Class CashRegister

java.lang.Object
    CashRegister

```
public class CashRegister
extends java.lang.Object
```

The CashRegister class contains the necessary methods to calculate prices, work with coupons, or find specific details about a sale. Also has the ability to format sales into receipts.

Since:

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Constructor Summary

Constructors

Constructor and Description
`CashRegister()` Default constructor initializes instance variables

Method Summary

All Methods Instance Methods Concrete Methods

Modifier and Type	Method and Description
void	`addDessert(DessertItem dessert)` Adds a DessertItem object into the ArrayList of DessertItem objects, dessertItems
void	`addDrink(DrinkItem drink)` Adds a DrinkItem object into the ArrayList of DrinkItem objects, drinkItems
void	`addToAllSales(java.lang.String sale)` This method is used to print out all the receipts made while the program is running.
void	`clearCashRegister()` "Clears the cash register" which clears each ArrayList containing either DrinkItems or DessertItems

java.lang.String	**discountItemDessert**() Uses the compareTo and max methods of the DessertItem class to find the largest costing item of the sale, depending on whether the user decides to use their coupon on desserts.
java.lang.String	**discountItemDrink**() Uses the compareTo and max methods of the DrinkItem class to find the largest costing item of the sale, depending on whether the user decides to use their coupon on drinks.
void	**displayAllsales**() Displays all receipts, each receipt has a "Sale #" header
int	**getAllSalesSize**() Finds the amount of sales made while the program is running by returning the size of AllSales, an ArrayList of strings representing receipts
int	**getDessertCount**() Gets the amount of desserts sold
double	**getDessertSubtotal**() Gets the subtotal of all desserts sold
int	**getDrinkCount**() Gets the amount of drinks sold
double	**getDrinkSubtotal**() Gets the subtotal of all drinks sold
double	**getGrandTotal**() Gets the final total of a sale
double	**getMaxCost**() Gets the current max cost of a drink or dessert item
DessertItem	**getMaxDessert**() Gets the current highest pricing desset
DrinkItem	**getMaxDrink**() Gets the current highest pricing drink
void	**setItemAmmountsAndSubtotals**() Sets the amount of drinks and desserts sold and finds their subtotals
java.lang.String	**toString**() toString method formats the items sold and their details nicely in a receipt format.

Methods inherited from class java.lang.Object

clone, equals, finalize, getClass, hashCode, notify, notifyAll, wait, wait, wait

Constructor Detail

CashRegister

```
public CashRegister()
```

Default constructor initializes instance variables

Method Detail

addDrink

```
public void addDrink(DrinkItem drink)
```

Adds a DrinkItem object into the ArrayList of DrinkItem objects, drinkItems

Parameters:

`drink - - a DrinkItem object`

addDessert

```
public void addDessert(DessertItem dessert)
```

Adds a DessertItem object into the ArrayList of DessertItem objects, dessertItems

Parameters:

`dessert - - a DessertItem object`

addToAllSales

```
public void addToAllSales(java.lang.String sale)
```

This method is used to print out all the receipts made while the program is running. Adds receipts into an ArrayList of receipt strings.

Parameters:

`sale - - A string representing a receipt`

getAllSalesSize

```
public int getAllSalesSize()
```

Finds the amount of sales made while the program is running by returning the size of AllSales, an ArrayList of strings representing receipts

Returns:

- the size of the AllSales ArrayList which represents total sales made

displayAllsales

```
public void displayAllsales()
```

Displays all receipts, each receipt has a "Sale #" header

clearCashRegister

```
public void clearCashRegister()
```

"Clears the cash register" which clears each ArrayList containing either DrinkItems or DessertItems

setItemAmmountsAndSubtotals

```
public void setItemAmmountsAndSubtotals()
```

Sets the amount of drinks and desserts sold and finds their subtotals

getDrinkCount

```
public int getDrinkCount()
```

Gets the amount of drinks sold

Returns:

- the amount of drinks sold

getDessertCount

```
public int getDessertCount()
```

Gets the amount of desserts sold

Returns:

- the amount of desserts sold

getDrinkSubtotal

```
public double getDrinkSubtotal()
```

Gets the subtotal of all drinks sold

Returns:

- the subtotal cost of drink sales

getDessertSubtotal

```
public double getDessertSubtotal()
```

Gets the subtotal of all desserts sold

Returns:

```
- the subtotal cost of dessert sales
```

getGrandTotal

```
public double getGrandTotal()
```

Gets the final total of a sale

Returns:

```
- the grand total of a sale without tax applied
```

toString

```
public java.lang.String toString()
```

toString method formats the items sold and their details nicely in a receipt format. Employs polymorphism as the method toString is called on a DrinkItem or a DessertItem object, but it does not explicitly know their specific subclass.

Overrides:

```
toString in class java.lang.Object
```

Returns:

```
- a nicely formatted list of items sold and the details of that sale
```

discountItemDrink

```
public java.lang.String discountItemDrink()
```

Uses the compareTo and max methods of the DrinkItem class to find the largest costing item of the sale, depending on whether the user decides to use their coupon on drinks. Applies coupon to item and applies boolean value to update the Object to have coupon characteristics included. Employs polymorphism as it calls methods on DrinkItem objects, but does not explicitly know their special type.

Returns:

```
- a string detailing the size and name of the drink of highest cost
```

discountItemDessert

```
public java.lang.String discountItemDessert()
```

Uses the compareTo and max methods of the DessertItem class to find the largest costing item of the sale, depending on whether the user decides to use their coupon on desserts. Applies coupon to item and applies boolean value to update the Object to have coupon characteristics included. Employs polymorphism as it calls methods on DessertItem objects, but does not explicitly know their special type.

Returns:

```
- a string detailing the size and name of the dessert of highest cost
```

getMaxCost

```
public double getMaxCost()
```

Gets the current max cost of a drink or dessert item

Returns:

```
- cost of highest pricing drink or dessert item
```

getMaxDrink

```
public DrinkItem getMaxDrink()
```

Gets the current highest pricing drink

Returns:

```
- DrinkItem object representing the highest pricing drink
```

getMaxDessert

```
public DessertItem getMaxDessert()
```

Gets the current highest pricing desset

Returns:

```
- DessertItem object representing the highest pricing dessert
```