

KIWI OOP PROJECT



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OUR TEAM

*Backend,
GUI*



Bew

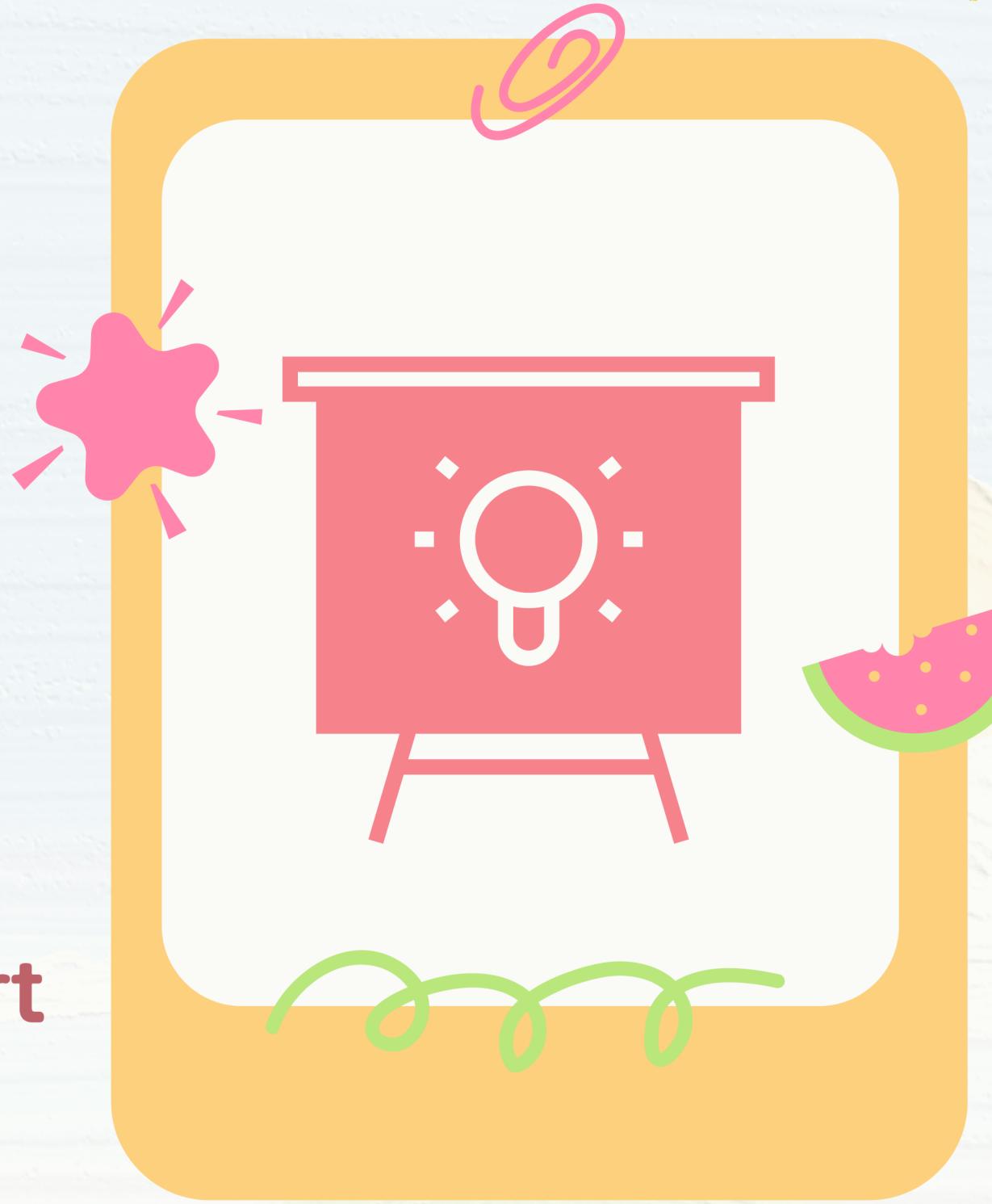


Diyaan

*Backend,
CLI*

PROGRAM CONCEPT

KIWI is an IT online store that offers a great variety of products with a robust sorting and filtering features to support specific search.



CODING CONCEPT

OOP concept

- Inheritance: all concrete classes inherit from Devices.
- Encapsulation: bundling methods and attributes using class definition.
- Abstraction: main looks simple through use of logic abstracted within the class.

Other mechanism

- Saving data using file system so it is not lost after runtime.
- UI created using Qt.

TEAM COOPERATION

Diyaan

- CLI run-through
- Class constructions
- Sorting
- File system implementation

Phathompol

- Qt GUI sample
- Class constructions
- Setters and Getters
- Research

SIGNING IN

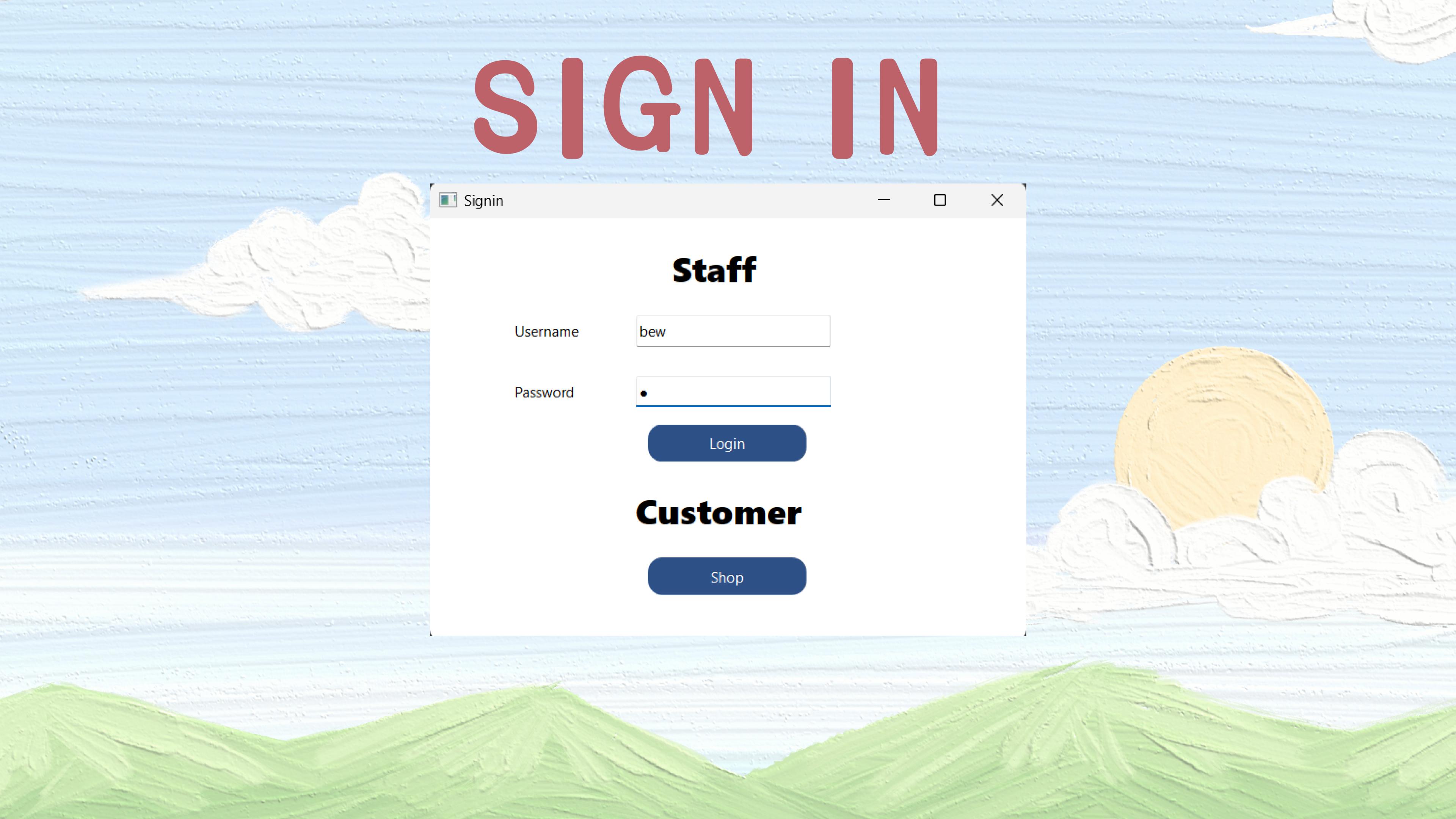
ADMIN (DEV) MODE

- Add/Remove products
- View stock
- View sales
- Enable/Disable product availability

CUSTOMER MODE

- View products
- Sort & Filter
- See detailed product specs
- Manage cart
- Checkout

SIGN IN



Signin

Staff

Username

Password

Login

Customer

Shop

CATEGORIES

Options:

1. Display products
2. View a product's specification
3. Add to cart
4. Remove from cart
5. View cart
6. Checkout
7. Sign out
8. Exit

Option number: 1

Choose a category:

1. Computer Parts
2. Console
3. Desktop
4. Laptop
5. Peripherals
6. Smartphone
7. Smartwatch
8. Tablet
9. VR

0. Go back

Category number: |

Category number: 2

Choose a category:

1. Handheld
2. Stationed
0. Go back

Category number: |

Category number: 1

Choose a category:

1. CPU
2. GPU
3. RAM
4. Motherboard
5. HDD
6. SSD
7. PSU
8. Case
9. Cooling
0. Go back

Category number: |

Category number: 5

Choose a category:

1. Earbuds
2. Earphones
3. Headphones
4. Headset
5. Microphone
6. Speakers
7. Display
8. Keyboard
9. Mouse
10. Portable HDD
11. Printer
12. SD Card
13. Touchpad
14. USB Drive
15. Webcam
16. Wire
0. Go back

Category number: |



ADMIN MODE

ADD/REMOVE

```
Category number: 1
Description: cpu1
Brand: A
Model: A123
Price: 235
Quantity: 33
On display (1 for yes, 0 for no): 1
Socket: ABCD
Form factor: ATS
Core number: 8
Thread number: 16
Base clock (GHz): p
Please enter a number: 2.5
Boost clock (GHz): 2.9
Has overclock (1 for yes, 0 for no): 1
Memory type: DDR5
Memory frequency (MHz): 1500
Memory number: 2
Integrated graphics: -
Image name in img folder ("n" for no image): n
CPU added successfully
Device added!
```

```
Welcome!
Options:
1. Add device
2. Remove device
3. List Devices
4. View sales
5. Put a product on display
6. Remove a product from display
7. Sign out
8. Exit
Option number: 2
Enter the ID of the device you want to remove (type n to go back):
```

Dialog

ADD (VR)

Model:	<input type="text"/>	Display:	<input type="text"/>
Brand:	<input type="text"/>	USB type:	<input type="text"/>
Description:	<input type="text"/>	Maximum refresh rate:	<input type="text"/>
Price:	<input type="text"/>	field of view:	<input type="text"/>
Quantity:	<input type="text"/>	Size of display:	<input type="text"/>
Resolution:	<input type="text"/> X <input type="text"/>	<input type="checkbox"/> controller	

OK

Dialog

DELETE

ID:	<input type="text" value="BA0000"/>
Quantity:	<input type="text" value="2"/>

OK

EDIT DEVICE (GUI EXCL.)

Dialog

EDIT

ID:

OK

Dialog

EDIT (VR)

Model:	<input type="text" value="AB1000"/>	Display:	<input type="text" value="oled"/>
Brand:	<input type="text" value="bewty kun"/>	USB type:	<input type="text" value="C"/>
Description:	<input type="text" value="the best vr for ever"/>		
Price:	<input type="text" value="100000"/>	Maximum refresh rate:	<input type="text" value="250"/>
Quantity:	<input type="text" value="1"/>	field of view:	<input type="text" value="180"/>
Resolution:	<input type="text" value="25"/> X <input type="text" value="25"/>	Size of display:	<input type="text" value="26"/>
<input checked="" type="checkbox"/> controller			

OK



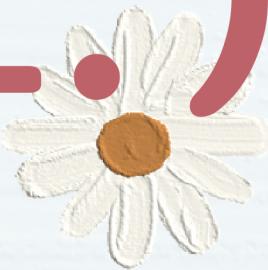
CUSTOMER MODE

VIEW PRODUCT LIST

Dialog									
Back		Add to Cart		Show info					
									
Brand: bewty krun Model: AB1000 Description: the best vr for ever Price: 100000 Quantity: 1 ID: AZ0001									
Brand: 75 Model: 57 Description: 75 Price: 75 Quantity: 75 ID: BA0000									
Brand: bewb Model: bew Description: bew Price: 125 Quantity: 4 ID: BD0000									
Brand: it Model: dinosure Description: good Price: 2136 Quantity: 2 ID: BG0000									
Brand: intell Model: AMD Description: great Price: 1256 Quantity: 23 ID: BE0000									

Category number: 2
ID: AB0000
Brand: AMD Model: Radeon RX 7600S Quantity: 13 Price: 399 For sale: No
ID: AB0001
Brand: NVIDIA Model: Geforce RTX 3070 Quantity: 28 Price: 499 For sale: Yes
ID: AB0002
Brand: ASUS Model: Geforce RTX 3050 Quantity: 40 Price: 319 For sale: Yes
ID: AB0003
Brand: NVIDIA Model: Geforce RTX 4080 Quantity: 12 Price: 1199 For sale: Yes
ID: AB0004
Brand: Intel Model: Arc A380 Quantity: 34 Price: 149 For sale: Yes
Options:
1. Sort & Filter
2. Go back
Option number:

SORT & FILTER (CLI EXCL.)



```
Category number: 2
ID: AB0000
    Brand: AMD      Model: Radeon RX 7600S      Quantity: 13      Price: 399      For sale: No
ID: AB0001
    Brand: NVIDIA    Model: Geforce RTX 3070      Quantity: 28      Price: 499      For sale: Yes
ID: AB0002
    Brand: ASUS      Model: Geforce RTX 3050      Quantity: 40      Price: 319      For sale: Yes
ID: AB0003
    Brand: NVIDIA    Model: Geforce RTX 4080      Quantity: 12      Price: 1199     For sale: Yes
ID: AB0004
    Brand: Intel     Model: Arc A380       Quantity: 34      Price: 149      For sale: Yes
Options:
1. Sort & Filter
2. Go back
Option number: 1
Sort Options:
1. Price
2. Base Clock
3. Boost Clock
4. Memory VRAM
5. Memory Bus Width
6. Power Consumption
7. Benchmark Score
8. Dimension
9. Filter Brand
10. Filter Cooling Type
11. Filter Output Ports
12. Filter for sale
0. Exit
```

Option number: 1

ID: AB0004	Brand: Intel	Model: Arc A380	Quantity: 34	Price: 149	For sale: Yes
ID: AB0002	Brand: ASUS	Model: Geforce RTX 3050	Quantity: 40	Price: 319	For sale: Yes
ID: AB0000	Brand: AMD	Model: Radeon RX 7600S	Quantity: 13	Price: 399	For sale: No
ID: AB0001	Brand: NVIDIA	Model: Geforce RTX 3070	Quantity: 28	Price: 499	For sale: Yes
ID: AB0003	Brand: NVIDIA	Model: Geforce RTX 4080	Quantity: 12	Price: 1199	For sale: Yes

SEE SPECS

Enter the ID of the device you want to view (type n to go back): AB0001
ID: AB0001
Brand: NVIDIA
Model: Geforce RTX 3070
Price: 499
In stock: 28
Description: A high-end graphics card by NVIDIA, launched in 2020.
Base clock (Ghz): 1.5
Boost clock (Ghz): 1.725
Memory type: GDDR6
VRAM (GB): 8
Bus width (Bit): 256
Output ports: HDMI 2.1
DisplayPort 1.4a
Power consumption (W): 220
Power pins: 12
Cooling type: Air
Dimensions (mm): 242x112x35
Benchmark score (Kiwi exclusive): 1930

Dialog



SHOW INFORMATION

ID: AZ0001

OK

Dialog

INFORMATION (VR)

Model: AB1000

Display:

oled

Brand: bewty kun

USB type:

c

Description: the best vr for ever

Maximum refresh rate:

250

Price: 100000

field of view:

180

Quantity:

1

Size of display:

26

Resolution: 25 X 25

controller

ADD TO CART

Dialog

Back

Add to Cart Show info

- Brand: bewt y kun Model: AB1000 Description: the best vr for ever Price: 100000 Quantity: 1 ID: AZ0001
- Brand: 75 Model: 57 Description: 75 Price: 75 Quantity: 72 ID: BA0000
- Brand: bewb Model: bew Description: bew Price: 125 Quantity: 4 ID: BD0000
- Brand: it Model: dinosure Description: good Price: 2136 Quantity: 2 ID: BG0000
- Brand: intell Model: AMD Description: great Price: 1256 Quantity: 23 ID: BE0000

Option number: 3

Enter the ID of the device you want to add to cart (type n to go back): AB0001

Enter the quantity you want to add: 2

Dialog

ADD Cart

ID: BA0000

Quantity: 5

OK

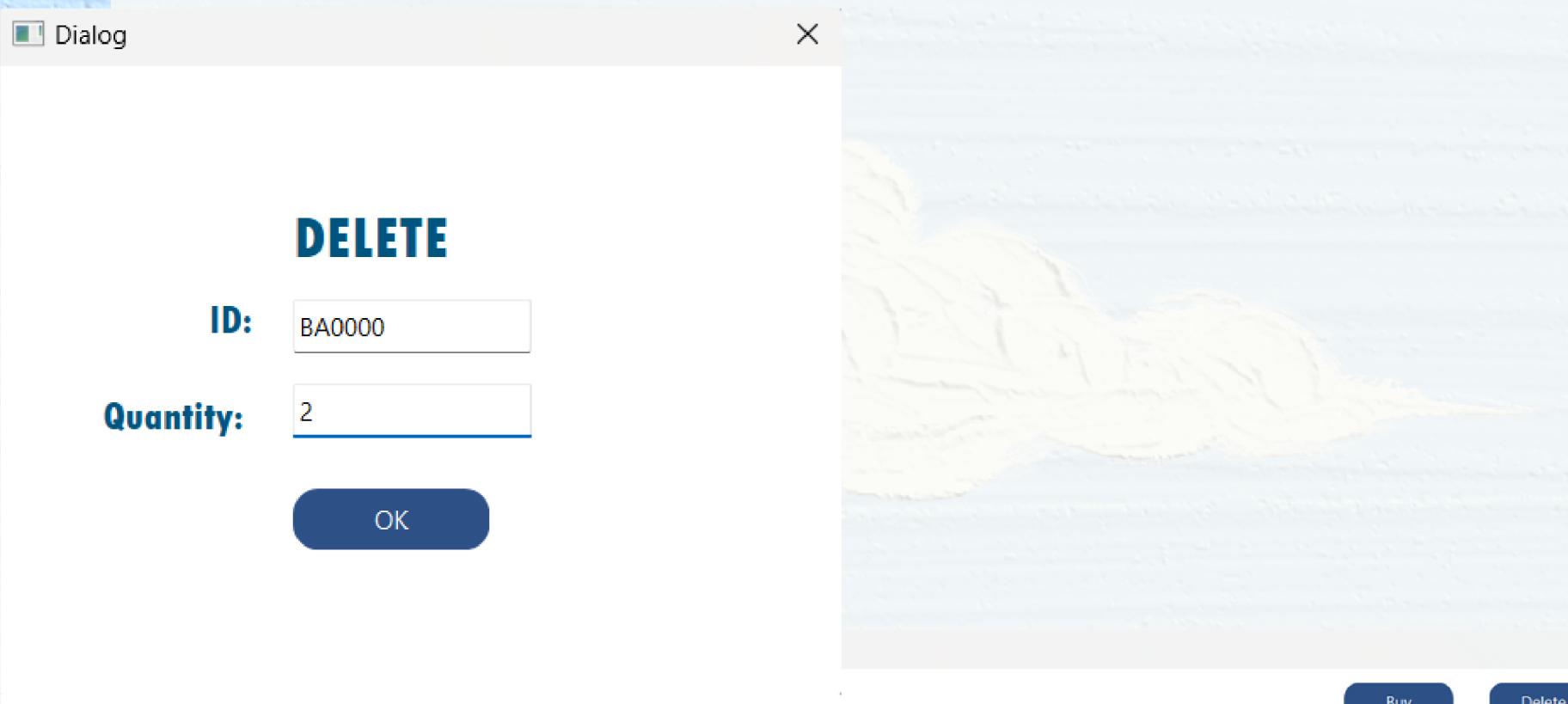
Dialog

Buy Delete

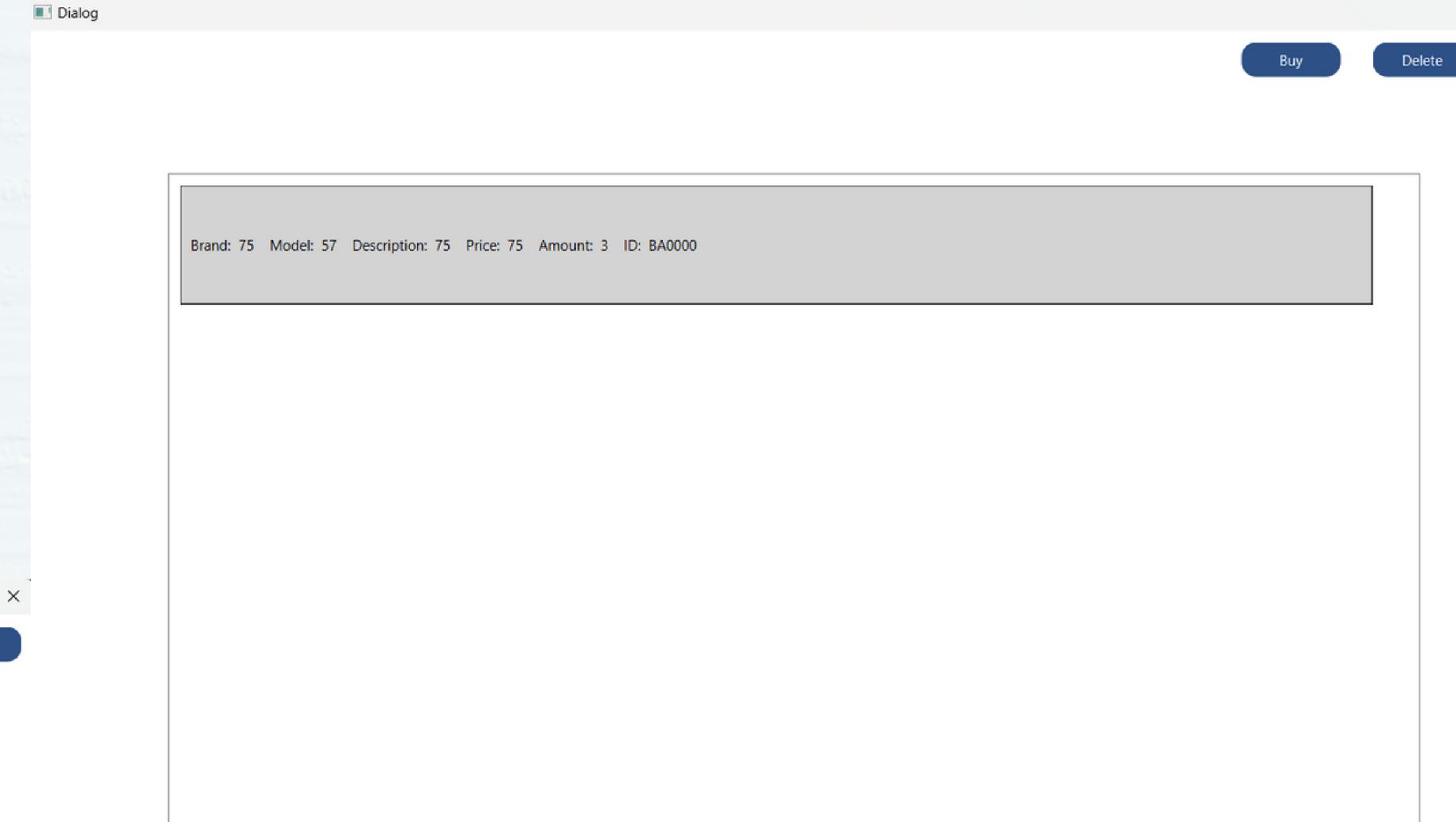
Brand: 75 Model: 57 Description: 75 Price: 75 Amount: 5 ID: BA0000

DELETE FROM CART

AFTER



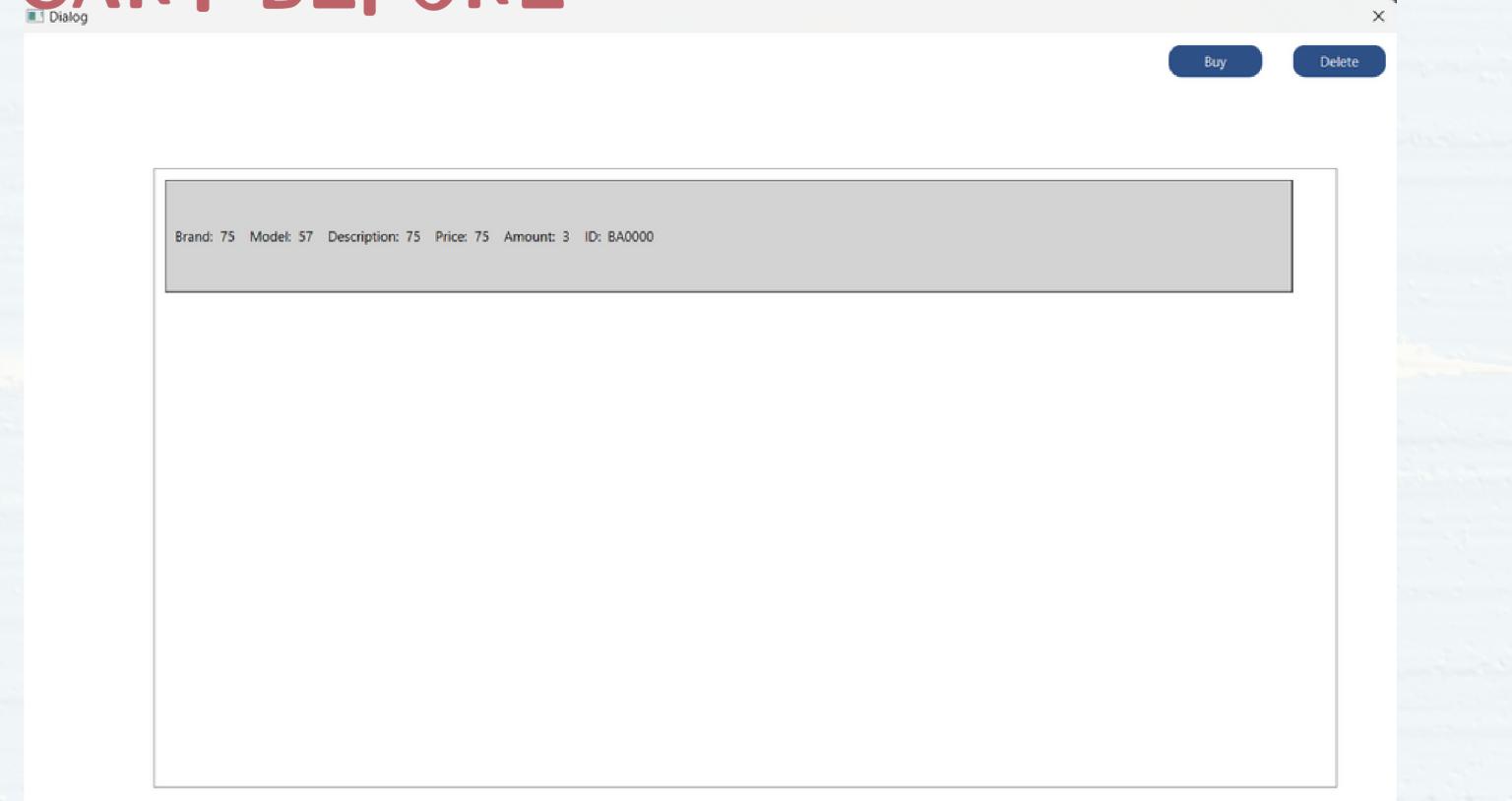
BEFORE



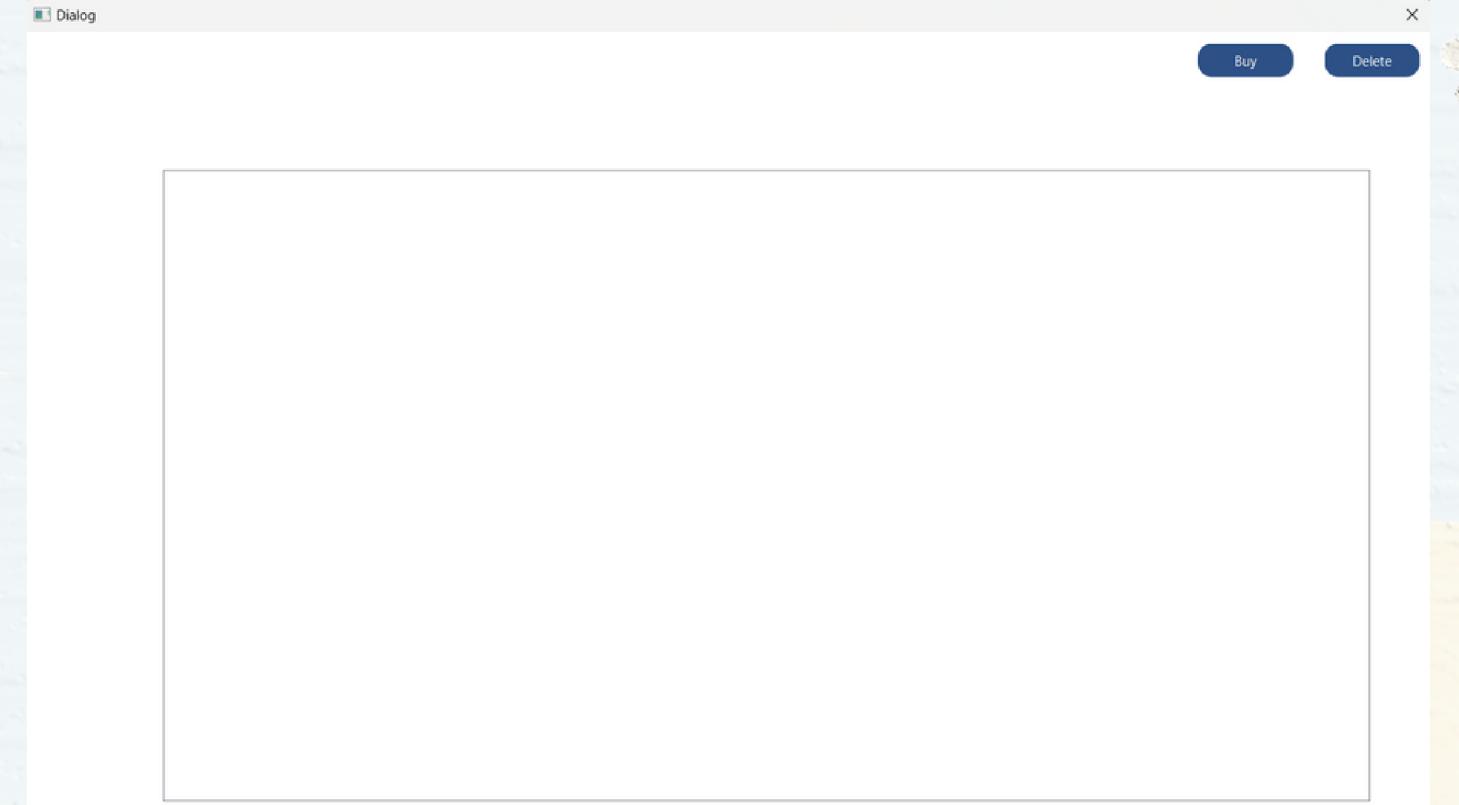
```
4. Remove from cart
5. View cart
6. Checkout
7. Sign out
8. Exit
Option number: 4
1.
ID: AB0001Brand: NVIDIA      Model: Geforce RTX 3070      Price: 499      Quantity: 2
Total: 998
Enter number of the device you want to remove from cart (type n to go back): 1
Enter the quantity you want to remove: 2
```

BUY FROM CART

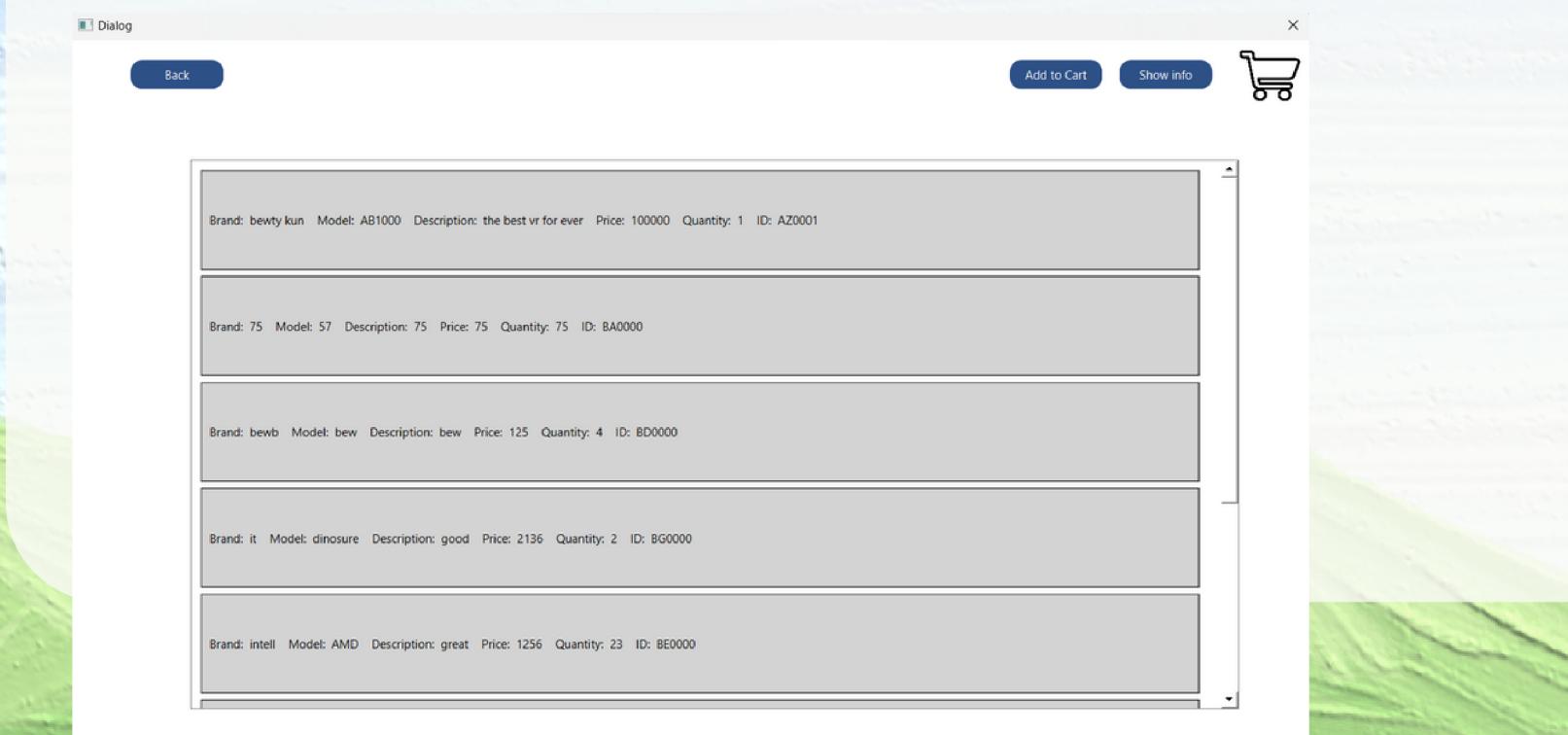
CART BEFORE



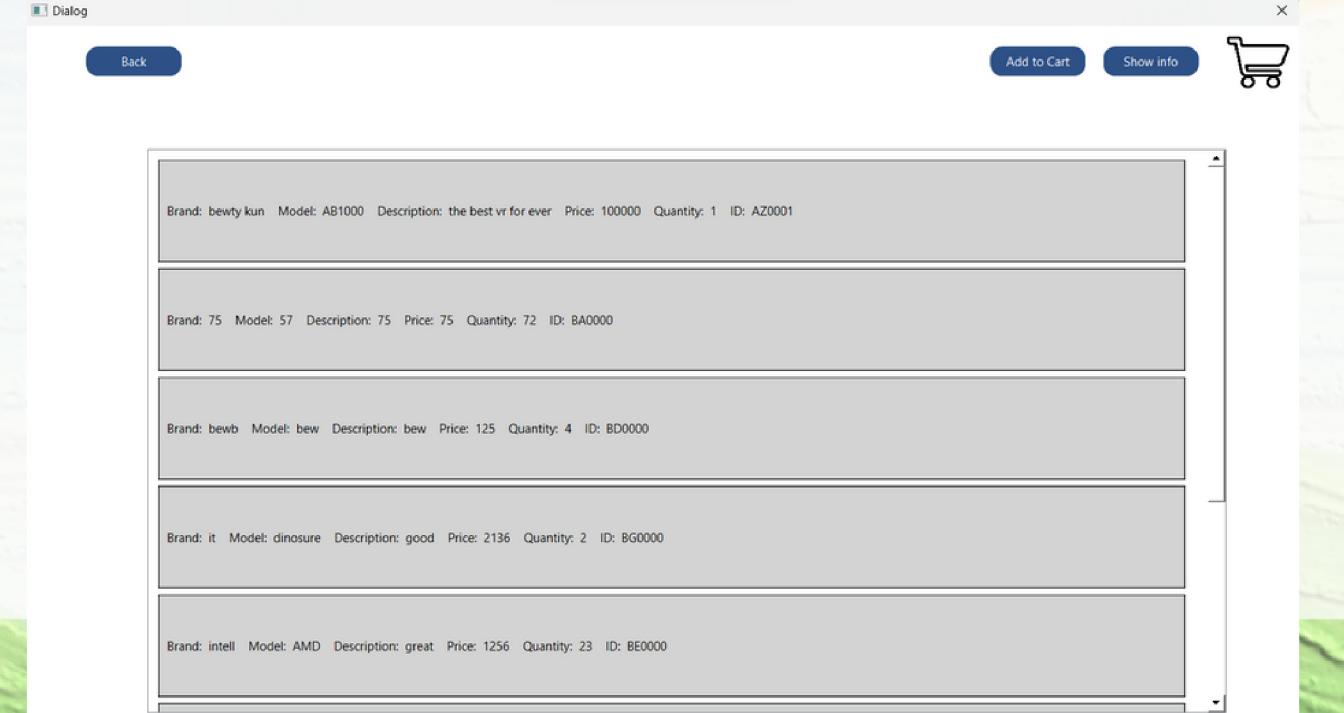
CART AFTER



SHOP PAGE BEFORE



SHOP PAGE AFTER



LESSON LEARNED

- we have learn how to use QT Gui in c++.
- we learn file saving, file update, file reading.
- we learn how to collaborate using github
- we learned how to minimize code by using inheritance effectively.