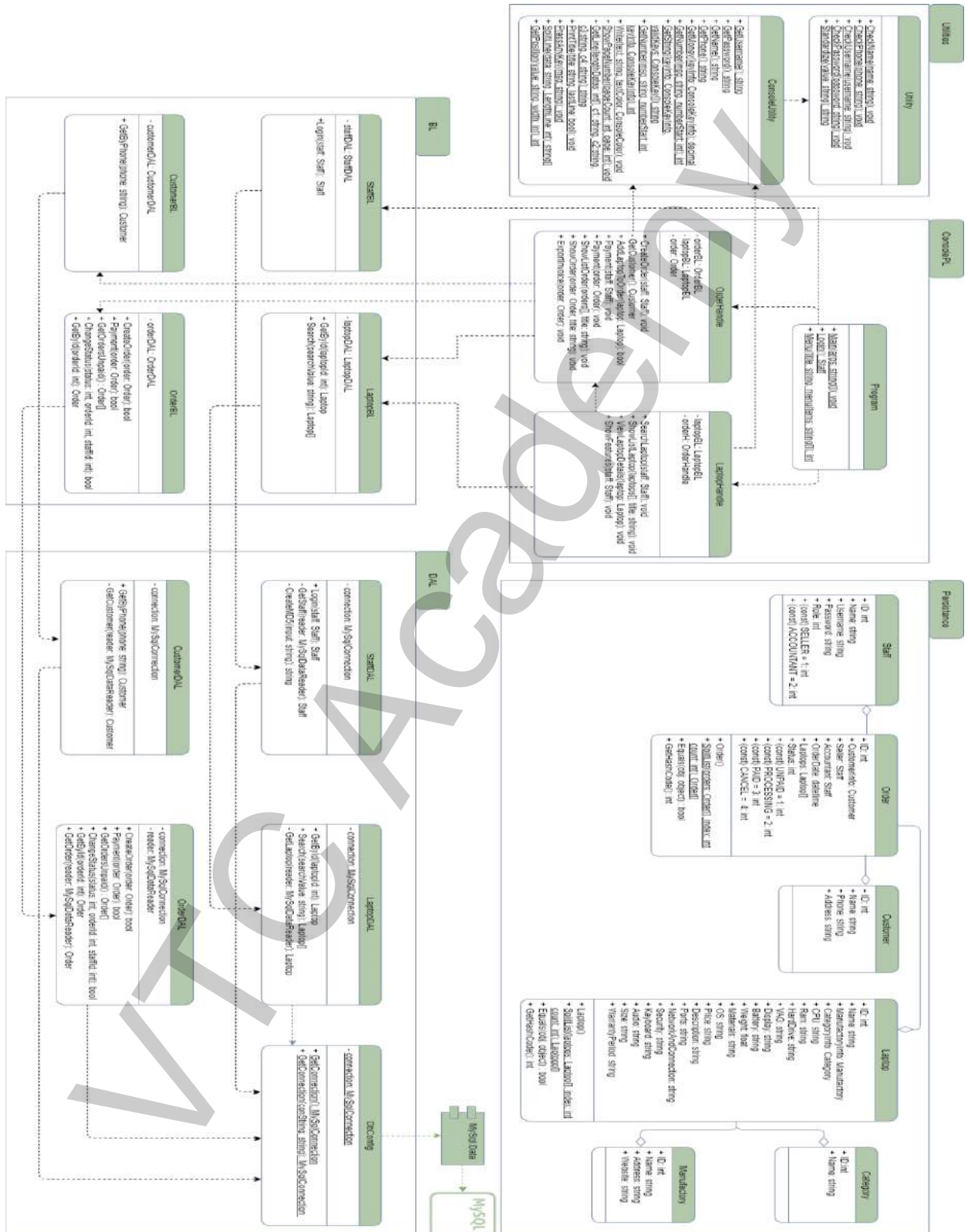
CUSTOMER

Ma Van Truong

→ EXCESS CASH: 40,000 VND  
 Press any key to back...

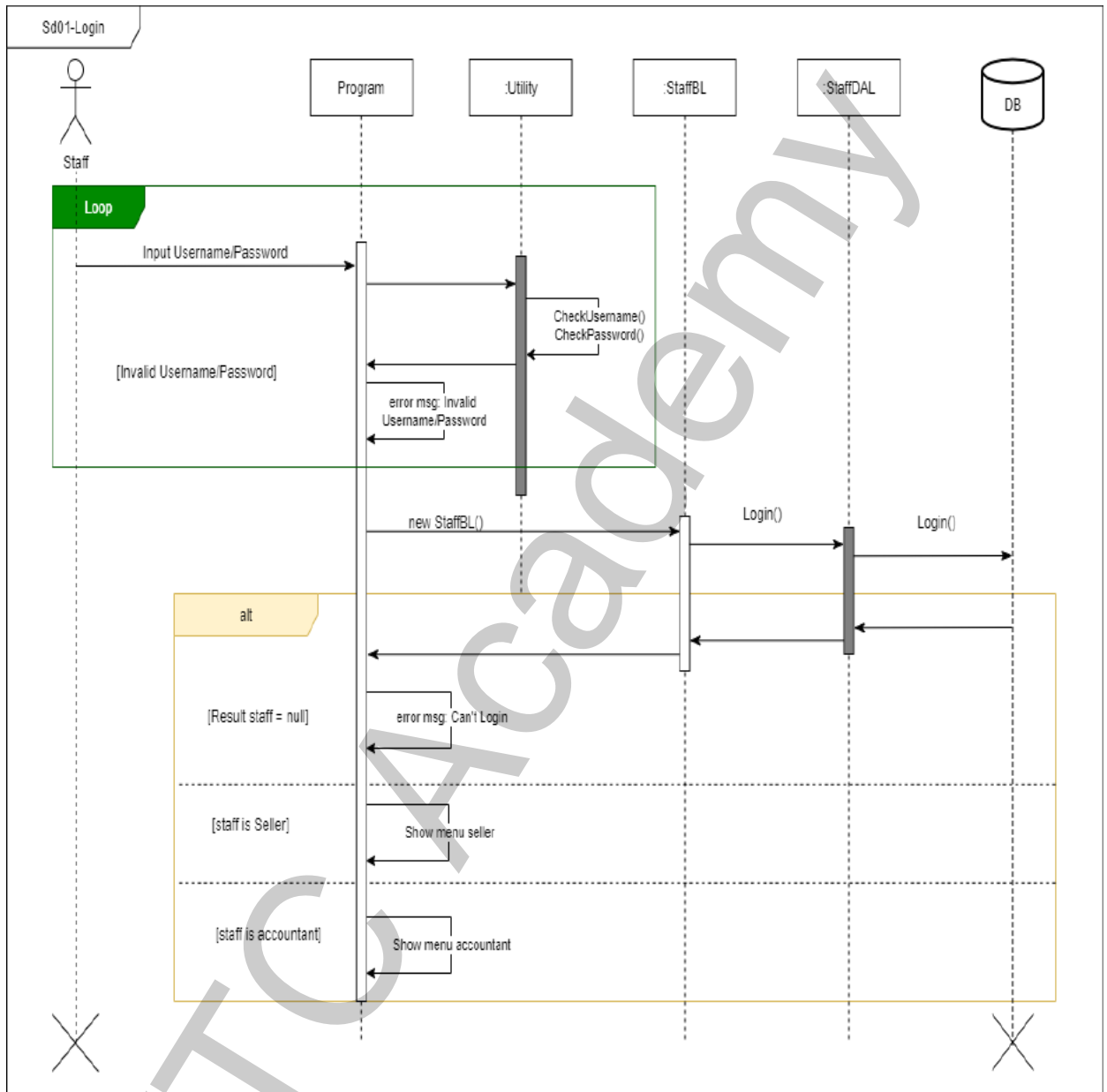


## 2. Code Design (Class Diagram)

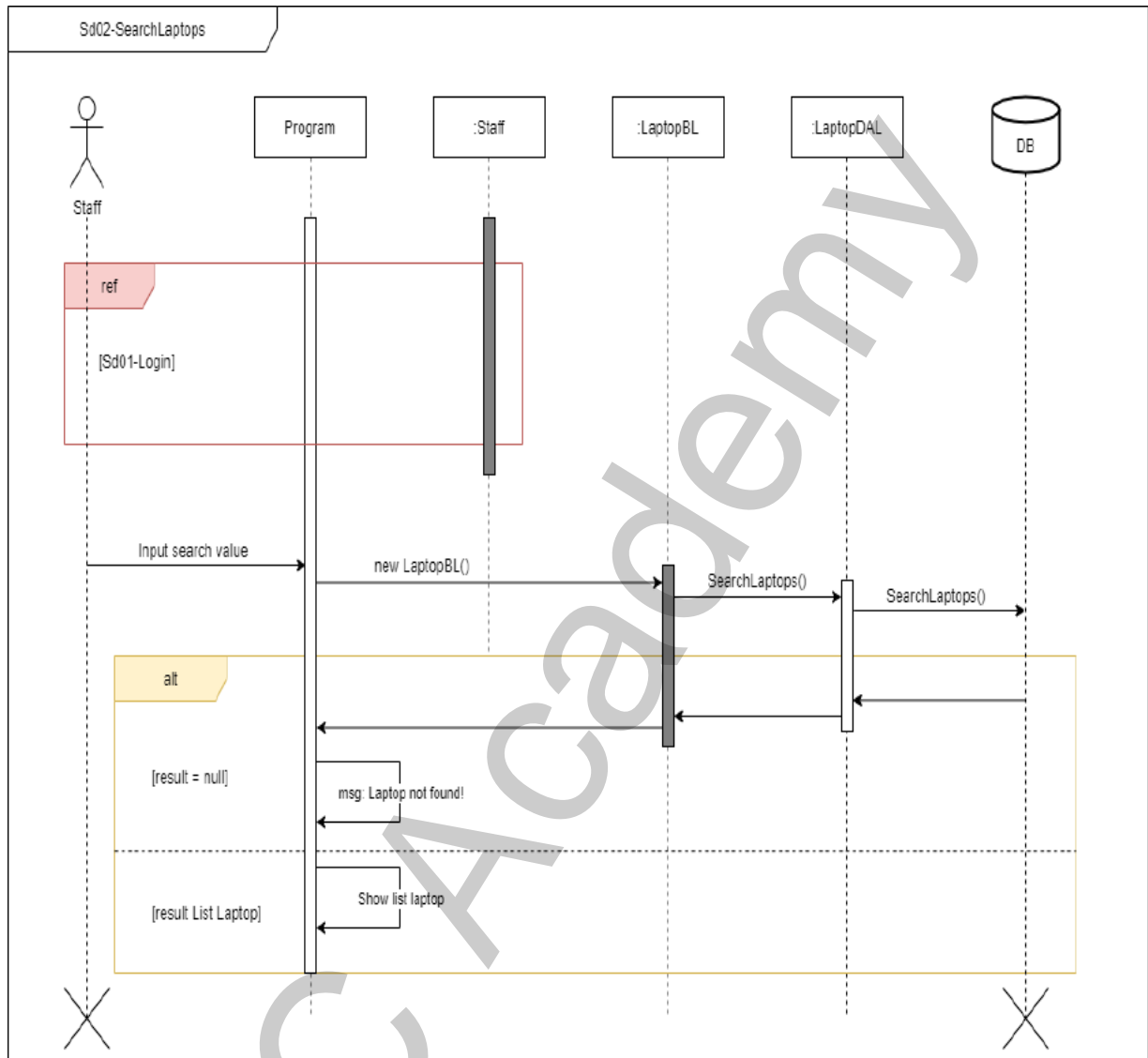


### 3. Sequence Diagram

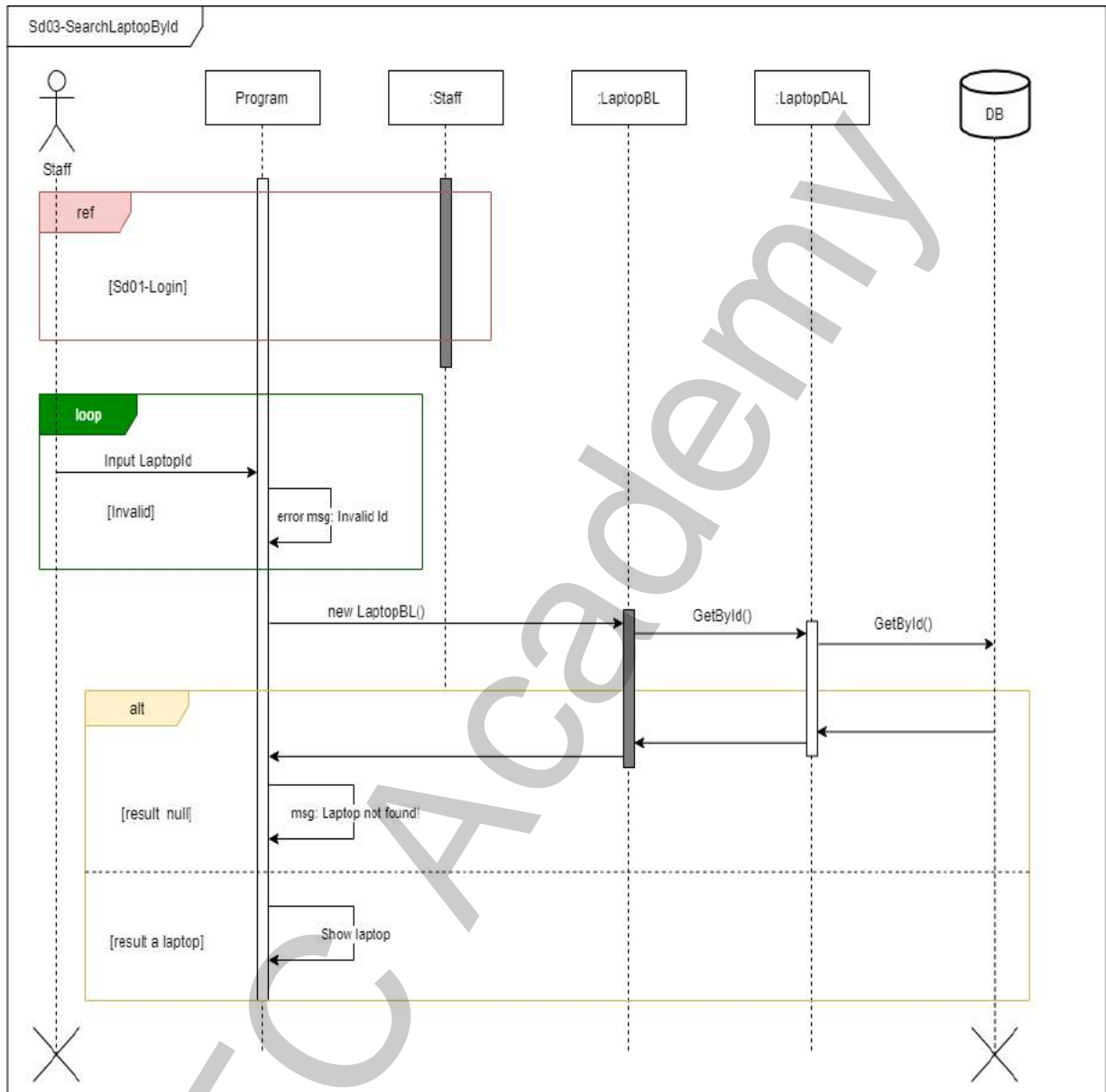
#### 3.1 Login



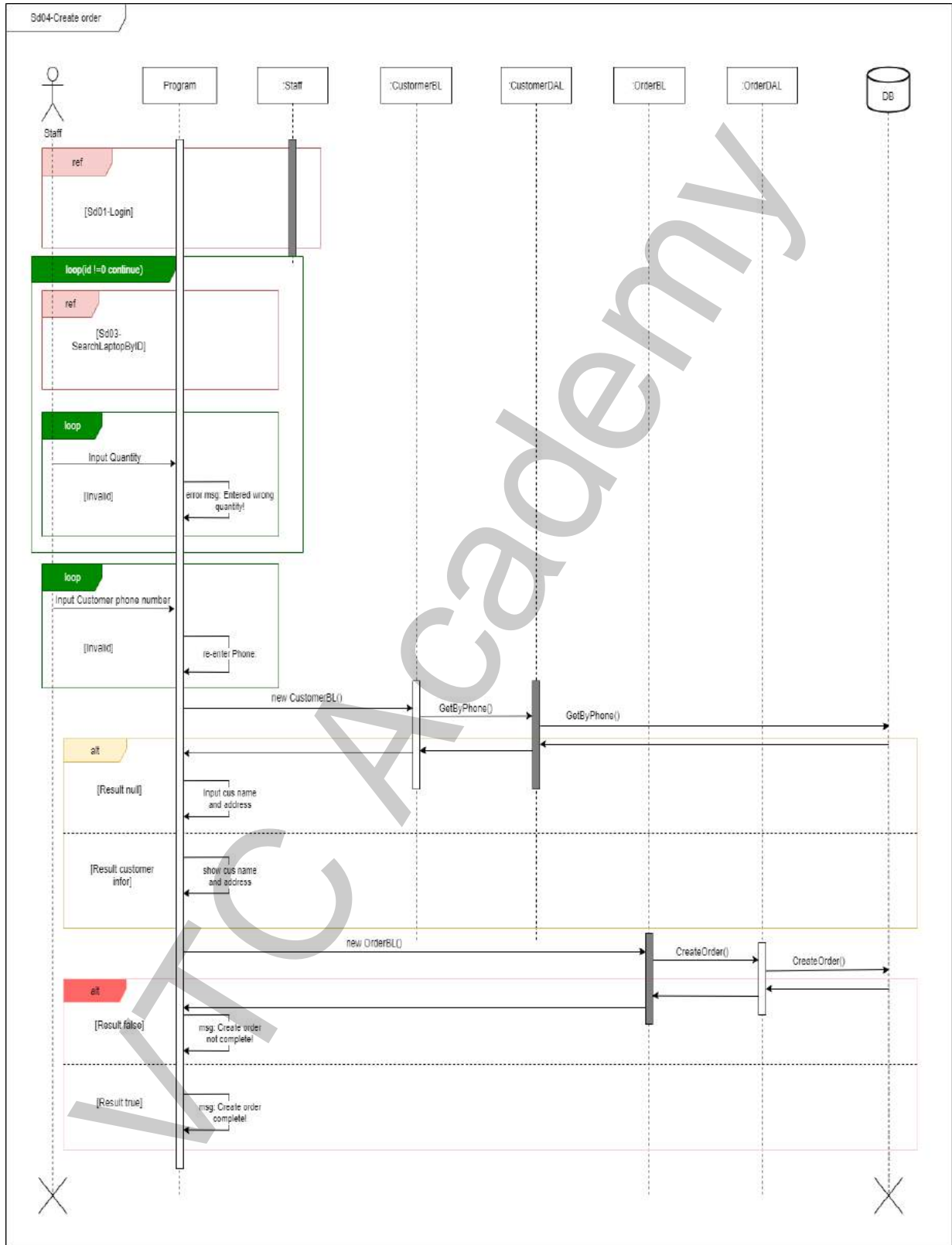
### 3.2 Search laptops



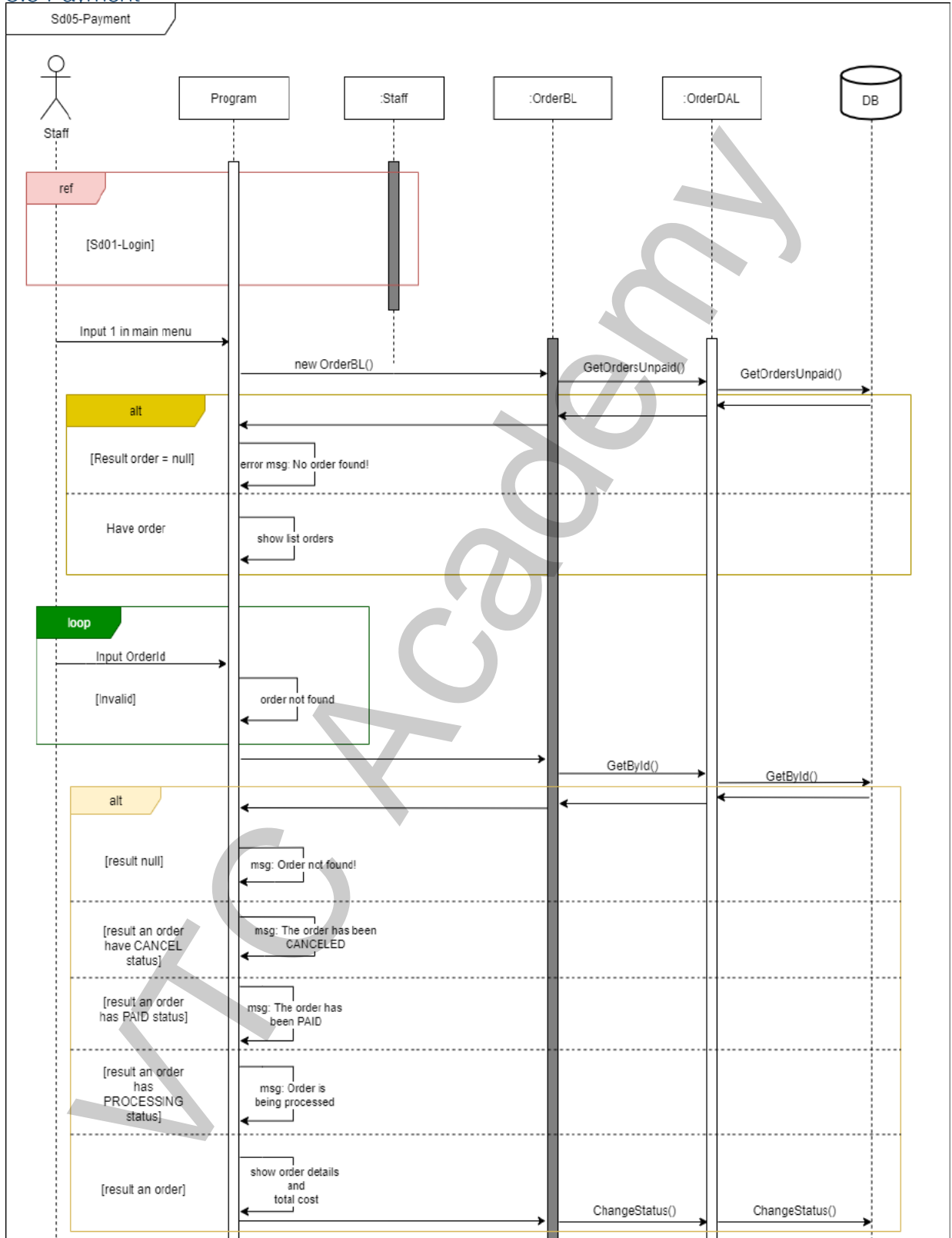
### 3.3 Search laptop by id

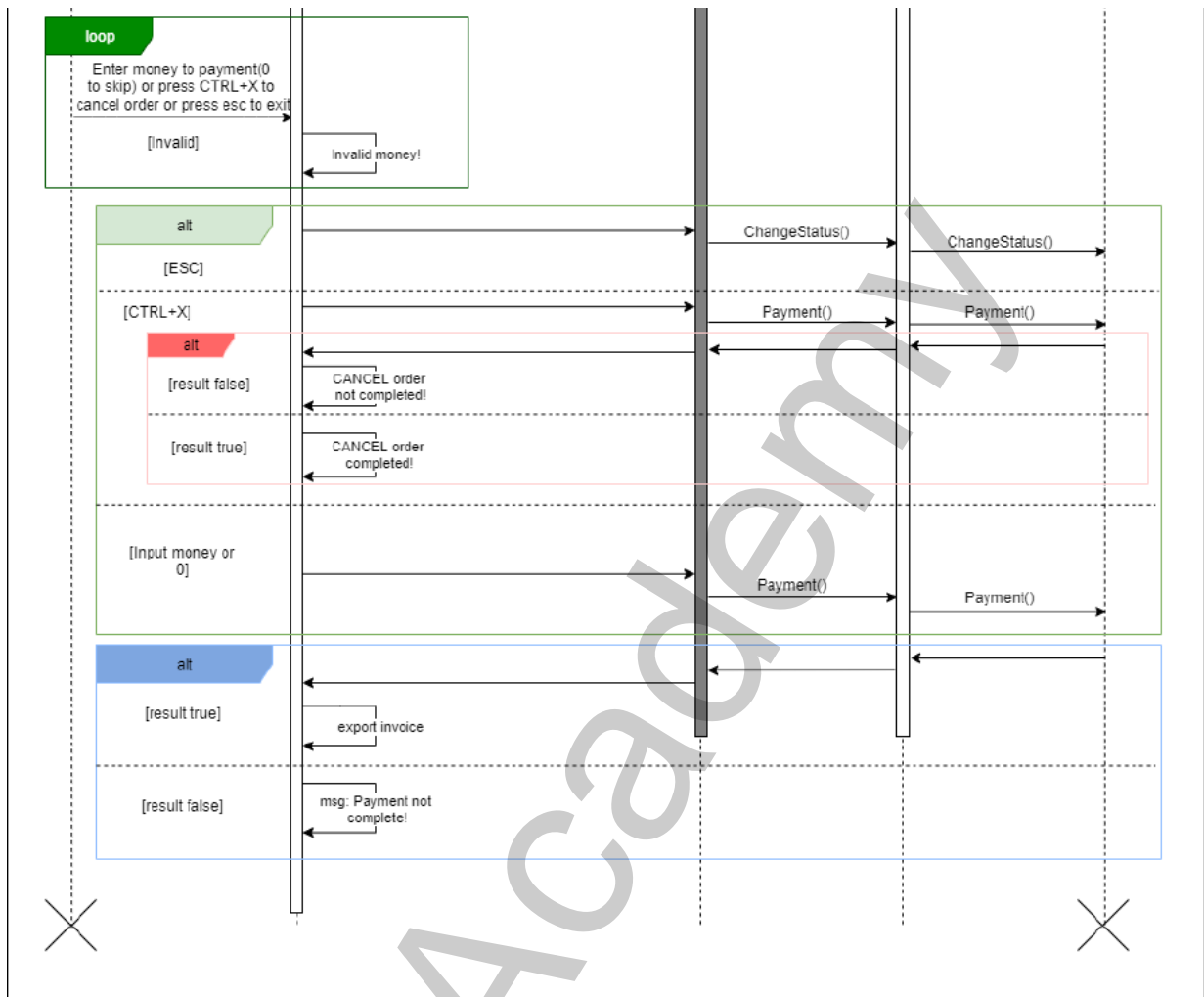


### 3.4 Create order



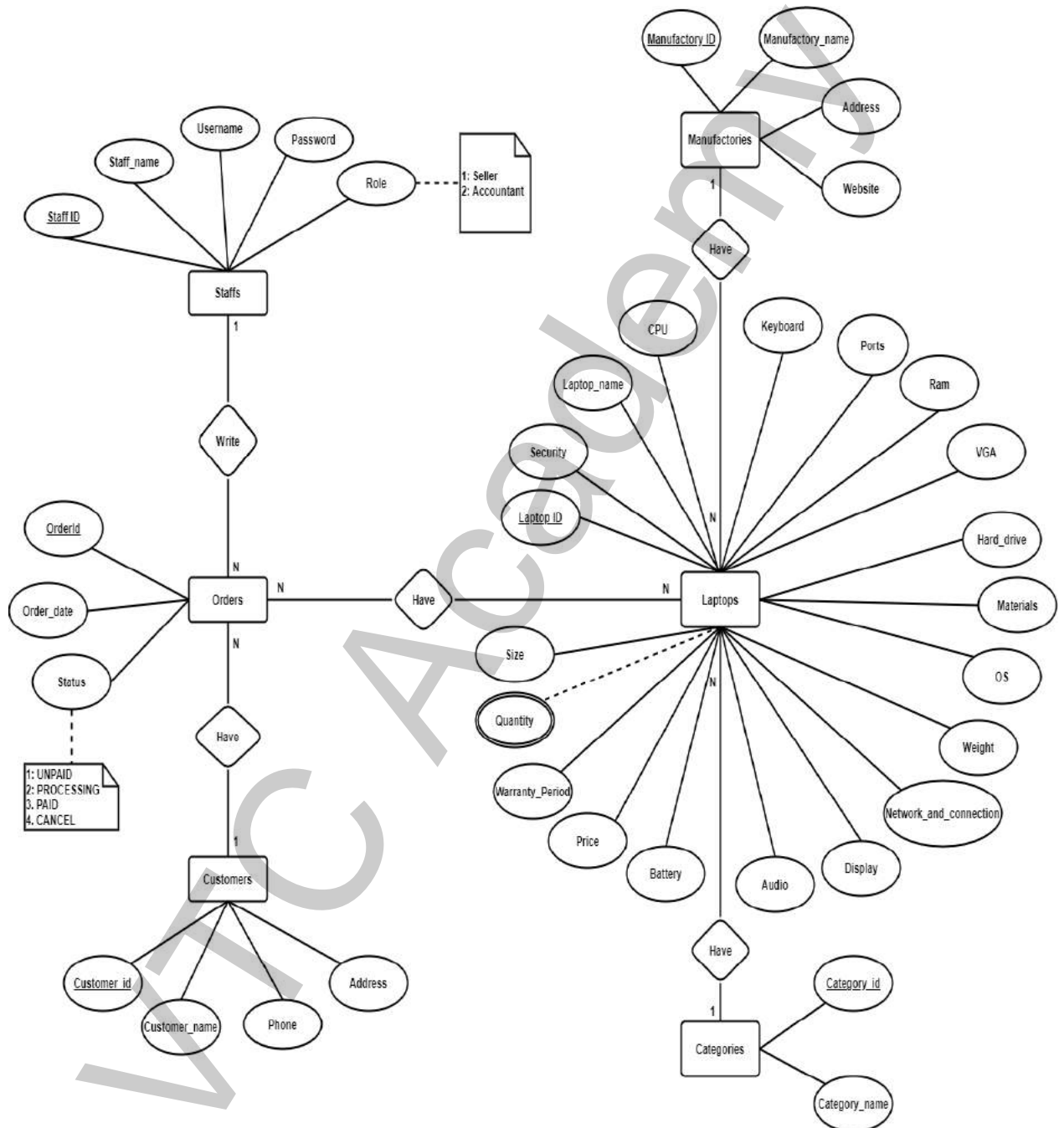
### 3.5 Payment





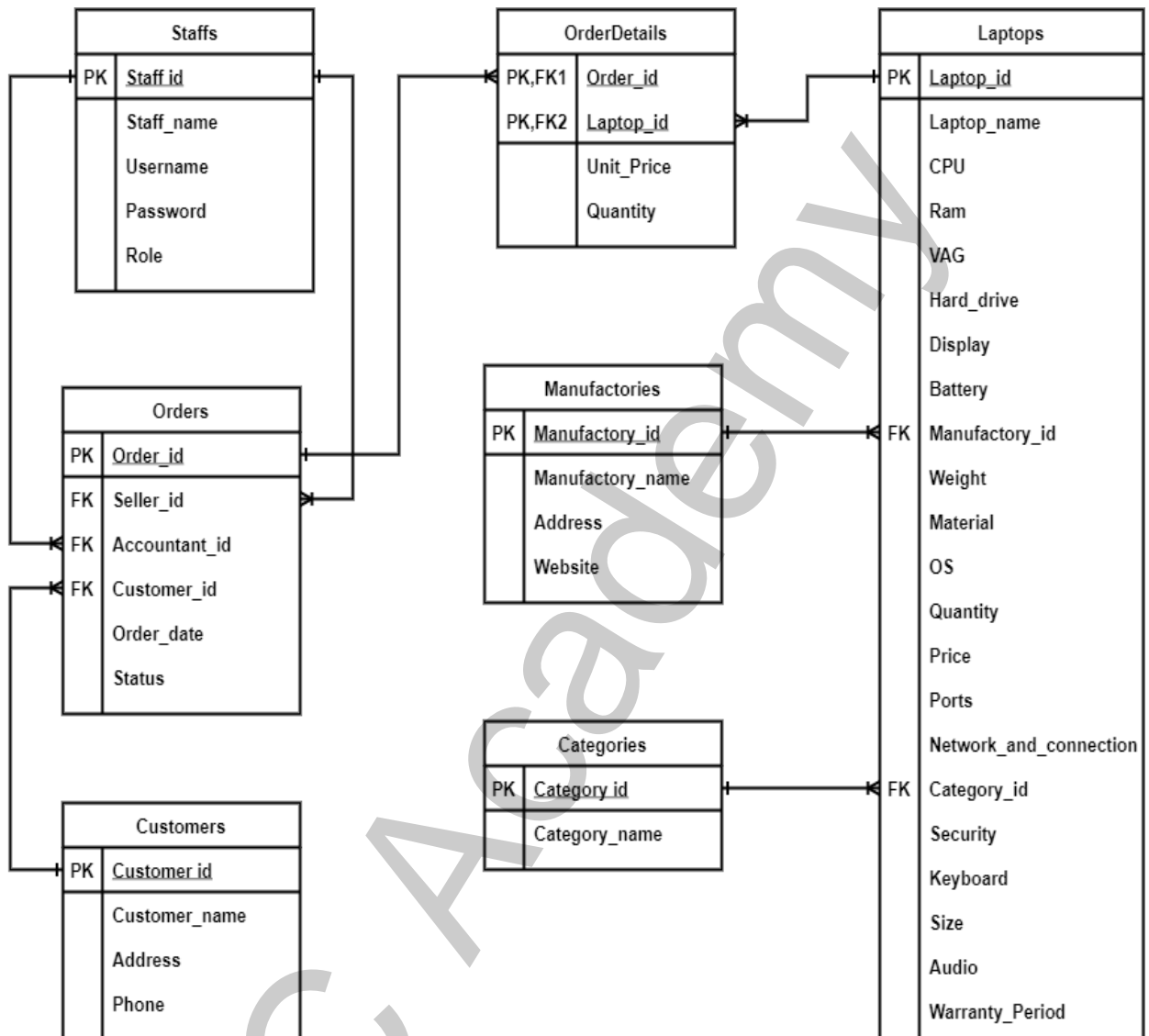
## 4. Database Design

### 4.1 Entity Relationship Diagram





## 4.2 Database Design Details



staffs			
Column Name	Data Type	Constraints	Description
staff_id	int	PRIMARY KEY, AUTO INCREMENT	
username	varchar(255)	NOT NULL	
password	varchar(255)	NOT NULL, UNIQUE	
staff_name	varchar(50)	NOT NULL	Staff's name
role	int	NOT NULL	1: Seller 2: Accountant

customers			
Column Name	Data Type	Constraints	Description
customer_id	int	PRIMARY KEY, AUTO INCREMENT	
customer_name	varchar(50)	NOT NULL	Customer name
Phone	varchar(10)	NOT NULL, UNIQUE	Customer's Phone number
address	varchar(100)		Customer's address

manufactories			
Column Name	Data Type	Constraints	Description
manufactory_id	int	PRIMARY KEY, AUTO INCREMENT	
manufactory_name	varchar(50)	NOT NULL, UNIQUE	Manufacturer name
website	varchar(255)		Manufacturer's website
address	varchar(255)		Manufacturer's address

categories			
------------	--	--	--

Column Name	Data Type	Constraints	Description
category_id	int	PRIMARY KEY, AUTO INCREMENT	
category_name	varchar(50)	NOT NULL, UNIQUE	Laptop category

orders			
Column Name	Data Type	Constraints	Description
order_id	int	PRIMARY KEY, AUTO INCREMENT	
customer_id	int	NOT NULL	
seller_id	int	NOT NULL	
accountant_id	int		
order_date	datetime	NOT NULL, DEFAULT CURRENT DATE	Order creation date
status	int	NOT NULL	1: Unpaid 2: Processing 3: Paid 4: Cancel

order_details			
Column Name	Data Type	Constraints	Description
order_id	int	PRIMARY KEY, FOREIGN KEY	
laptop_id	int	PRIMARY KEY, FOREIGN KEY	
unit_price	Decimal	NOT NULL	Laptop's unit price
quantity	int	NOT NULL, DEFAULT 1	Laptop's Quantity

laptops			
Column Name	Data Type	Constraints	Description
laptop_id	int	PRIMARY KEY, AUTO INCREMENT	
laptop_name	varchar(100)	NOT NULL	Laptop's name
category_id	int	NOT NULL	Laptop's category
manufactory_id	int	NOT NULL	Laptop's manufacturer
CPU	varchar(100)	NOT NULL	Laptop's CPU
Ram	varchar(100)	NOT NULL	Laptop's Ram
hard_drive	varchar(100)	NOT NULL	Laptop's Hard_drive
VGA	varchar(100)	NOT NULL	Laptop's VGA
display	varchar(255)	NOT NULL	Laptop's Display
battery	varchar(255)	NOT NULL	Laptop's Battery
weight	float	NOT NULL	Laptop's Weight, unit: kilogram
materials	varchar(100)	NOT NULL	Laptop's Materials
ports	varchar(255)	NOT NULL	Laptop's Ports
network_and_connection	varchar(100)	NOT NULL	Laptop's Network and connection
security	varchar(100)	NOT NULL	Laptop's Security
keyboard	varchar(100)	NOT NULL	Laptop's Keyboard
audio	varchar(100)	NOT NULL	Laptop's Audio
size	varchar(100)	NOT NULL	Laptop's Size
OS	varchar(100)	NOT NULL	Laptop's OS
warranty_period	varchar(100)	NOT NULL	Laptop's Warranty period
price	Decimal	NOT NULL, DEFAULT 0	Laptop's Price
quantity	int	NOT NULL, DEFAULT 0	Laptop's Quantity

#### IV. Test

##### 1. Login test

##### 1.1 Login test 1

Test Case Number	001
Test Case Name	LoginTest1()
Test Case Description	This test case checks username and password correct or not
Preconditions	Username and password must exist in the database
Test Case Input	“seller001”, “12345678” “accountant003”, “12345678”
Test Case Expected Output	A Staff
Test Case Steps	New Staff New StaffDAL Call Login method Compare output with expected output
Default Value Preverving	

## 1.2 Login test 2

Test Case Number	002
Test Case Name	LoginTest2()
Test Case Description	This test case checks username and password correct or not
Preconditions	
Test Case Input	"seller00fdsj", "12345678" "seller002", "ddf12345678" "SEller002", "12345678"
Test Case Expected Output	Null
Test Case Steps	New Staff New StaffDAL Call Login method Compare output with expected output
Default Value Preverving	

## 2. Search Laptops test

### 2.1 Search Laptops test 1

Test Case Number	001
Test Case Name	SearchLaptopsTest1()
Test Case Description	Search for products in the system
Preconditions	Logged in
Test Case Input	<a href="#">"a"</a> <a href="#">"office"</a> <a href="#">"macbook"</a> <a href="#">"asus"</a>
Test Case Expected Output	List laptop
Test Case Steps	New LaptopDAL Call Search method Compare output with expected output
Default Value Preverving	

## 2.2 Search Laptops test 2

Test Case Number	002
Test Case Name	SearchLaptopsTest2()
Test Case Description	Search for products in the system
Preconditions	Logged in
Test Case Input	"a # desc" "office # desc" "asus # desc"
Test Case Expected Output	List laptop
Test Case Steps	New LaptopDAL Call Search method Compare output with expected output
Default Value Preverving	

## 2.3 Search Laptops test 3

Test Case Number	003
Test Case Name	SearchLaptopsTest3()
Test Case Description	Search for products in the system
Preconditions	Logged in
Test Case Input	"a # asc" "office # asc" "asus # asc"
Test Case Expected Output	List laptop
Test Case Steps	New LaptopDAL Call Search method Compare output with expected output
Default Value Preverving	



## 2.4 Search Laptops test 4

Test Case Number	004
Test Case Name	SearchLaptopsTest4()
Test Case Description	Search for products in the system
Preconditions	Logged in
Test Case Input	"asus # gaming" "gaming # acer" "apple # multimedia"
Test Case Expected Output	List laptop
Test Case Steps	New LaptopDAL Call Search method Compare output with expected output
Default Value Preverving	

## 2.5 Search Laptops test 5

Test Case Number	005
Test Case Name	SearchLaptopsTest5()
Test Case Description	Search for products in the system
Preconditions	Logged in
Test Case Input	"asus # gaming # desc" "gaming # acer # desc" "apple # multimedia # desc"
Test Case Expected Output	List laptop
Test Case Steps	New LaptopDAL Call Search method Compare output with expected output
Default Value Preverving	

## 2.6 Search Laptops test 6

Test Case Number	006
Test Case Name	SearchLaptopsTest6()
Test Case Description	Search for products in the system
Preconditions	Logged in
Test Case Input	"asus # gaming # asc" "gaming # acer # asc" "apple # multimedia # asc"
Test Case Expected Output	Null
Test Case Steps	New LaptopDAL Call Search method Compare output with expected output
Default Value Preverving	

## 2.7 Search Laptops test 7

Test Case Number	007
Test Case Name	SearchLaptopsTest7()
Test Case Description	Search for products in the system
Preconditions	Logged in
Test Case Input	"sdfasjhjf" "asus # dell #" "a # # asus" "dell # mac # # desc"
Test Case Expected Output	Null
Test Case Steps	New LaptopDAL Call Search method Compare output with expected output
Default Value Preverving	

### 3. Get laptop by ID test

#### 3.1 Get laptop by id test 1

Test Case Number	001
Test Case Name	GetLaptopByldTest1()
Test Case Description	Search for laptop in the system
Preconditions	Logged in
Test Case Input	1 5 27
Test Case Expected Output	A laptop
Test Case Steps	New LaptopDAL Call GetByld method Compare output with expected output
Default Value Preverving	

#### 3.2 Get laptop by id test 2

Test Case Number	002
Test Case Name	GetLaptopByldTest2()
Test Case Description	Search for laptop in the system
Preconditions	Logged in
Test Case Input	0 29
Test Case Expected Output	Null
Test Case Steps	New LaptopDAL Call GetByld method Compare output with expected output
Default Value Preverving	

#### 4. Get Customer by phone test

##### 4.1 Get Customer by phone test 1

Test Case Number	001
Test Case Name	GetCustomerByPhoneTest1()
Test Case Description	Search for customer in the system
Preconditions	Logged in
Test Case Input	"0836984311" "0836984312" "0836984313"
Test Case Expected Output	A customer
Test Case Steps	New CustomerDAL Call GetByPhone method Compare output with expected output
Default Value Preverving	

##### 4.2 Get Customer by phone test 2

Test Case Number	002
Test Case Name	GetCustomerByPhoneTest2()
Test Case Description	Search for customer in the system
Preconditions	Logged in
Test Case Input	" "0836984310"
Test Case Expected Output	Null
Test Case Steps	New CustomerDAL Call GetByPhone method Compare output with expected output
Default Value Preverving	

## 5. Create order test

### 5.1 Create order test 1

Test Case Number	001
Test Case Name	CreateOrderTest1()
Test Case Description	Create an order with at least one laptop and customer information
Preconditions	Logged in
Test Case Input	
Test Case Expected Output	True
Test Case Steps	New Order New OrderDAL Call CreateOrder method Compare output with expected output
Default Value Preverving	

### 5.2 Create order test 2

Test Case Number	002
Test Case Name	CreateOrderTest2()
Test Case Description	Create an order with at least one laptop and customer information
Preconditions	Logged in
Test Case Input	
Test Case Expected Output	True
Test Case Steps	New Order New OrderDAL Call CreateOrder method Compare output with expected output
Default Value Preverving	

### 5.3 Create order test 3

Test Case Number	003
Test Case Name	CreateOrderTest3()
Test Case Description	Create an order with at least one laptop and customer information
Preconditions	Logged in
Test Case Input	
Test Case Expected Output	True
Test Case Steps	New Order New OrderDAL Call CreateOrder method Compare output with expected output
Default Value Preverving	

### 5.4 Create order test 4

Test Case Number	004
Test Case Name	CreateOrderTest4()
Test Case Description	Create an order with at least one laptop and customer information
Preconditions	Logged in
Test Case Input	
Test Case Expected Output	False
Test Case Steps	New Order New OrderDAL Call CreateOrder method Compare output with expected output
Default Value Preverving	

### 5.5 Create order test 5

Test Case Number	005
Test Case Name	CreateOrderTest5()
Test Case Description	Create an order with at least one laptop and customer information
Preconditions	Logged in
Test Case Input	
Test Case Expected Output	False
Test Case Steps	New Order New OrderDAL Call CreateOrder method Compare output with expected output
Default Value Preverving	

### 5.6 Create order test 6

Test Case Number	006
Test Case Name	CreateOrderTest6()
Test Case Description	Create an order with at least one laptop and customer information
Preconditions	Logged in
Test Case Input	
Test Case Expected Output	False
Test Case Steps	New Order New OrderDAL Call CreateOrder method Compare output with expected output
Default Value Preverving	

## 5.7 Create order test 7

Test Case Number	007
Test Case Name	CreateOrderTest7()
Test Case Description	Create an order with at least one laptop and customer information
Preconditions	Logged in
Test Case Input	
Test Case Expected Output	False
Test Case Steps	New Order New OrderDAL Call CreateOrder method Compare output with expected output
Default Value Preverving	

## 5.8 Create order test 8

Test Case Number	008
Test Case Name	CreateOrderTest8()
Test Case Description	Create an order with at least one laptop and customer information
Preconditions	Logged in
Test Case Input	
Test Case Expected Output	False
Test Case Steps	New Order New OrderDAL Call CreateOrder method Compare output with expected output
Default Value Preverving	



## 5.9 Create order test 9

Test Case Number	009
Test Case Name	CreateOrderTest9()
Test Case Description	Create an order with at least one laptop and customer information
Preconditions	Logged in
Test Case Input	
Test Case Expected Output	False
Test Case Steps	New Order New OrderDAL Call CreateOrder method Compare output with expected output
Default Value Preverving	

## 5.10 Create order test 10

Test Case Number	010
Test Case Name	CreateOrderTest10()
Test Case Description	Create an order with at least one laptop and customer information
Preconditions	Logged in
Test Case Input	
Test Case Expected Output	False
Test Case Steps	New Order New OrderDAL Call CreateOrder method Compare output with expected output
Default Value Preverving	

## 6. Get orders unpaid test

Test Case Number	001
Test Case Name	GetOrderUnpaidTest1()
Test Case Description	Take order with status as unpaid
Preconditions	Logged in
Test Case Input	
Test Case Expected Output	List Order
Test Case Steps	New OrderDAL Call GetOrdersUnpaid method Compare output with expected output
Default Value Preverving	

## 7. Get order by ID test

### 7.1 Get order by ID test 1

Test Case Number	001
Test Case Name	GetOrderByldTest1()
Test Case Description	Take order by insert order id
Preconditions	Logged in
Test Case Input	1 2 3
Test Case Expected Output	An order
Test Case Steps	New OrderDAL Call GetOrderByld method Compare output with expected output
Default Value Preverving	

## 7.2 Get order by ID test 2

Test Case Number	002
Test Case Name	GetOrderByIdTest2()
Test Case Description	Take order by insert order id
Preconditions	Logged in
Test Case Input	0 1000
Test Case Expected Output	null
Test Case Steps	New OrderDAL Call GetOrderById method Compare output with expected output
Default Value Preverving	

## 8. Change order status test

### 8.1 Change order status test 1

Test Case Number	001
Test Case Name	ChangeOrderStatusTest1()
Test Case Description	Change order status
Preconditions	Logged in
Test Case Input	1, 1, 5 3, 2, 4 4, 3, 6
Test Case Expected Output	True
Test Case Steps	New OrderDAL Call ChangeOrderStatus method Compare output with expected output
Default Value Preverving	

## 8.2 Change order status test 2

Test Case Number	002
Test Case Name	ChangeOrderStatusTest2()
Test Case Description	Change order status
Preconditions	Logged in
Test Case Input	1, 1, 100 3, 2, 0 4, 1000, 6
Test Case Expected Output	False
Test Case Steps	New OrderDAL Call ChangeOrderStatus method Compare output with expected output
Default Value Preverving	

## 9. Payment test

### 9.1 Payment test 1

Test Case Number	001
Test Case Name	PaymentTest1()
Test Case Description	Confirm payment or cancel order
Preconditions	Logged in
Test Case Input	
Test Case Expected Output	True
Test Case Steps	New Order New OrderDAL Call GetByld method Call Payment method Compare output with expected output
Default Value Preverving	

## 9.2 Payment test 2

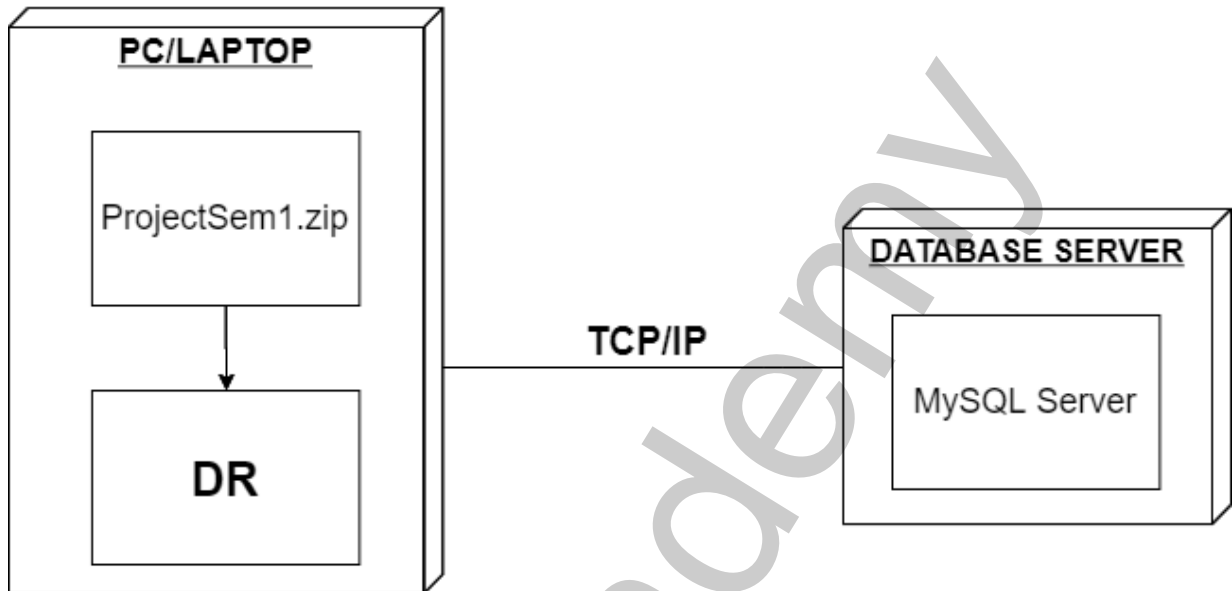
Test Case Number	002
Test Case Name	PaymentTest2()
Test Case Description	Confirm payment or cancel order
Preconditions	Logged in
Test Case Input	
Test Case Expected Output	True
Test Case Steps	New Order New OrderDAL Call Byld method Call Payment method Compare output with expected output
Default Value Preverving	

## V. TaskAssign (to each team member)

Group 6	Laptop Store					
No	Task name	Description	Start Date	End Date	Member	Self assessment
1	Write report		2 Aug	29 Aug	Hung & Truong	
2	Code		15 Aug	10 Sep	Truong	
3	Code		05 Sep	30 Sep	Hung	
4	Code		25 Sep	13 Oct	Truong	
5	Control		13 Oct	19 Oct	Hung & Truong	

## VI. Installation Instructions

### 1. Deployment Diagram



### 2. Installation steps

- Database Install
- Server install
- Application install