

CS 234 2021F

Project: Eastern New Mexico Retro Paradise Part 2 Walkthrough

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Our project is a point of sale and inventory management system for a retro gaming store in Eastern New Mexico. When the user logs in, they are presented with a menu of the various options the system has. Options can be selected with either upper- or lower-case letters.

```
Welcome to the Eastern New Mexico Retro Paradise Point-of-Sale System.
To use this system, enter the highlighted letter for the subsystem you wish to use.
Both uppercase and lowercase letters can be used.
| P)urchase an item from a customer | S)ell an item to a customer |
| C)ustomer Information | E)mployee Information |
| S)ore I)nventory | V)iew Invoices | Q)uit
```

The system is initialized with an existing stock of inventory that can be viewed by pressing the indicated key (“I”).

```
| P)urchase an item from a customer | S)ell an item to a customer |
| C)ustomer Information | E)mployee Information |
| S)ore I)nventory | V)iew Invoices | Q)uit
i
Consoles: 23
Games: 121
Controllers: 42
Accessories: 56
Memorabilia: 32
```

The user can then create an invoice for a purchase of used gaming items from a client. The system will compute the total due to the client based on the number of each type of piece and prices of each category, and the points the client earned for the transaction.

```

Welcome to the Eastern New Mexico Retro Paradise Point-of-Sale System.
To use this system, enter the highlighted letter for the subsystem you wish to use.
Both uppercase and lowercase letters can be used.
| P)urchase an item from a customer | S)ell an item to a customer |

| C)ustomer Information | E)mployee Information |

| Store I)nventory | V)iew Invoices | Q)uit
p
Please enter the customer's account number:
5678
Please enter a transaction ID number:
1245
Please enter the current date in (mm/dd/yy) format:
10/25/21
How many consoles would you like to purchase from the customer?
5
How many games would you like to purchase from the customer?
1
How many controllers would you like to purchase from the customer?
0
How many accessories would you like to purchase from the customer?
0
How many memorabilia items would you like to purchase from the customer?
1
Total: $555.0
Points earned: 55.5
| P)urchase an item from a customer | S)ell an item to a customer |

| C)ustomer Information | E)mployee Information |

| Store I)nventory | V)iew Invoices | Q)uit
p
Please enter the customer's account number:
5679
Please enter a transaction ID number:
5214
Please enter the current date in (mm/dd/yy) format:
05/21/21
How many consoles would you like to purchase from the customer?
0
How many games would you like to purchase from the customer?
5
How many controllers would you like to purchase from the customer?
1
How many accessories would you like to purchase from the customer?
1
How many memorabilia items would you like to purchase from the customer?
0
Total: $280.0
Points earned: 28.0

```

Once a purchase invoice has been created, it can be viewed.

```

| P)urchase an item from a customer | S)ell an item to a customer |
| C)ustomer Information | E)mployee Information |
| Store I)nventory | V)iew Invoices | Q)uit
v
Which kind of invoice would you like to view?
S)ales to customers or P)urchases from customers?
p
[
AccountID: 5678
Invoice ID: 1245
Date: 10/25/21
Consoles purchased: 5
Games purchased: 1
Accessories purchased: 0
Controllers purchased: 0
Memorabilia purchased: 1
Amount: 555.0
Points earned: 55.5,
AccountID: 5679
Invoice ID: 5214
Date: 05/21/21
Consoles purchased: 0
Games purchased: 5
Accessories purchased: 1
Controllers purchased: 1
Memorabilia purchased: 0
Amount: 280.0
Points earned: 28.0]
| P)urchase an item from a customer | S)ell an item to a customer |

```

Inventory changes made in the purchase invoices will then reflect in the inventory.

```

| P)urchase an item from a customer | S)ell an item to a customer |
| C)ustomer Information | E)mployee Information |
| Store I)nventory | V)iew Invoices | Q)uit
i
Consoles: 28
Games: 127
Controllers: 43
Accessories: 57
Memorabilia: 33
| P)urchase an item from a customer | S)ell an item to a customer |

```

Points earned and sales made in the invoice menu will reflect in the referenced employee and customer entries.

In a similar manner, the user can create and then view sales invoices of merchandise to a client, with total charge and points being computed and items removed from inventory.

```

| P)urchase an item from a customer | S)ell an item to a customer |
| C)ustomer Information | E)mployee Information |
| Store I)nventory | V)iew Invoices | Q)uit
s
Please enter the employee ID:
12345
Please enter the customer's ID:
5678
Please enter a transaction ID number:
5487
Please enter the current date in (mm/dd/yy) format:
05/21/21
How many consoles does the customer want to purchase?
2
How many games does the customer want to purchase?
8
How many controllers does the customer want to purchase?
1
How many accessories does the customer want to purchase?
2
How many memorabilia items does the customer want to purchase?
0
Total: $640.0
Points earned: 64.0
| P)urchase an item from a customer | S)ell an item to a customer |
| C)ustomer Information | E)mployee Information |
| Store I)nventory | V)iew Invoices | Q)uit
s
Please enter the employee ID:
12345
Please enter the customer's ID:
5678
Please enter a transaction ID number:
5248
Please enter the current date in (mm/dd/yy) format:
04/12/21
How many consoles does the customer want to purchase?
0
How many games does the customer want to purchase?
7
How many controllers does the customer want to purchase?
2
How many accessories does the customer want to purchase?
5
How many memorabilia items does the customer want to purchase?
2
Total: $450.0
Points earned: 45.0

```

```

| P)urchase an item from a customer | S)ell an item to a customer |

| C)ustomer Information | E)mployee Information |

| Store I)nventory | V)iew Invoices | Q)uit
v
Which kind of invoice would you like to view?
S)ales to customers or P)urchases from customers?
s
[
Employee ID: 12345
Account ID: 5678
Invoice ID: 5487
Date: 05/21/21
Consoles sold: 2
Games sold: 8
Accessories sold: 2
Controllers sold: 1
Memorabilia sold: 0
Amount: 640.0
Points earned: 64.0,
Employee ID: 12345
Account ID: 5678
Invoice ID: 5248
Date: 04/12/21
Consoles sold: 0
Games sold: 7
Accessories sold: 5
Controllers sold: 2
Memorabilia sold: 2
Amount: 450.0
Points earned: 45.0]
| P)urchase an item from a customer | S)ell an item to a customer |

```

```

| P)urchase an item from a customer | S)ell an item to a customer |

| C)ustomer Information | E)mployee Information |

| Store I)nventory | V)iew Invoices | Q)uit
i
Consoles: 26
Games: 112
Controllers: 40
Accessories: 50
Memorabilia: 31

```

The program also includes systems for managing customer information. It allows the user to create new customers with an ID number, their name and phone number and initializes the account with zero points, and adds the customer to an extant database of current customers. It also includes a subclass of the customer which is the Silver level customer for select customers which includes the information of a regular customer along with a coupon for the client to use.

```

| P)urchase an item from a customer | S)ell an item to a customer |

| C)ustomer Information | E)mployee Information |

| Store I)nventory | V)iew Invoices | Q)uit
c
A)dd R)emove M)odify U)pgrade P)rint
a
What ID number would you like to give the new customer?
45654
What is their name?
Mercy Graves
What is their phone number?
555-555-1234

```

Users can also upgrade clients to silver status int the customer menu.

```
| P)urchase an item from a customer | S)ell an item to a customer |  
  
| C)ustomer Information | E)mployee Information |  
  
| Store I)nventory | V)iew Invoices | Q)uit  
c  
A)dd R)emove M)odify U)pgrade P)rint  
u  
[  
Account ID: 5678  
Name: Lex Luthor  
Phone Number: 5059876543  
Points: 264.5,  
Account ID: 5679  
Name: Solomon Grundy  
Phone Number: 5058973484  
Points: 78.0,  
Account ID: 45654  
Name: Mercy Graves  
Phone Number: 555 555 1234  
Points: 0.0]  
[  
Account ID: 4567  
Name: Norman Osborne  
Phone Number: 5059875678  
Points: 200.0  
Coupon: true]  
Please enter customer's ID to upgrade to Silver status:  
45654  
| P)urchase an item from a customer | S)ell an item to a customer |  
  
| C)ustomer Information | E)mployee Information |  
  
| Store I)nventory | V)iew Invoices | Q)uit  
c  
A)dd R)emove M)odify U)pgrade P)rint  
p  
Customers: [  
Account ID: 5678  
Name: Lex Luthor  
Phone Number: 5059876543  
Points: 264.5,  
Account ID: 5679  
Name: Solomon Grundy  
Phone Number: 5058973484  
Points: 78.0]  
Silver customers: [  
Account ID: 4567  
Name: Norman Osborne  
Phone Number: 5059875678  
Points: 200.0  
Coupon: true,  
Account ID: 45654  
Name: Mercy Graves  
Phone Number: 555 555 1234  
Points: 0.0  
Coupon: true]
```

The system also allows for the removal of customers.

```
| P)urchase an item from a customer | S)ell an item to a customer |  
  
| C)ustomer Information | E)mployee Information |  
  
| Store I)nventory | V)iew Invoices | Q)uit  
c  
A)dd R)emove M)odify U)pgrade P)rint  
r  
[  
Account ID: 5678  
Name: Lex Luthor  
Phone Number: 5059876543  
Points: 264.5,  
Account ID: 5679  
Name: Solomon Grundy  
Phone Number: 5058973484  
Points: 78.0]  
[  
Account ID: 4567  
Name: Norman Osborne  
Phone Number: 5059875678  
Points: 200.0  
Coupon: true,  
Account ID: 45654  
Name: Mercy Graves  
Phone Number: 555 555 1234  
Points: 0.0  
Coupon: true]  
Please enter the ID number for the customer you wish to remove:  
5679  
| P)urchase an item from a customer | S)ell an item to a customer |  
  
| C)ustomer Information | E)mployee Information |  
  
| Store I)nventory | V)iew Invoices | Q)uit  
c  
A)dd R)emove M)odify U)pgrade P)rint  
p  
Customers: [  
Account ID: 5678  
Name: Lex Luthor  
Phone Number: 5059876543  
Points: 264.5]  
Silver customers: [  
Account ID: 4567  
Name: Norman Osborne  
Phone Number: 5059875678  
Points: 200.0  
Coupon: true,  
Account ID: 45654  
Name: Mercy Graves  
Phone Number: 555 555 1234  
Points: 0.0  
Coupon: true]
```

The user can also modify the name, phone number and point total of a customer using an existing ID number.

```
| P)urchase an item from a customer | S)ell an item to a customer |
| C)ustomer Information | E)mployee Information |
| Store I)nventory | V)iew Invoices | Q)uit
c
A)dd R)emove M)odify U)pgrade P)rint
m
[
Account ID: 5678
Name: Lex Luthor
Phone Number: 5059876543
Points: 100.0]
[
Account ID: 4567
Name: Norman Osborne
Phone Number: 5059875678
Points: 200.0
Coupon: true,
Account ID: 45654
Name: Mercy Graves
Phone Number: 555 555 1234
Points: 0.0
Coupon: true]
Please enter the ID number for the customer who's information you wish to change:
4567
What is their name?
Norman Osbourn
What is their phone number?
555 555 7894
What is their current point total?
250
| P)urchase an item from a customer | S)ell an item to a customer |
| C)ustomer Information | E)mployee Information |
| Store I)nventory | V)iew Invoices | Q)uit
c
A)dd R)emove M)odify U)pgrade P)rint
p
Customers: [
Account ID: 5678
Name: Lex Luthor
Phone Number: 5059876543
Points: 100.0]
Silver customers: [
Account ID: 4567
Name: Norman Osbourn
Phone Number: 555 555 7894
Points: 250.0
Coupon: true,
Account ID: 45654
Name: Mercy Graves
Phone Number: 555 555 1234
Points: 0.0
Coupon: true]
```



Finally, the system includes a similar database of employees at the store that new employees can be added to with their assigned ID, name and phone number with their weekly sales being initialized at zero and with one employee already in the system. Name and phone number information for an employee can be modified using their current ID, with their weekly sales carrying over.

```
| P)urchase an item from a customer | S)ell an item to a customer |  
  
| C)ustomer Information | E)mployee Information |  
  
| Store I)nventory | V)iew Invoices | Q)uit  
e  
A)dd R)emove M)odify P)rint  
a  
Please create an ID number for the new employee:  
12356  
What is their name?  
Ted Grant  
What is their phone number?  
505 234 5689  
What will be their hourly wage?  
15  
| P)urchase an item from a customer | S)ell an item to a customer |  
  
| C)ustomer Information | E)mployee Information |  
  
| Store I)nventory | V)iew Invoices | Q)uit  
e  
A)dd R)emove M)odify P)rint  
p  
[  
Employee ID: 12345  
Name: Alan Scott  
Phone number: 5051241567  
Hourly wage: 22  
Weekly sales: 2000.0,  
Employee ID: 12356  
Name: Ted Grant  
Phone number: 505 234 5689  
Hourly wage: 15  
Weekly sales: 0.0]
```

```

| P)urchase an item from a customer | S)ell an item to a customer |
| C)ustomer Information | E)mployee Information |
| Store I)nventory | V)iew Invoices | Q)uit
e
A)dd R)emove M)odify P)rint
m
[
Employee ID: 12345
Name: Alan Scott
Phone number: 5051241567
Hourly wage: 22
Weekly sales: 2000.0,
Employee ID: 12356
Name: Ted Grant
Phone number: 505 234 5689
Hourly wage: 15
Weekly sales: 0.0]
Please enter the ID number for the employee who's information you wish to change:
12345
Please enter their name:
Alan Scot
Please enter their phone number:
523 458 7896
Please enter their hourly wage:
25
| P)urchase an item from a customer | S)ell an item to a customer |
| C)ustomer Information | E)mployee Information |
| Store I)nventory | V)iew Invoices | Q)uit
e
A)dd R)emove M)odify P)rint
p
[
Employee ID: 12345
Name: Alan Scot
Phone number: 523 458 7896
Hourly wage: 25
Weekly sales: 2000.0,
Employee ID: 12356
Name: Ted Grant
Phone number: 505 234 5689
Hourly wage: 15
Weekly sales: 0.0]

```

Employees can also be removed from the system by entering their ID number.

```
| P)urchase an item from a customer | S)ell an item to a customer |  
  
| C)ustomer Information | E)mployee Information |  
  
| Store I)nventory | V)iew Invoices | Q)uit  
e  
A)dd R)emove M)odify P)rint  
r  
[  
Employee ID: 12345  
Name: Alan Scot  
Phone number: 523 458 7896  
Hourly wage: 25  
Weekly sales: 2000.0,  
Employee ID: 12356  
Name: Ted Grant  
Phone number: 505 234 5689  
Hourly wage: 15  
Weekly sales: 0.0]  
Please enter the ID number for the employee you wish to remove:  
12356  
| P)urchase an item from a customer | S)ell an item to a customer |  
  
| C)ustomer Information | E)mployee Information |  
  
| Store I)nventory | V)iew Invoices | Q)uit  
e  
A)dd R)emove M)odify P)rint  
p  
[  
Employee ID: 12345  
Name: Alan Scot  
Phone number: 523 458 7896  
Hourly wage: 25  
Weekly sales: 2000.0]
```

The system includes validation of the client's selection at the main menu and submenus.

```
| P)urchase an item from a customer | S)ell an item to a customer |  
  
| C)ustomer Information | E)mployee Information |  
  
| Store I)nventory | V)iew Invoices | Q)uit  
g  
That is not a valid option. Please try again.  
| P)urchase an item from a customer | S)ell an item to a customer |  
  
| C)ustomer Information | E)mployee Information |  
  
| Store I)nventory | V)iew Invoices | Q)uit
```

```
Weekly Sales: 100000  
| P)urchase an item from a customer | S)ell an item to a customer |  
  
| C)ustomer Information | E)mployee Information |  
  
| Store I)nventory | V)iew Invoices | Q)uit  
c  
A)dd R)emove M)odify U)pgrade P)rint  
h  
That is not a valid option. Please try again.  
| P)urchase an item from a customer | S)ell an item to a customer |  
  
| C)ustomer Information | E)mployee Information |  
  
| Store I)nventory | V)iew Invoices | Q)uit
```

The user can quit the system by pressing q.

```
| P)urchase an item from a customer | S)ell an item to a customer |  
  
| C)ustomer Information | E)mployee Information |  
  
| Store I)nventory | V)iew Invoices | Q)uit  
q  
C:\Users\bme1d\Desktop\cs234proj>
```