SED505-ASSIGNMENT-1

<<interface>> ToolIf

+ getCost() : double
+ display()

Implemets

Implements

Hammer

- name : String
- cost : double

+ Hammer (in name : String, in Cost :double)
+ getCost() : double
+ display()

Screwdriver

- name : String
- cost : double

+ Screwdriver (in name : String, in Cost :double)
+ getCost() : double
+ display()

Toolbox

- name: String
- totalCost: double
- items: List<ToolIf>
- numItems: Int

+ Toolbox(in name : String)
+ addTool(in tool : ToolIf) : boolean
+ display()
+ main(in args : String[])
+createTool(in scanner : Scanner) : ToolIf
+ getCost()

creates

<<interface>> Item

+ getCost(): double
+ display()

Implements

Implements

Customer

- cart : ShoppingCart
- name : String
- cashamount : double
- store : *RetailStoreFactory
- toolboxCost;
- groceryCost;

+ addItem():boolean
+ addCash()
+ getCost() : double
+ buy() :boolean
+ getGst() : double
+ display()
+ getToolBoxCost():double
+getGroceryCost():double
+getName()
+getTotalSpend()

0..*

RetailStoreFactory

- Customers : List<Customer>
- Storename : String
- avgspend : double
- totalspend : double
- precentageToobox : double
- percentageGrocery : double

+ RetailStoreFactory(in storeName : String)
+ display()
+ calculateAverage() :double
+calculateTotal() : double
+calculatePercentage()
+ addCustomer(in customer : Customer)
+getCustomers() : List<Customer>
+getPercentageToolbox()
+ getPercentageGrocery()

Creates

ShoppingCart

-items : List<item>
- totalCostofCart

+ ShoppingCart()
+ addItem( ) () : boolean
+ display()
+getCost()
+ isToolbox(Itemif item) : boolean
+ getItems() : List<ItemIf>
+ getToolboxCost(): double
+ getGroceryCost()

<<interface>> GroceryIf

+getCost() : double
+ display()

Implements

Implements

Apple

- name : String
- cost : double
- calories : double

+ Apple (in name : string, in cost : double, in calories : double)
+ getCost() : double
+ display()

Orange

- name : String
- cost : double
- calories : double

+ Orange (in name : string, in cost : double, in calories : double)
+ getCost() : double
+ display()

GroceryBag

- name : String
- totalCost : double
- items : List<GroceryIf>
- MAX_GROCERIES : Int =4

+GroceryBag(in name : String)
+ display()
+getCost()
+ addGrocery(in grocery : GroceryIf): boolean
+display()

Creates

Asks

GroceryBagMain

+ main(in args : String[])
+ createGrocery(in scanner : Scanner) : GroceryIf

Extends

AbstractStoreFactory

+ display()
+ calculateAverage()
+calculateTotal()
+calculatePercentage()
+addCustomer(in customer1 : Customer)
+ getCustomers() : List<Customer>

Asks

testProgram

+ main(int args : String[])