

Class UsedCarLot

java.lang.Object
UsedCarLot

```
public class UsedCarLot
extends Object
```

This class is the management of a plethora of car objects all contained within a single "inventory" array.

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Constructor Summary

Constructors	
Constructor	Description
UsedCarLot()	Initialization of the car array.

Method Summary

All Methods	Instance Methods	Concrete Methods
Modifier and Type	Method	Description
void	addCar(int indexToAdd, Car carToAdd)	Adds a new car object at the specific index within the inventory array, shifting all cars to the right.
void	addCar(Car newCar)	Adds another car object the inventory car array.
ArrayList <Car>	getInventory()	Returns the inventory array holding all the car objects.
void	moveCar(int indexOfCarToMove, int destinationIndex)	Moves a car object within the inventory array to a different index.
Car	sellCarNoShift(int indexOfCarToSell)	"Sells" a car object from the inventory array, effectively removing it from the array without shifting the array, instead replacing the sold car object with null.
Car	sellCarShift(int indexOfCarToSell)	"Sells" a car object from the inventory array, effectively removing it from the

array and shifting the rest of the car objects in the array to the left.

boolean **swapCar**(int car1idx, int car2idx) Swaps the car at the first index with the car at the second index of the inventory array.

Methods inherited from class java.lang.Object

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

Constructor Details

UsedCarLot

```
public UsedCarLot()
```

Initialization of the car array.

Method Details

getInventory

```
public ArrayList <Car> getInventory()
```

Returns the inventory array holding all the car objects.

Returns:

The inventory array.

addCar

```
public void addCar(Car newCar)
```

Adds another car object the inventory car array.

Parameters:

newCar - The car object which is being added.

swapCar

```
public boolean swapCar(int car1idx,  
                      int car2idx)
```

Swaps the car at the first index with the car at the second index of the inventory array.

Parameters:

car1idx - Index of the first car to be swapped.

car2idx - Index of the second car to be swapped.

Returns:

either true/false depending on if the swapping of the cars in the array was successful or not.

addCar

```
public void addCar(int indexToAdd,  
                  Car carToAdd)
```

Adds a new car object at the specific index within the inventory array, shifting all cars to the right.

PRECONDITION: $0 \leq \text{indexToAdd} < \text{inventory.size()}$

Parameters:

indexToAdd - The index at which the new car will be added at.

carToAdd - The new car object which will be added to the inventory array.

sellCarShift

```
public Car sellCarShift(int indexOfCarToSell)
```

"Sells" a car object from the inventory array, effectively removing it from the array and shifting the rest of the car objects in the array to the left.

PRECONDITION: $\text{indexOfCarToSell} < \text{inventory.size()}$

Parameters:

indexOfCarToSell - The index of the car to be "sold" and removed from the array.

Returns:

The car object which is being removed.

sellCarNoShift

```
public Car sellCarNoShift(int indexOfCarToSell)
```

"Sells" a car object from the inventory array, effectively removing it from the array without shifting the array, instead replacing the sold car object with null.

PRECONDITION: $\text{indexOfCarToSell} < \text{inventory.size()}$

Parameters:

indexOfCarToSell - The index of the car to be "sold" and removed from the array.

Returns:

The car object which is being removed.

moveCar

```
public void moveCar(int indexOfCarToMove,  
                    int destinationIndex)
```

Moves a car object within the inventory array to a different index.

PRECONDITION: indexOfCarToMove < inventory.size() destinationIndex < inventory.size()

Parameters:

indexOfCarToMove - The index of the car object being moved.

destinationIndex - The index of where to put the car object being moved.